Aberdeen Proving Ground
Edgewood Area and Michaelsville Landfill

NPL

FFID:	MD321382135500		53.57 (Edgewood Area); placed on NPL in February 1990	**Funding to Date:**	$ 614.2 million
Location (Size):	Edgewood and Aberdeen, Maryland (72,516 acres)	**IAG Status:**	IAG signed in March 1990	**Est. CTC (Comp Year):**	$ 212.7 million (FY2042)
Mission:	Develop and test equipment and provide troop training	**Contaminants:**	VOCs, SVOCs, metals, PCBs, explosives, petroleum products, pesticides, radiation, CWM, UXO, potential biological warfare materiel, propellants	**IRP Sites (Final RIP/RC):**	270 (FY2016)
HRS Score:	31.45 (Michaelsville Landfill); placed on NPL in October 1989	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**MMRP Sites (Final RIP/RC):**	30 (FY2018)
				Five-Year Review Status:	Completed and planned
				IRP/MMRP Status Table:	Refer to page E-6-90

Introduction

Studies have identified many areas of contamination at Aberdeen Proving Ground, including chemical munitions and manufacturing waste sites. RCRA facility assessments identified 319 solid waste management units, which were combined into 13 study areas. Remedial investigations (RIs) identified high levels of organic contaminants in most study areas. Completed removal actions include removal of soil contaminated with metals, polychlorinated biphenyls (PCBs), petroleum hydrocarbons, trichloroethylene (TCE), and DDT; removal of underground storage tanks; removal of unexploded ordnance (UXO); closure of Nike missile silos, an adam site vault, and pilot plant sumps; and cleanup of open dump sites. The potential risk to human health and the environment was significant enough for EPA to place two areas of Aberdeen Proving Ground on the NPL in 1989 and 1990. DoD and EPA signed an interagency agreement (IAG) in 1990 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Aberdeen Proving Ground for realignment. In FY95, the installation converted its technical review committee, responsible for communicating cleanup progress with the community, into a Restoration Advisory Board. To ensure continuous monitoring and improvement, Aberdeen Proving Ground completed five-year review reports in FY99 and FY04.

Aberdeen Proving Ground has completed 27 Records of Decision (RODs), which selected cleanup actions for environmental restoration sites. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

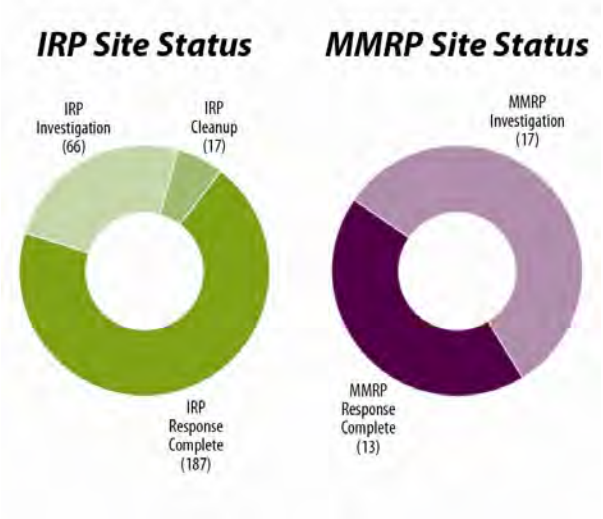
Aberdeen Proving Ground completed a ROD for additional soil sites at the Canal Creek, a ROD for Kings Creek, and proposed plans for the remaining Bush River soils. The installation also continued cleanup actions at the I-Field Munitions Dump in Other Edgewood Study Area. The cost of completing environmental restoration has changed significantly due to technical issues.

Administrative and regulatory issues delayed the start of the site inspection (SI) at the newly discovered radiation site within G-Street.

FY10 MMRP Progress

Aberdeen Proving Ground completed a site investigation and awarded a contract for the remedial investigation (RI) at the Aberdeen Area.

Technical issues delayed the start of field work for the RI at the Edgewood Area.



Plan of Action

Plan of action items for Aberdeen Proving Ground are grouped below according to program category.

IRP

- Complete RODs for Wright Creek, Doves Cove, Western Shore, the Old O-Field Area, Boone Creek, the Other Edgewood Study Area, Bush River, Shell Washout, 26th Street, and Western Boundry Operable Units 2 OU 3 in FY11-FY12.
- Begin SI and RI at the newly discovered radiation site in G-Street in FY11-FY12.
- Complete removal actions at the I-Field Munitions Dump in Other Edgewood Study Area in FY11.
- Complete construction of the cleanup system for the Kings Creek Disposal Site and the 30th Street Landfill in FY11-FY12.

MMRP

- Begin field work at the Edgewood Area in FY11.
- Complete work plan for the Aberdeen Area in FY11.
- Continue construction support and sweeps of UXO for enhanced use leasing and the golf course in FY11-FY12.

Adak Naval Air Facility

NPL/BRAC 1995

FFID:	AK017002432300	**Contaminants:**	Heavy metals, propellants, VOCs, explosives, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Adak, Alaska (76,800 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-3
Mission:	Provided services and materials to support aviation activities and operating forces of the Navy	**Funding to Date:**	$ 293.5 million		
HRS Score:	51.37; placed on NPL in May 1994	**Est. CTC (Comp Year):**	$ 128.7 million (FY2043)		
IAG Status:	FFA signed in November 1993	**IRP Sites (Final RIP/RC):**	96 (FY2013)		
		MMRP Sites (Final RIP/RC):	1 (FY2017)		

Introduction

Beginning in the early 1940s, Adak Naval Air Facility (NAF) served as a key operations and supply location for U.S. military forces. A study identified 32 sites at the installation, including landfills, unexploded ordnance areas, and polychlorinated biphenyl (PCB) spill sites, which have contaminated groundwater, surface water, sediments, and soil. DoD and EPA signed a federal facility agreement (FFA) in November 1993, outlining how they were going to proceed with cleanup. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in May 1994. In September 1995, the BRAC Commission recommended closure of Adak NAF. Operational Naval forces departed the island on April 1, 1997, and Engineering Field Activity Northwest assumed command functions. The installation closed in September 1997. The installation completed a community relations plan in FY90, and revised the plan in FY95, FY99, and FY03. In FY96, Adak NAF converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01 and FY08.

The installation has signed Records of Decision (RODs), which selected cleanup actions for Operable Units (OUs) A and B1. Adak NAF also signed two No Further Action RODs, which determined that no further cleanup activities were necessary for solid waste management units (SWMUs) 4, 27, and several sites originally included in OU B. The installation also signed a Decision Document (DD), which selected cleanup actions for 10 of the 14 free-product petroleum sites at OU A. In FY04, Adak NAF transferred approximately 47,000 acres for private reuse. The installation also transferred an additional 24,300 acres to the Department of the Interior in FY04. In FY02, Adak NAF conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

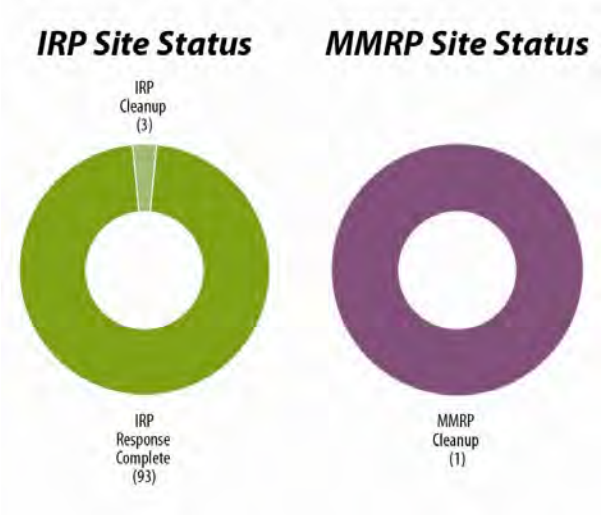
Adak NAF completed additional site characterization at the main road pipeline and at four petroleum sites. The installation also continued long-term management (LTM); and inspections for land use controls (LUCs); which are tools that minimize the potential for human exposure, and well abandonment at CERCLA and petroleum release sites. Adak NAF also completed landfill repairs at six locations, and completed repairs for island-wide LUCs. The cost of completing environmental restoration has changed significantly due to technical issues and changes in estimating criteria.

Regulatory issues delayed the partial delisting of 55 CERCLA sites. Technical issues delayed the proposed plan (PP) and DD for Area 303.

FY10 MMRP Progress

Adak NAF completed the fieldwork for cleanup at the three remaining OU B1 sites.

Regulatory issues delayed the feasibility study (FS) to evaluate cleanup alternatives for OU B2 and the partial delisting of 55 CERCLA sites from the NPL.



Plan of Action

Plan of action items for Adak Naval Air Facility are grouped below according to program category.

IRP

- Complete PP and DD and begin cleanup at Area 303 in FY11.
- Complete partial delisting of 55 CERCLA sites in FY11.
- Continue LTM and LUC inspection requirements in FY11-FY12.
- Complete DD for two additional petroleum sites in FY11-FY12.

MMRP

- Complete remedial investigation and FS for OU B2 in FY11.
- Complete the PP and ROD for OU B2 in FY11-FY12.
- Update materials and processes for the island-wide institutional controls program in FY11-FY12.

Air Force Plant No. 4

NPL

FFID:	TX657172460500	**Contaminants:**	Waste oils and fuels, heavy metals, VOCs, cyanide, DNAPL, TCE, PCBs, paint residues, spent process chemicals, solvents	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Fort Worth, Texas (706 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Manufacture aircraft (F-16, partial F-22, and the F-35 Joint Strike Fighter) and associated equipment; testing electronics	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-156
		Funding to Date:	$ 71.7 million		
HRS Score:	39.92; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 13.2 million (FY2018)		
IAG Status:	FFA signed in August 1990	**IRP Sites (Final RIP/RC):**	30 (FY2006)		

Introduction

Air Force Plant No. 4 (AFP 4) has been a primary manufacturing plant for military aircraft and related equipment since 1942. The installation is adjacent to, and shares an airfield with Fort Worth Joint Reserve Base Naval Air Station (former Carswell Air Force Base [AFB]). Studies have confirmed trichloroethylene (TCE) contamination in the surface water, soil, and in groundwater underneath six spill sites and four landfills. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed a federal facility agreement (FFA) in August 1990 to outline how they were going to proceed with cleanup. In FY95, AFP 4 converted its technical review committee, responsible for communicating cleanup progress with community, into a Restoration Advisory Board (RAB). To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY04 and FY09.

To date, AFP 4 has signed Records of Decision (RODs), which select cleanup actions at all sites. In FY05, AFP 4 conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

AFP 4 began its cleanup optimization process.

Regulatory issues delayed finalization of the explanation of significant differences with the ROD and addressing EPA comments on the five-year review report. Technical issues delayed addressing a vapor intrusion request on former Carswell AFB BRAC property.

The installation continued RAB meetings.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.

Plan of Action

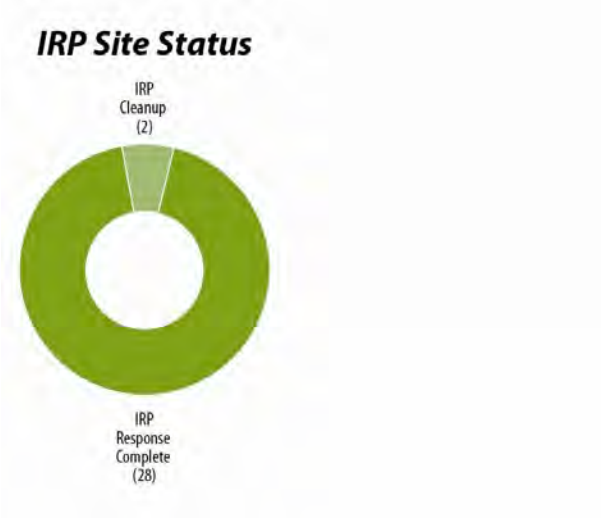
Plan of action items for Air Force Plant No. 4 are grouped below according to program category.

IRP

- Finalize the explanation of significant differences with the ROD and five-year review report in FY11.
- Complete vapor intrusion preliminary study in FY11-FY12.
- Continue operation and maintenance optimizaiton with long term management in FY11-FY12.
- Assess RPO for implementation in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Air Force Plant No. 44

NPL

FFID:	AZ957172462900	**Contaminants:**	Paint sludges, paint thinners, heavy metals, solvents, machine coolants, machine lubricants, TCE, VOCs, SVOCs	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Tucson, Arizona (2,174 acres)			**Five-Year Review Status:**	Completed
Mission:	Research, design, and manufacture of missiles	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-14
HRS Score:	57.86; placed on NPL in September 1983	**Funding to Date:**	$ 92.2 million		
IAG Status:	FFA negotiations underway	**Est. CTC (Comp Year):**	$ 36.0 million (FY2030)		
		IRP Sites (Final RIP/RC):	13 (FY2011)		

Introduction

Air Force Plant No. 44 (AFP 44), located adjacent to Tucson International Airport (IAP), began operations in 1951 to manufacture Falcon air-to-air missiles, and has supported several other missile systems. Contaminants identified at AFP 44 include solvents, machine coolants and lubricants, paint sludges and thinners, and heavy metals. The installation is part of the Tucson IAP Area, which EPA placed on the NPL in September 1983 due to the potential significant risk to human health and the environment. DoD and EPA are currently negotiating a federal facility agreement (FFA) to outline how they will proceed with cleanup. In FY95, the installation converted its Restoration Advisory Board, responsible for communicating cleanup progress with the community, into a Unified Community Advisory Board. In FY04, AFP 44 updated and finalized the community relations plan. To ensure continuous monitoring and improvement, AFP 44 completed a five-year review report for six soil sites in FY04.

To date, the installation has signed Records of Decision (RODs) which selected cleanup actions for three soil vapor extraction sites, and one groundwater cleanup site. The installation also signed a ROD determining that no further cleanup actions were necessary for four sites. In FY05, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

After AFP 44 completed sampling across the installation, the installation began the Phase 2 remedial investigation (RI) of 1,4 dioxane. The installation completed the cleanup optimization, determined the cleanup actions, and incorporated the Shallow Groundwater Zone into the regional groundwater. AFP 44 submitted draft FFA's to EPA Region 9 and the Arizona Department of Environmental Quality and is in discussion with regulators on final revisions. The installation completed the focused Phase 1 focused RI and began to close Sites 1, 2, and 3.

Administrative issues delayed completing the closure of Sites 1, 2, and 3.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.

Plan of Action

Plan of action items for Air Force Plant No. 44 are grouped below according to program category.

IRP

- Complete the Phase 2 focused RI of 1,4 dioxane in FY11.
- Close Sites 1, 2, and 3 in FY11.
- Complete the final FFA in FY11.
- Incorporate the Shallow Groundwater Zone into the Regional Groundwater in FY11.
- Begin the Regional Groundwater feasibility study to evalutate cleanup alternatives in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Air Force Plant PJKS

NPL

FFID:	CO857172553700	**Contaminants:**	PCBs, PAHs, BTEX, chlorinated organic solvents, VOCs, SVOCs, metals, n-nitrosodimethylamine, pesticides	**MMRP Sites (Final RIP/RC):**	5 (FY2005)
Location (Size):	Waterton, Colorado (464 acres)			**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Mission:	Research, develop, and assemble missiles and missile components; test engines	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-48
HRS Score:	42.93; placed on NPL in November 1989	**Funding to Date:**	$ 44.9 million		
IAG Status:	None	**Est. CTC (Comp Year):**	$ 19.1 million (FY2020)		
		IRP Sites (Final RIP/RC):	61 (FY2012)		

Introduction

Air Force Plant PJKS supported the military by researching, developing, and assembling missiles, missile components, and engines. Past operations contaminated groundwater beneath the installation with trichloroethylene (TCE), TCE degradation products (dichloroethene and vinyl chloride), and n-nitrosodimethylamine, and soil with polychlorinated biphenyls (PCBs) and polyaromatic hydrocarbons (PAHs). The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. In FY01, Lockheed Martin Corporation, the operator of the facility, purchased Former Air Force Plant PJKS. In FY96, the installation formed a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community.

To date, Air Force Plant PJKS has identified Installation Restoration Program (IRP) sites, which are grouped into six operable units. The installation has removed 12 of 14 underground storage tanks and closed two sites. In FY03, regulators determined no further cleanup actions were necessary for 12 sites. In FY05, the installation held quarterly RAB meetings. Also in FY05, Air Force Plant PJKS conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); five MMRP sites were identified.

FY10 IRP Progress

Air Force Plant PJKS completed and submitted the focused feasibility study (FS), which presented cleanup alternatives and recommendations for groundwater contamination. The installation also continued to operate groundwater cleanup systems in the seven bedrock groundwater source areas, and submitted quarterly technical memorandums. Air Force Plant PJKS conducted two rounds of groundwater monitoring and submitted the annual report.

The installation continued to brief the RAB on a regular basis.

FY10 MMRP Progress

Air Force Plant PJKS conducted no MMRP actions.

Plan of Action

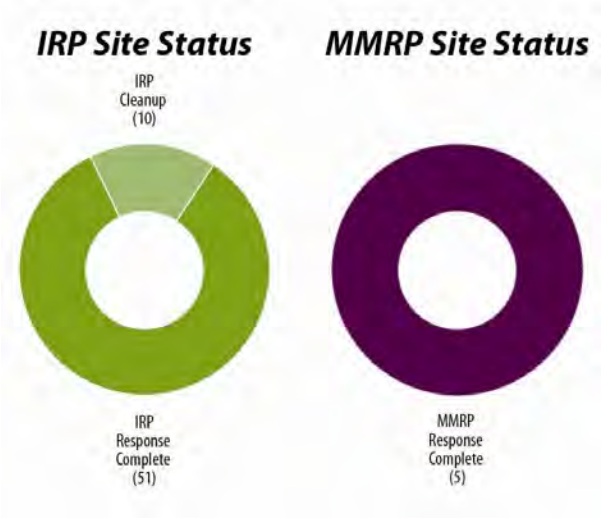
Plan of action items for Air Force Plant PJKS are grouped below according to program category.

IRP

- Continue to operate groundwater cleanup systems and collect performance data in FY11.
- Continue groundwater monitoring in FY11-FY12.
- Prepare Record of Decision to select cleanup actions for review and approval in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Alabama Army Ammunition Plant

NPL/BRAC 1988

FFID:	AL421382000800	**Contaminants:**	Nitroaromatic compounds, heavy metals, munitions-related wastes, VOCs, SVOCs, explosives, propellants	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Childersburg, Alabama (2,235 acres)	**Media Affected:**	Groundwater	**Five-Year Review Status:**	Planned
Mission:	Manufactured explosives	**Funding to Date:**	$ 63.1 million	**IRP/MMRP Status Table:**	Refer to page E-7-1
HRS Score:	36.83; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 1.2 million (FY2017)		
IAG Status:	FFA signed in December 1989	**IRP Sites (Final RIP/RC):**	42 (FY2012)		

Introduction

The mission of Alabama Army Ammunition Plant (AAP) was to manufacture explosives. Studies conducted at Alabama AAP since FY83 identified various sites as potential sources of contamination. Prominent site types include: a former ammunition production and burning ground for explosives; industrial wastewater conveyance systems, ditches, a red water storage basin, landfills, underground storage tanks, polychlorinated biphenyl (PCB)-containing transformers, and a former coke oven. The groundwater, surface water, sediment, and soil are contaminated with nitroaromatic compounds, heavy metals, and explosives waste. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed a federal facility agreement (FFA) in December 1989 to outline how they were going to proceed with cleanup. In FY94, Alabama AAP formed a BRAC cleanup team to develop a process for site cleanup. During FY95, the installation attempted to establish a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community, but received no applications for RAB membership. To ensure continuous monitoring and improvement, Alabama AAP signed five-year review reports in FY02 and FY08.

To date, Alabama AAP has signed three Records of Decision (RODs), which selected cleanup actions at 29 environmental restoration sites. The installation closed 35 groundwater monitoring wells in FY99. In FY03, Alabama AAP completed the early transfer of property to the City of Childersburg. Also in FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Alabama AAP began groundwater monitoring at Area B and a feasibility study (FS) to evaluate cleanup alternatives for Area B Groundwater.

Regulatory issues delayed completion of the ROD for Area B Soils, Sediment, and Surface Water.

FY10 MMRP Progress

Alabama AAP has identified no MMRP sites.

Plan of Action

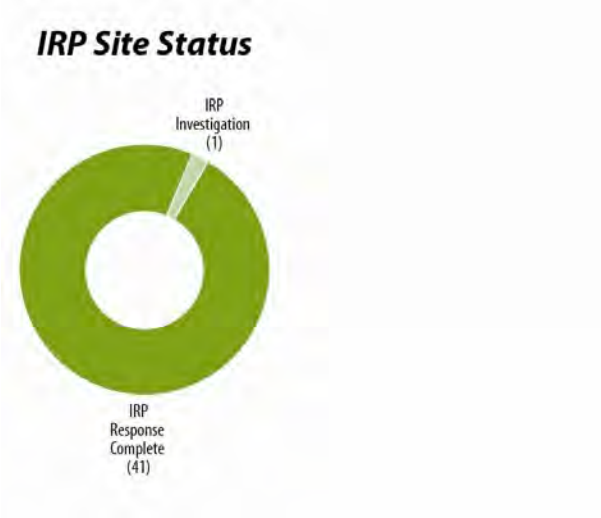
Plan of action items for Alabama Army Ammunition Plant are grouped below according to program category.

IRP

- Complete ROD for Area B Soils, Sediment, and Surface Water in FY11.
- Complete the FS and begin the proposed plan and ROD for Area B Groundwater in FY11.
- Continue groundwater monitoring in Area B in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Alameda Naval Air Station

NPL/BRAC 1993

FFID:	CA917002323600	**Contaminants:**	BTEX, chlorinated solvents, radium, heavy metals, herbicides, pesticides, petroleum hydrocarbons, PAHs, PCBs, VOCs, SVOCs, explosives, propellants	**IRP Sites (Final RIP/RC):**	46 (FY2017)
Location (Size):	Alameda, California (2,675 acres)			**MMRP Sites (Final RIP/RC):**	None
Mission:	Maintained and operated facilities and provided services for naval aviation activities and operating forces	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Planned
		Funding to Date:	$ 441.7 million	**IRP/MMRP Status Table:**	Refer to page E-6-23
HRS Score:	50.0; placed on NPL in July 1999	**Est. CTC (Comp Year):**	$ 117.5 million (FY2017)		
IAG Status:	FFA signed in FY01				

Introduction

Prominent site types at Alameda Naval Air Station (NAS) include landfills, offshore sediment areas, plating and cleaning shops, pesticide control areas, a radium dial paint shop, transformer storage areas, and a former oil refinery. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1999. In FY01, DoD and EPA signed a federal facility agreement (FFA) outlining how they were going to proceed with cleanup. In September 1993, the BRAC Commission recommended closure of Alameda NAS and the installation closed in 1997. The installation formed a BRAC cleanup team in FY93 to develop a process for the cleanup of sites. Alameda NAS completed a BRAC cleanup plan prioritizing sites for cleanup in FY94. In addition, the installation approved a community land reuse plan in FY96. In FY98, the installation received funding for technical assistance for public participation. The installation received additional technical assistance for public participation funding in FY03 and FY04. In FY03, the installation formed a Restoration Advisory Board to communicate cleanup progress with the community. In FY03 and FY09, Alameda NAS updated its community relations plan.

To date, Alameda NAS has completed 18 Records of Decision (RODs) which selected cleanup actions for Marsh Crust, Sites 1, 2, 14, 15, 17, 20, 24, 25 through 31, and 35, and OUs 1 and 5.

FY10 IRP Progress

Alameda NAS installed and launched cleanup systems at OU 1. The installation began basewide radiological surveys and finalized the design for cleanup and cleanup work plans for OU 1 and Site 28. Alameda NAS also completed RODs for Sites 2, 24, and 35. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

Alameda NAS has identified no Military Munitions Response Program (MMRP) sites.

Plan of Action

Plan of action items for Alameda Naval Air Station are grouped below according to program category.

IRP

- Complete design of cleanup and begin cleanup activities at Sites 1, 17, and 28 in FY11.
- Complete feasibility study (FS) to evaluate cleanup alternatives for OUs 2A, 2B, and 2C in FY11.
- Complete proposed plan for OUs 2A and 2B in FY11.
- Complete remedial investigation and FS for Site 32 in FY11.
- Complete ROD for Site 34 in FY11.
- Complete 5 year Review for Sites 6, 14, 16, 25, 26, 27, 28 and March Crust.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Albany Marine Corps Logistics Base

NPL/BRAC 2005 Realignment

FFID:	GA417302369400	**HRS Score:**	44.65; placed on NPL in December 1989	**IRP Sites (Final RIP/RC):**	32 (FY2008)
Location (Size):	Albany, Georgia (3,579 acres)	**IAG Status:**	FFA signed in July 1991	**MMRP Sites (Final RIP/RC):**	None
Mission:	Acquire, supply, and dispose of materials needed to sustain combat readiness of Marine Corps forces worldwide; acquire, maintain, repair, rebuild, distribute, and store supplies and equipment; conduct training	**Contaminants:**	VOCs, PCBs, heavy metals, pesticides, PAHs, SVOCs, TCE, explosives, propellants	**Five-Year Review Status:**	Completed and planned
		Media Affected:	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-61
		Funding to Date:	$ 44.1 million		
		Est. CTC (Comp Year):	$ 10.3 million (FY2039)		

Introduction

The Albany Marine Corps Logistics Base (MCLB) is used to acquire, supply, and dispose of materials needed to sustain combat readiness of Marine forces worldwide. The sites at the installation are grouped into six operable units (OUs), including groundwater throughout the base (OU 6) and a site-screening group. Sites include disposal areas, storage areas, and landfills. Contaminants include trichloroethylene (TCE), polychlorinated biphenyls (PCBs), and heavy metals. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in December 1989. DoD and EPA signed a federal facility agreement (FFA) in July 1991 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Albany MCLB for realignment. The installation formed a technical review committee in FY89. Albany MCLB completed a community relations plan in FY92 and updated it in FY10. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01 and FY06.

To date, Albany MCLB has signed a No Further Action Record of Decision (ROD) for OU 2, which determined no further cleanup activities were necessary at the OU 2 site. The installation has also signed RODs, selecting cleanup actions for OUs 1, 3, 4, 5, and 6. In addition, the installation has signed an interim ROD at Solid Waste Management Unit 3. In FY02, Albany MCLB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Albany MCLB continued cleanup using natural processes, completed construction of the landfill cap, and completed the optimization review. The cost of completing environmental restoration has changed significantly due to technical issues.

Regulatory issues delayed the implementation of the optimization recommendations.

The installation updated the community relations plan and released it for public comment.

FY10 MMRP Progress

Albany MCLB has identified no MMRP sites.

Plan of Action

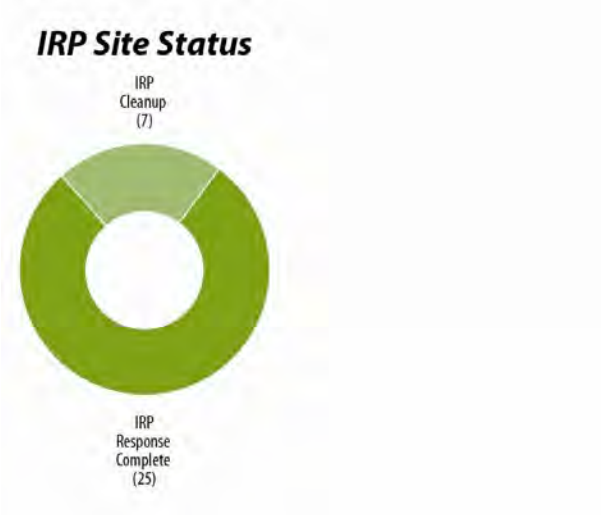
Plan of action items for Albany Marine Corps Logistics Base are grouped below according to program category.

IRP

- Complete a five-year review report in FY11.
- Implement recommendations from optimization review in FY11.
- Continue monitoring contaminated groundwater areas using natural processes in FY11-FY12.
- Perform operation and maintenance of the landfill cap in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Allegany Ballistics Laboratory

NPL

FFID:	WV317002369100	**Contaminants:**	VOCs, RDX, HMX, perchlorate, silver, SVOCs, explosives, propellants, metals	**Five-Year Review Status:**	Completed and planned
Location (Size):	Mineral County, West Virginia (1,628 acres)	**Media Affected:**	Surface Water, Sediment, Groundwater, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-179
Mission:	Research, develop, and produce solid propellant rocket motors for DoD and NASA	**Funding to Date:**	$ 41.2 million		
HRS Score:	50.00; placed on NPL in May 1994	**Est. CTC (Comp Year):**	$ 38.1 million (FY2038)		
IAG Status:	FFA signed in January 1998	**IRP Sites (Final RIP/RC):**	41 (FY2016)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

The Allegany Ballistics Laboratory was used for research, development, and production of solid propellant rocket motors for DoD and NASA. Contaminants found at the installation included volatile organic chemicals (VOCs), RDX, HMX, perchlorate, and silver. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in May 1994. DoD and EPA signed a federal facility agreement (FFA) in January 1998 to outline how they were going to proceed with cleanup. In FY94, the installation established an administrative record and two information repositories. In FY95, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. In FY99, the installation issued a draft community relations plan. To ensure continuous monitoring and improvement, the installation completed a five-year review report for Sites 1, 5, and 10 in FY08.

The installation has signed Records of Decision (RODs), which selected cleanup actions for Site 1 Groundwater, Site 5, and Site 10. In addition, the installation has signed a ROD, which determined that no further cleanup activities were necessary at Sites 2, 3, 4B, and 7. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

The installation completed the final feasibility study (FS) to evaluate cleanup alternatives for Sites 11/12.

Regulatory issues delayed the completion of the FS for Site 1 Soils.

FY10 MMRP Progress

Allegany Ballistics Laboratory has identified no MMRP sites.

Plan of Action

Plan of action items for Allegany Ballistics Laboratory are grouped below according to program category.

IRP

- Complete FS for Site 1 Soils in FY11.
- Complete Remedial Investigation and FS for Solid Waste Management Unit 27A in FY11.
- Issue ROD for Sites 11/12 in FY11-FY12.
- Complete groundwater treatment plant upgrade in FY11-FY12.
- Initiate optimization program to identify opportunities for streamlining cleanup at the groundwater treatment system in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

FFID:	MD357182400000	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-92
Location (Size):	Camp Springs, Maryland (4,300 acres)	**Funding to Date:**	$ 90.5 million		
Mission:	Provide Presidential airlift support	**Est. CTC (Comp Year):**	$ 73.4 million (FY2016)		
HRS Score:	50.00; placed on NPL in June 1999	**IRP Sites (Final RIP/RC):**	57 (FY2012)		
IAG Status:	FFA under negotiation	**MMRP Sites (Final RIP/RC):**	6 (FY2014)		
Contaminants:	SVOCs, VOCs, PAHs, PCBs, pesticides, metals, explosives, propellants, BTEX	**Five-Year Review Status:**	Underway and planned		

Introduction

The mission at Andrews Air Force Base (AFB) is to provide Presidential airlift support. Environmental studies at Andrews AFB began in 1985. Historic fuel supply activities, landfills (LFs), and other support and training operations contaminated ground and surface water with metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polyaromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and pesticides. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in June 1999. DoD and EPA are currently negotiating a federal facility agreement (FFA) to outline how they will proceed with cleanup. The 2005 BRAC Commission recommended Andrews AFB for realignment.

To date, the installation has closed 8 sites under the petroleum program and signed 21 Records of Decision (RODs) that selected cleanup actions for 22 sites. In FY05, Andrews AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); six MMRP sites were identified.

FY10 IRP Progress

Andrews AFB continued evaluation of LFs 06 and 07, and Spill Sites (SSs) 11, 26, and 28. The installation completed a proposed plan and a feasibility study (FS) to evaluate cleanup alternatives for SS 27. Andrews AFB installed cleanup systems at LF 05, and fire training site Area 02. The installation also assumed environmental restoration responsibilities from Naval Air Facility Washington, and began five-year review reports for all Andrews AFB sites to ensure continuous monitoring and improvement. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed the completion of the FS to evaluate cleanup alternatives at LFs 06 and 07, and technical issues delayed the completion of FSs at SSs 11, 26, and 28. Regulatory issues delayed the completion of the ROD for SS 27. Technical issues delayed installation of cleanup systems at SS 27, and operation at LF 05, SS 27, and Fire Training Site Area 02. Regulatory issues delayed completion of the five-year review report for all Andrews AFB sites.

FY10 MMRP Progress

Andrews AFB completed the site inspection (SI). The installation awarded a contract for the engineering evaluation and cost analysis (EE/CA) and removal of lead contaminated soil.

Plan of Action

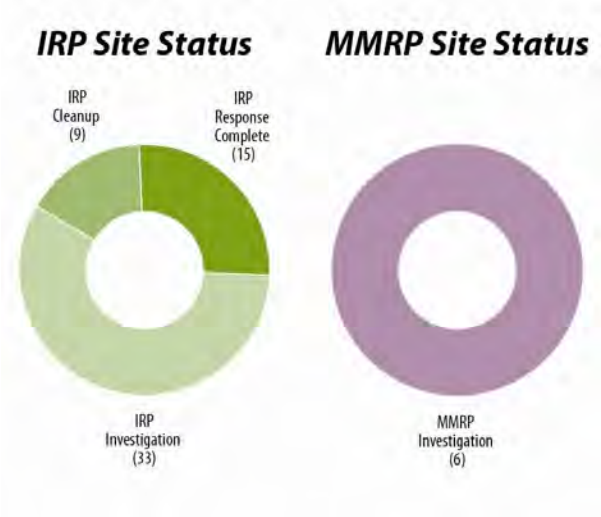
Plan of action items for Andrews Air Force Base are grouped below according to program category.

IRP

- Complete FS at LFs 06 and 07, and SSs 11, 26, and 28 in FY11.
- Complete five-year review report for all Andrews AFB sites in FY11.
- Install and operate cleanup systems at LF 05, SS 27, and FIre Training site 02 in FY11.
- Complete ROD for SS 27 in FY11.

MMRP

- Complete SI in FY11.
- Complete EE/CA and removal action of lead contaminated soil in FY12.



Anniston Army Depot
Southeast Industrial Area

NPL

FFID:	AL421382002700	**Media Affected:**	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-1
Location (Size):	Anniston, Alabama (600 acres)	**Funding to Date:**	$ 71.8 million		
Mission:	Maintain combat vehicles	**Est. CTC (Comp Year):**	$ 38.7 million (FY2041)		
HRS Score:	51.91; placed on NPL in March 1989	**IRP Sites (Final RIP/RC):**	49 (FY2013)		
IAG Status:	IAG signed in June 1990	**MMRP Sites (Final RIP/RC):**	3 (FY2018)		
Contaminants:	phenols, petroleum products, acids, VOCs, caustics, SVOCs, Heavy metals	**Five-Year Review Status:**	Completed and underway		

Introduction

Since 1948, the Army has repaired, rebuilt, and modified combat vehicles and artillery equipment at the Anniston Army Depot (AD) Southeast Industrial Area. Anniston AD also repairs small arms. Painting, degreasing, and plating operations at the installation generated wastes containing volatile organic compounds (VOCs), phenols, heavy metals, and petroleum distillates. The potential risk to human health and the environment was significant enough for EPA to place the Southeast Industrial Area on the NPL in March 1989. DoD and EPA signed an interagency agreement (IAG) in 1990 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Anniston AD for realignment. In FY98, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community, and updated the community relations plan. To ensure continuous monitoring and improvement, Anniston AD completed five-year review reports in FY99, FY04, and FY10.

To date, Anniston AD has signed 3 interim Records of Decision (RODs) and 2 final RODs, which selected cleanup actions for 39 environmental restoration sites. In FY03, Anniston AD conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Anniston AD completed a five-year review report for the installation, and the expanded site inspection at operable unit (OU) 5. The installation continued groundwater sampling at OUs 1 and 3. Anniston AD also continued maintenance and monitoring of the land use control (LUC), which restricts the use of or access to OU 2, and operations and maintenance (O&M) of the shallow groundwater treatment plant. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

Anniston AD began remedial investigations (RIs) for three sites.

Plan of Action

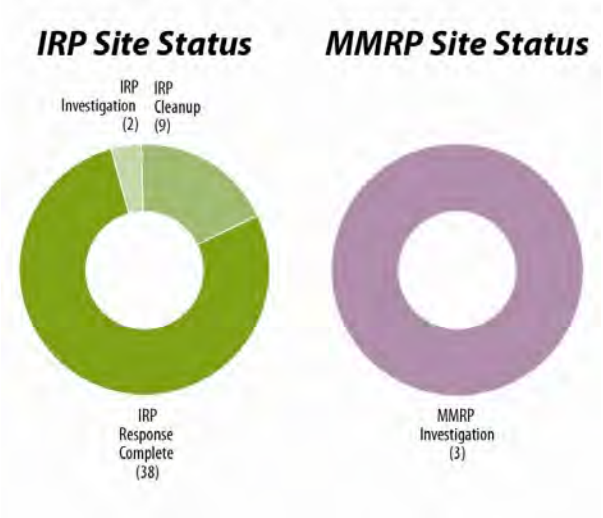
Plan of action items for Anniston Army Depot are grouped below according to program category.

IRP

- Begin RI at OU 5 in FY11-FY12.
- Continue groundwater sampling at OUs 1 and 3 in FY11-FY12.
- Continue maintenance and monitoring of the LUC at OU 2 in FY11-FY12.
- Continue O&M of the shallow groundwater treatment plant and complete the focused feasibility study to evaluate cleanup alternatives for OU 1 in FY11-FY12.

MMRP

- Continue RIs at three MMRP sites in FY11.



Arnold Engineering Development Center

Proposed NPL

FFID:	TN457172404400	**IAG Status:**	N/A	**MMRP Sites (Final RIP/RC):**	17 (FY2015)
Location (Size):	Coffee and Franklin Counties, Tennessee (40,000 acres)	**Contaminants:**	VOCs, SVOCs, solvents, metals	**Five-Year Review Status:**	Planned for future
Mission:	Conduct aerospace ground tests, engineering analysis, technical evaluations, and simulate operational conditions	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-153
HRS Score:	50.00; proposed for NPL in August 1994	**Funding to Date:**	$ 121.7 million		
		Est. CTC (Comp Year):	$ 49.3 million (FY2035)		
		IRP Sites (Final RIP/RC):	30 (FY2010)		

Introduction

Arnold Engineering Development Center is an advanced aerospace testing, evaluation, and simulation facility. Sites at the installation include a landfill (LF), a chemical treatment plant, the main testing area, a leaching pit, a leachate burn area, and a fire training area. Chlorinated solvents are the primary contaminants. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1994. In FY95, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board.

The installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

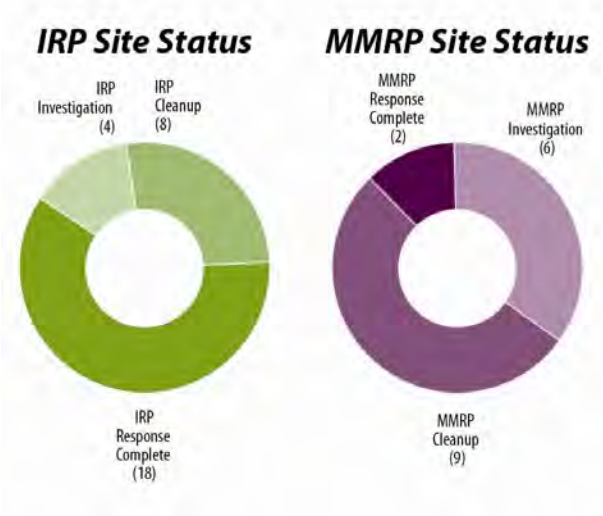
Arnold Engineering Development Center completed construction of the thermal treatment system at Waste Pit (WP) 08, and began cleanup of perchloroethylene (PCE)-contaminated groundwater in the targeted treatment zones. Additionally, Arnold Engineering Development Center continued to treat contaminated groundwater in the intermediate aquifer downgradient of WP 08. The installation submitted the construction completion report for Spill Site (SS) 19 to the Tennessee Department of Environment and Conservation for review and concurrence. Arnold Engineering Development Center completed alternative cleanup measures at SSs 25 and 26. The installation drafted statements of basis for LF 01, Surface Drainage Site 05, SSs 7/22, 19, 25, and 26. Arnold Engineering Development Center also completed the alternative cleanup measures at LF 01. The installation requested FY11 funding to implement recommendations from the Environmental Restoration Program Optimization Team of the Air Force Center for Engineering and the Environment.

Technical issues delayed the completion of the draft statement of basis for WP 08.

FY10 MMRP Progress

Arnold Engineering Development Center completed the work plan, explosive safety submission, and an engineering evaluation and cost analysis document, and began cleanup at Small Arms Ranges (SARs) 31 and 32 and Impact Area (TGs) 27 and 28. The installation completed a removal action at SAR 32 and an investigation at TG 27. The installation received funding for a preliminary assessment (PA) and site inspection (SI) at a new munitions response site (MRS), Camp Forrest Maneuver Area (TM 720). The installation also drafted cleanup reports for SAR 32 and TG 27.

Technical issues delayed submission of the final cleanup report to the Tennesee Department of Environment and Conservation for review and concurrence for the cleanup actions at SAR 31 and TG 28.



Plan of Action

Plan of action items for Arnold Engineering Development Center are grouped below according to program category.

IRP

- Complete WP 08 thermal remediation project in FY11.
- Begin cleanup of PCE contaminated sediments in Ditch H at WP 08 in FY11.
- Implement recommendations from the Environmental Restoration Program Optimization Team in FY11.
- Complete alternative measures at LF 01 in FY11.
- Complete cleanup of PCE contaminated sediments in Ditch H at WP 08 in FY12

MMRP

- Complete surface clearance of UXO at site TG 28 in FY11.
- Complete excavation of lead contaminated soil at SAR 31 in FY11.
- Begin investigation of base wide MRSs in FY11.
- Begin Camp Forrest Maneuver Area (TM270) MMRP PA and SI in FY11.
- Submit final report to Tennessee Department of Environment and Conservation for their review and concurrence for the cleanup actions at SARs 31 and 32 and TGs 27 and 28 in FY11.

Atlantic City Air National Guard Base
Atlantic City International Airport

NPL/BRAC 2005 Realignment

FFID:	NJ257282844900	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-35
Location (Size):	Pleasantville, New Jersey (280 acres)	**Funding to Date:**	$ 2.2 million		
Mission:	Provide Air National Guard training	**Est. CTC (Comp Year):**	$ 1.6 million (FY2017)		
HRS Score:	39.65; placed on NPL in August 1990	**IRP Sites (Final RIP/RC):**	5 (FY2012)		
IAG Status:	FFA signed in May 1993	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	VOCs, SVOCs, lead, copper, pesticides, metals, PCBs, PAHs, BTEX	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.		

Introduction

Atlantic City Air National Guard (ANG) Base is home to the 177th Fighter Squadron whose mission is to maintain fighter aircraft on continuous peacetime air defense alert to preserve U.S. air sovereignty. The installation is part of the Federal Aviation Administration (FAA) Technical Center covering approximately 5,100 acres which includes the FAA Williams J. Hughes Technical Center, Atlantic City ANG Base, Atlantic City International Airport, and U.S. Coast Guard Air Station Atlantic City. All of the property is federally owned except for 84 acres, which is owned by the South Jersey Transportation Authority and includes the airport terminal and support facility areas. Sites included a salvage yard, fire training facility, jet fuel farm, fuel mist test facility, and landfill. Volatile organic compounds (VOCs), metals, and pesticides have been detected in groundwater. EPA placed the FAA facility on the NPL in August 1990 because of its proximity to the South Branch of Doughty's Mill Stream, which flows into the Upper Atlantic City Reservoir, a source of drinking water for local residents. In addition, a sole-source aquifer underlying the FAA facility contributes 85 to 90 percent of the watershed for the Upper Atlantic City Reservoir. DoD and EPA signed a federal facility agreement (FFA) in May 1993 to outline how they were going to proceed with cleanup. The 2005 BRAC Commission recommended Atlantic City ANG Base for realignment.

Environmental studies have identified five Installation Restoration Program (IRP) sites on the Atlantic City ANG Base property consisting of 280 acres under permit from the FAA. In FY05, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Atlantic City ANG Base received additional comments from the regulatory community, and regulators concurred to close and transfer one site to the State of New Jersey Underground Storage Tank Program.

Administrative issues delayed finalization of the feasibility study (FS) to evaluate cleanup alternatives at four sites.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.

Plan of Action

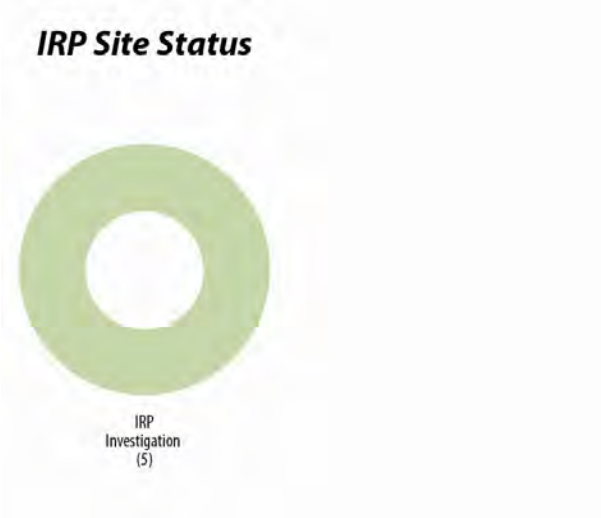
Plan of action items for Atlantic City Air National Guard Base are grouped below according to program category.

IRP

- Finalize the remedial investigation, FS, and Record of Decision selecting cleanup actions for four sites in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Bangor Naval Submarine Base

NPL/BRAC 2005 Realignment

FFID:	WA017002729100	**Contaminants:**	Residual TNT, RDX, Otto fuel, VOCs, SVOCs, metals, explosives, propellants	**Five-Year Review Status:**	Completed and planned
Location (Size):	Silverdale, Washington (7,201 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-176
Mission:	Provide support base for Trident submarines	**Funding to Date:**	$ 93.8 million		
HRS Score:	30.42 (Bangor Ordnance Disposal), placed on NPL in July 1987; 55.91 (Bangor Naval Submarine Base), placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 50.8 million (FY2040)		
		IRP Sites (Final RIP/RC):	42 (FY2001)		
IAG Status:	FFA signed in January 1990	**MMRP Sites (Final RIP/RC):**	1 (FY2015)		

Introduction

Bangor Naval Submarine Base (NSB) stored, processed, and shipped munitions from the early 1940s until it was commissioned as a submarine base in 1977. Past chemical releases at the installation are primarily related to the detonation, demilitarization, and disposal of explosive ordnance and associated activities. The potential risk to human health and the environment was significant enough for EPA to place the Bangor Ordnance Disposal Area on the NPL in July 1987 and the Bangor NSB on the NPL in August 1990. In January 1990, DoD, EPA, and the State of Washington signed a federal facility agreement (FFA) for the installation to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Bangor NSB for realignment. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY00 and FY05, and updated the community relations plan in FY08.

To date, the installation completed eight Records of Decision (RODs), selecting cleanup actions for environmental restoration at these sites. Bangor NSB has submitted construction completion documents for operable units (OUs) 1, 2, and 7 to EPA and the Washington Department of Ecology. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site has been identified.

FY10 IRP Progress

Bangor NSB installed additional wells for compliance monitoring at OU 2. Additionally, Bangor NSB conducted a pilot study to address the potential for contamination from OU 8 to migrate off-base. The installation also conducted a third five-year review report. The cost of completing environmental restoration has changed significantly due to technical issues.

FY10 MMRP Progress

The installation continued the removal of lead-contaminated soil and the remedial investigation (RI) at Site EO 300. Bangor NSB also continued the risk assessment at the Trap Range Area.

Plan of Action

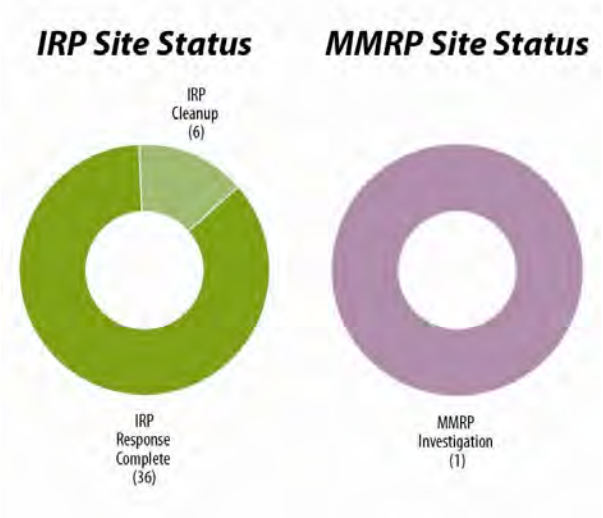
Plan of action items for Bangor Naval Submarine Base are grouped below according to program category.

IRP

- Continue study to evaluate stability of groundwater plume at OU 1 in FY11.
- Begin cleanup design for OU 8 in FY11-12.
- Optimize treatment system at Site F (OU 2) in FY11-FY12.
- Complete third five-year review report and implement action items in FY11-FY12.

MMRP

- Complete RI at Site EO 300 in FY11.
- Complete risk assessment of Trap Range Area in FY11.
- Develop proposed plan and ROD for Trap Range Area in FY11-FY12.



Barbers Point Naval Air Station

BRAC 1993

FFID:	HI917002432600	**Contaminants:**	Heavy metals, petroleum hydrocarbons, pesticides, solvents, asbestos, PCBs, VOCs, SVOCs	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Barbers Point, Hawaii (3,816 acres)			**Five-Year Review Status:**	Underway
Mission:	Maintain and operate facilities and provide services and material support to aviation activities and units of the operating forces	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-21
		Funding to Date:	$ 63.8 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 5.5 million (FY2027)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	35 (FY2014)		

Introduction

Barber's Point Naval Air Station (NAS) maintained and operated facilities and material support for aviation activities and units of the operating forces. In July 1993, the BRAC Commission recommended closure of Barbers Point NAS. The installation closed on July 2, 1999. In FY94, the installation completed an Environmental Baseline Survey to determine the presence of potential environmental hazards, and formed a Restoration Advisory Board to discuss cleanup progress with the community. Also in FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. In FY97, the BRAC cleanup team completed the latest version of the BRAC cleanup plan with community input to prioritize sites requiring environmental restoration, along with a land reuse plan. To ensure continuous monitoring and improvement, the installation completed the first five-year review report in FY06.

To date, the installation has signed Records of Decision, which selected cleanup actions for Sites 1, 8, 13, 15, 19, and 20. The installation closed Sites 5, 8 through 13, and 19 in FY99, and Sites 2 and 18 in FY07. The installation transferred BRAC parcels to the Department of Hawaiian Home Lands in FY02 and FY08. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Barbers Point NAS found the two remaining sites to be suitable for transfer and completed the environmental hazard management plan. The installation also awarded a contract for decommissioning monitoring wells.

FY10 MMRP Progress

Barbers Point NAS has identified no MMRP sites.

Plan of Action

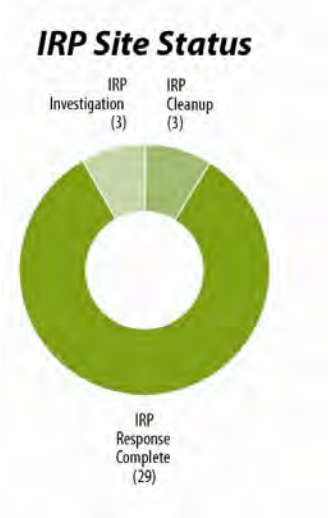
Plan of action items for Barbers Point Naval Air Station are grouped below according to program category.

IRP

- Decommission remaining monitoring wells in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Barstow Marine Corps Logistics Base

NPL/BRAC 2005 Realignment

FFID:	CA917302426100	**Contaminants:**	Heavy metals, PCBs, petroleum hydrocarbons, pesticides, herbicides, MTBE, VOCs, SVOCs, radioactive materials, TCE	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Barstow, California (5,688 acres)	**Media Affected:**	Groundwater and Soil	**Five-Year Review Status:**	Completed and planned
Mission:	Maintain, repair, rebuild, store, and distribute supplies and equipment; formerly conducted industrial operations	**Funding to Date:**	$ 112.5 million	**IRP/MMRP Status Table:**	Refer to page E-6-23
HRS Score:	37.93; placed on NPL in November 1989	**Est. CTC (Comp Year):**	$ 42.4 million (FY2039)		
IAG Status:	FFA signed in October 1990	**IRP Sites (Final RIP/RC):**	43 (FY2016)		

Introduction

Barstow Marine Corps Logistics Base (MCLB) consists of Yermo Annex, Nebo Main Base, and the Rifle Range. Vehicle maintenance, repair and maintenance of weapons and missile systems, and storage of petroleum and chemical products contributed to contamination. Site types include sludge disposal areas, plating waste disposal areas, low-level radioactive waste storage areas, spill sites, underground storage tank sites, and evaporation ponds. The potential risk to human health and the environment from high concentrations of trichloroethylene (TCE) detected in groundwater monitoring wells was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in October 1990 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Barstow MCLB for realignment. The installation established an information repository and administrative record in FY91. The installation formed a technical review committee responsible for communicating cleanup progress with the community, and prepared a community relations plan; the community relations plan was revised in FY02. Public meetings are held annually; however, no community interest exists in forming a Restoration Advisory Board. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY03 and FY08.

To date, the installation has completed Records of Decision for Operable Units (OUs) 1 through 6, which selected cleanup actions for these sites. The installation closed OUs 3 and 4 in FY00, and OUs 5 and 6 in FY02. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Barstow MCLB completed the supplemental remedial investigation and assessment of potential risks to the environment for OU 7. The installation also updated the base master plan.

Regulatory issues delayed the Methyl Tertiary Butyl Ether (MTBE) settlement agreement.

FY10 MMRP Progress

Barstow MCLB has identified no MMRP sites.

Plan of Action

Plan of action items for Barstow Marine Corps Logistics Base are grouped below according to program category.

IRP

- Complete additional field investigations for OU 7 in FY11.
- Prepare draft feasibility study to evaluate cleanup alternatives for OU 7 in FY11.
- Complete MTBE settlement agreement in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Bedford Naval Weapons Industrial Reserve Plant

NPL

FFID:	MA117002357000	**Contaminants:**	Acids, BTEX, incinerator ash, industrial wastes, POLs, photographic wastes, solvents, paints, VOCs, SVOCs, metals	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Bedford, Massachusetts (46 acres)			**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Mission:	Designed, fabricated, and tested prototype weapons and equipment	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-93
HRS Score:	50.00; placed on NPL in May 1994	**Funding to Date:**	$ 25.8 million		
IAG Status:	FFA signed in September 1999	**Est. CTC (Comp Year):**	$ 14.1 million (FY2038)		
		IRP Sites (Final RIP/RC):	4 (FY2013)		

Introduction

The Bedford Naval Weapons Industrial Reserve Plant (NWIRP), a formerly government-owned and contractor-operated plant, designed, produced, and tested prototype equipment for missile guidance and control systems. Contaminants found at the installation include acids; benzene, toluene, ethylbenzene, and xylene (BTEX); incinerator ash; industrial wastes; paints; petroleum/oil/lubricants (POLs); photographic wastes; solvents; and volatile organic compounds (VOCs). The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in May 1994. DoD and EPA signed a federal facility agreement (FFA) in September 1999 to outline how they were going to proceed with cleanup. The Navy formed a technical review committee in FY89, responsible for communicating cleanup progress with the community, and converted it to a Restoration Advisory Board in FY95. The Navy also developed a community relations plan in FY89 and updated it in FY92. In addition, the Navy maintains an information repository. DoD declared the facility as excess and closed it as a non-BRAC closure in FY01.

Sites identified at the installation include Site 1: an incinerator ash disposal area (potential soil contamination with ash and heavy metals); Site 2: a components-laboratory fuel tank (potential soil contamination with low levels of POLs); Site 3: a northwest groundwater contaminated area (groundwater contaminated with VOCs); and Site 4: a former fuel pump/tank area (soil and groundwater contaminated with BTEX). In FY00, the Navy completed a No Further Action Record of Decision (ROD) for Sites 1 and 2, which determined that no further cleanup activities were necessary for these sites. In FY10, the installation completed a ROD which selected cleanup actions for environmental restoration sites. In FY02, the Navy conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Bedford NWIRP completed investigations, a revised feasibility study to evaluate cleanup alternatives, proposed plan, and ROD for Site 3. The installation also completed the investigation and began preparing the design for cleanup at Site 4. The cost of completing environmental restoration has changed significantly due to technical issues.

Technical issues delayed the completion of the design for cleanup at Site 4.

FY10 MMRP Progress

Bedford NWIRP has identified no MMRP sites.

Plan of Action

Plan of action items for Bedford Naval Weapons Industrial Reserve Plant are grouped below according to program category.

IRP

- Complete cleanup design for Sites 3 and 4 in FY11.
- Complete Phase I of cleanup actions at Site 3 in FY11.
- Install wells for monitored cleanup using natural processes at Site 4 in FY11.
- Continue groundwater monitoring at all sites in FY11-FY12.
- Continue operating pump-and-treat system to contain Site 3 plume in FY11-FY12.
- Complete Phase II of cleanup actions at Site 3 in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Bergstrom Air Force Base

BRAC 1991

FFID:	TX657002418800	**Contaminants:**	VOCs, pesticides, hydrocarbons, metals, TCE, low-level radioactive waste, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Austin, Texas (3,197 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-49
Mission:	Supported reconnaissance and fighter aircraft operations	**Funding to Date:**	$ 48.9 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 2.1 million (FY2016)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	32 (FY1999)		
		MMRP Sites (Final RIP/RC):	8 (FY2002)		

Introduction

Bergstrom Air Force Base (AFB) began operations in 1942 and supported flying operations for various aircraft throughout its history. Site types identified at the installation include underground storage tanks (USTs), landfills (LFs), fuel spill areas, a pesticide evaporation pit, firing ranges, a sludge weathering pit, aboveground storage tanks (ASTs), oil-water separators, a fire training area, and a radioactive waste disposal area. In July 1991, the BRAC Commission recommended closure of the installation. The installation closed September 1993, and the City of Austin began to convert the installation into the Austin-Bergstrom International Airport. In FY94, Bergstrom AFB formed a BRAC cleanup team to develop a process for cleanup of sites, and formed a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community. The RAB adjourned in FY97 due to successful cleanup at the installation. Bergstrom AFB updated the community relations plan in FY05 to indicate the status of cleanup and identify ongoing opportunities for community involvement. In order to ensure continuous monitoring and improvement, the installation completed a five-year review report in FY06 and FY10.

Environmental studies have identified CERCLA sites and RCRA areas of concern (AOCs). Cleanup has included removal of 106 USTs, removal of contaminated soil and low-level radioactive wastes, and closure of 45 ASTs. To date, no further cleanup action is required at 478 sites and AOCs. All property at the installation has been transferred to the City of Austin. In FY04, Bergstrom AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); eight MMRP sites were identified. The installation closed seven MMRP sites in FY04.

FY10 IRP Progress

Bergstrom AFB completed a five-year review report. The installation also continued reevaluating contract mechanisms to continue long-term management (LTM), operations and maintenance (O&M), well decommissioning, and other activities at SS031. Additionally, Bergstrom AFB continued LTM and O&M at LFs 3 through 7, and Solid Waste Management Unit (SWMU) 76 Area 1 trichloroethylene (TCE)-contaminated area.

FY10 MMRP Progress

The installation conducted no MMRP actions.

Plan of Action

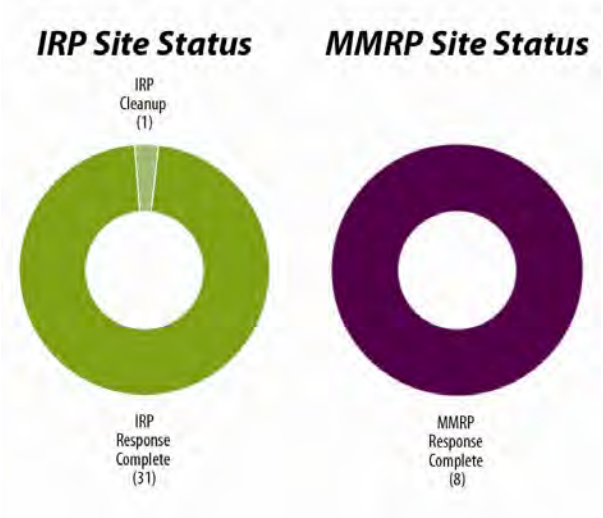
Plan of action items for Bergstrom Air Force Base are grouped below according to program category.

IRP

- Continue LTM and O&M at LFs 3 through 7, and SWMU 76 Area 1 TCE-contaminated area in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Brandywine Defense Reutilization and Marketing Office

NPL

FFID:	MD357182400000	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-92
Location (Size):	Brandywine, Maryland (8 acres)	**Funding to Date:**	$ 16.1 million		
Mission:	None (inactive)	**Est. CTC (Comp Year):**	$ 17.3 million (FY2016)		
HRS Score:	50.15; placed on NPL in June 1999	**IRP Sites (Final RIP/RC):**	3 (FY2008)		
IAG Status:	FFA signed in November 2009	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	PCBs, VOCs, SVOCs, solvents (including TCE), metals	**Five-Year Review Status:**	Underway and planned		

Introduction

The Brandywine facility is an inactive eight-acre former Defense Reutilization and Marketing Office (DRMO) site located approximately eight miles south of Andrews Air Force Base (AFB). Andrews AFB acquired the property from the Navy in 1961 and used it to store bulky aircraft parts, aircraft engine fuels and lubricants, paints, chemicals, and other supplies subject to deterioration. As a Defense Property Disposal Office in the 1970s, the facility temporarily accumulated wastes from other area DoD facilities, though no hazardous materials have been stored onsite since 1980. The primary contaminants of concern are polychlorinated biphenyls (PCBs) and solvents, including trichloroethylene (TCE). The potential risk to human health and the environment was significant enough for EPA to place Brandywine DRMO on the NPL in June 1999. DoD and EPA signed a federal facility agreement (FFA) in November 2009 to outline how they are going to proceed with cleanup.

Brandywine DRMO is identified as Spill Site 01 in the Andrews AFB Installation Restoration Program (IRP) site inventory. To date, the installation has signed one interim Record of Decision, which selected groundwater cleanup actions. The installation has also removed a total of 17,000 cubic yards of contaminated soil. In FY05, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Brandywine DRMO continued to operate the groundwater treatment system, and monitored the results of the bioremediation. The installation continued to investigate potential groundwater contamination sources. The installation began a second set of substrate injections, which involved injecting directly into the subsurface groundwater. Brandywine DRMO began a five-year review report. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

Brandywine DRMO has identified no MMRP sites.

Plan of Action

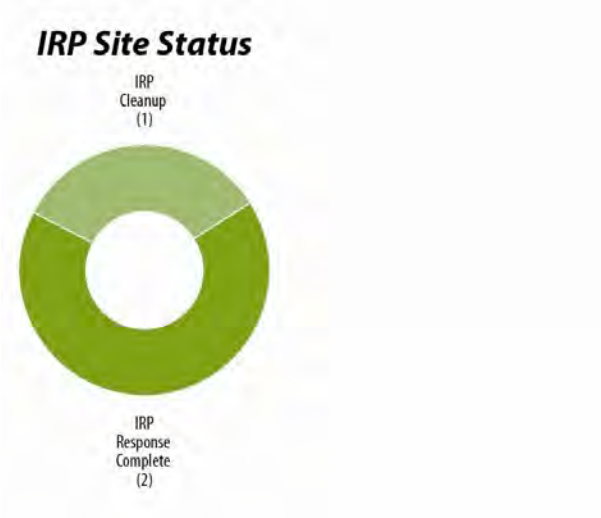
Plan of action items for Brandywine Defense Reutilization and Marketing Office are grouped below according to program category.

IRP

- Conduct the Defense Nonaqueous Phase Liquid source area investigvation in FY11-FY12.
- Complete the five-year review report in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Brooks City-Base

BRAC 2005 Closure

FFID:	TX657172430300	**IAG Status:**	N/A	**IRP Sites (Final RIP/RC):**	18 (FY2002)
Location (Size):	San Antonio, Texas (1,309 acres)	**Contaminants:**	Thinners, pesticides, hydraulics fluids, VOCs, SVOCs, PAHs, PCBs, metals, fuels, POLs, cleaning solvents, paints	**MMRP Sites (Final RIP/RC):**	None
Mission:	Serve as host to the 311 Human System Wing, the USAF's agent for human-centered research, development, acquisition, and operational support	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	N/A	**Funding to Date:**	$ 8.7 million	**IRP/MMRP Status Table:**	Refer to page E-7-49
		Est. CTC (Comp Year):	$ 2.2 million (FY2020)		

Introduction

Brooks Air Force Base (AFB) was established as Brooks Field in 1918 to train pilots. In 1948, Brooks Field was renamed Brooks AFB. In 1991, Brooks AFB was designated as the central location for the Air Force Center for Engineering and the Environment, one of several tenant organizations on base. In 1998, Air Force Materiel Command converted Brooks AFB from a center to the Air Force's only composite medical wing, the 311th Human Systems Wing. In 2002, the Air Force transferred Brooks AFB to the Brooks Development Authority, and the installation became Brooks City-Base, as part of a demonstration project in which the city undertook infrastructure responsibilities in exchange for business opportunities and community development. The 2005 BRAC Commission recommended closure of Brooks City-Base. In order to ensure continuous monitoring and improvement, the installation completed a five-year review report in FY05 and FY10.

Several area of concerns (AOC) and ten Installation Restoration Program (IRP) sites have been closed because no further cleanup action was required. The remaining IRP site continues to undergo cleanup. In FY05, Brooks City-Base conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Brooks AFB documented closure of Operable Unit (OU) 1 and petitioned for closure of Fire Protection Training Area (FPTA) 2. The installation also monitored natural contaminant reduction at selected wells to supplement biostimulation data. In addition, the installation shut down the test recovery system to address containment consensus. Brooks AFB also completed the second five-year review report and redeveloped the screening interval at Monitoring Well 28.

FY10 MMRP Progress

Brooks City-Base has identified no MMRP sites.

Plan of Action

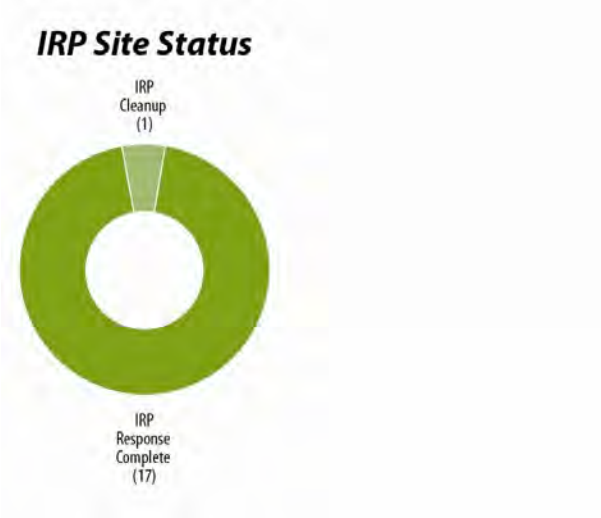
Plan of action items for Brooks City-Base are grouped below according to program category.

IRP

- Remove and close the gas station in FY11-FY12.
- Continue closure of OU 1 in FY11-FY12.
- Operate pump-and-treat system, if necessary, at OU 1 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Camp Lejeune Marine Corps Base

NPL

FFID:	NC417302258000	**Contaminants:**	Battery acid, fuels, used oils, paints, thinners, PCBs, pesticides, metals, solvents, VOCs, SVOCs, radioactive materials	**MMRP Sites (Final RIP/RC):**	22 (FY2020)
Location (Size):	Jacksonville, North Carolina (151,000 acres)			**Five-Year Review Status:**	Underway
Mission:	Provide housing, training facilities, logistical support, and administrative supplies for Fleet Marine Force units	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-123
HRS Score:	36.84; placed on NPL in October 1989	**Funding to Date:**	$ 178.2 million		
IAG Status:	FFA signed in February 1991	**Est. CTC (Comp Year):**	$ 188.0 million (FY2058)		
		IRP Sites (Final RIP/RC):	196 (FY2017)		

Introduction

Camp Lejeune Marine Corps Base (MCB) provides housing, training facilities, logistical support, and administrative supplies for Fleet Marine Force units and other assigned units. The installation also provides specialized schools and other training. Contaminants released from past storage and disposal operations have migrated to a shallow aquifer, several surface water bodies, and a deep aquifer used for drinking water. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in October 1989. In February 1991, DoD and EPA signed a federal facility agreement (FFA) to outline how they were going to proceed with cleanup. The installation formed a technical review committee in FY88, responsible for communicating cleanup progress with the community, and converted it to a Restoration Advisory Board in FY95. The installation completed a community relations plan in FY90. The installation placed its administrative record on the internet in FY00. Additionally, the installation finalized a community involvement plan in FY05, which was updated in FY10. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY99, FY05, and FY10.

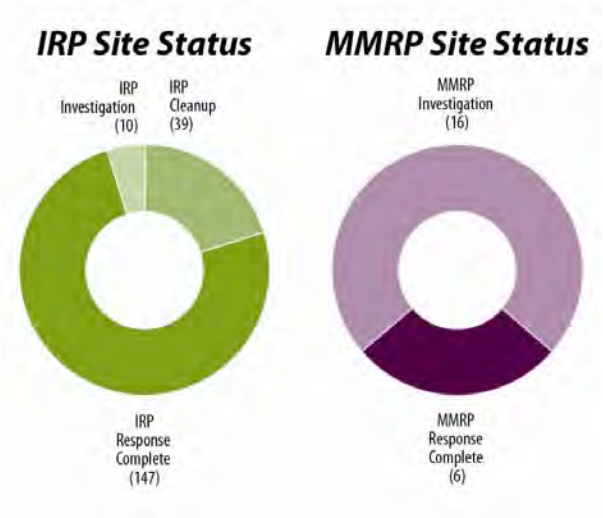
To date, the installation has completed 39 Records of Decision (RODs), which selected cleanup actions for environmental restoration sites. In addition, Camp Lejeune MCB completed an interim final ROD for Site 69. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Camp Lejeune MCB completed removal actions for Sites 89 and 95. In addition, Camp Lejeune MCB signed the ROD, completed the design for cleanup, and began cleanup actions at Sites 35 and 73. The installation also continued long-term management at Sites 03, 06, 36, 78, 82, and 93. Camp Lejeune MCB also completed a five-year review report. The installation updated the community involvement plan. The cost of completing environmental restoration has changed significantly due to technical issues.

FY10 MMRP Progress

Camp Lejeune MCB completed preliminary assessments (PAs) and site inspections (SIs) at Unexploded Ordnance (UXO) Sites 01, 07, 08, 10, 11, 12, 14, and 17 through 20. The installation also closed 10 sites, identified 12 sites for expanded SIs, and identified 2 sites for remedial investigations (RIs).



Plan of Action

Plan of action items for Camp Lejeune Marine Corps Base are grouped below according to program category.

IRP

- Complete PA/SIs at 21 sites in FY11.
- Complete the feasibility study (FS) to evaluate cleanup alternatives for Site 88 in FY11.
- Continue operation and maintenance of cleanup systems at Sites 06, 35, 73, 78, 82, and 89 in FY11-FY12.
- Complete treatability studies for Sites 78 and 86 in FY11-FY12.
- Conduct human health and ecological risk assessments at Site 49 in FY11-FY12.
- Begin RI/FS for Site 96 in FY11-FY12.
- Begin the proposed cleanup plans and RODs for Sites 69, 86, 88, and 89 in FY11-FY12.
- Implement five-year review report recommendations in FY11-FY12.

MMRP

- Conduct expanded SIs at 12 sites in FY11-FY12.
- Conduct RIs at UXO Sites 06 and 08 in FY11-FY12.
- Start site closeout procedures for UXO Sites 01, 12, 18, and 20 in FY11-FY12.
- Begin PA/SI at UXO Sites 22, 23, and 24 in FY11-FY12.

Camp Pendleton Marine Corps Base

NPL/BRAC 2005 Realignment

FFID:	CA917302353300	**Contaminants:**	Pesticides, herbicides, heavy metals, PCBs, VOCs, SVOCs, TCE	**Five-Year Review Status:**	Completed and planned
Location (Size):	Oceanside, California (250,000 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-24
Mission:	Provide housing, training facilities, logistics support, and administrative support to Fleet Marine Force Units	**Funding to Date:**	$ 227.3 million		
HRS Score:	33.79; placed on NPL in November 1989	**Est. CTC (Comp Year):**	$ 92.9 million (FY2028)		
IAG Status:	FFA signed in October 1990	**IRP Sites (Final RIP/RC):**	209 (FY2017)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Camp Pendleton Marine Corps Base (MCB) provides housing, training facilities, logistics support, and administrative support to Fleet Marine Force Units. Environmental contamination at the installation resulted from maintenance of vehicles and equipment and support facilities, such as gas stations, hospitals, laundries, pest control services, and hobby shops. Sites at the installation include landfills, surface impoundments, pesticide storage areas, fire training areas, vehicle maintenance areas, and underground storage tanks (USTs). The potential risk to human health and the environment from detection of an herbicide (Silvex) in two groundwater wells used for drinking water was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in October 1990 to outline how they would proceed with cleanup. In 2005, the BRAC Commission recommended Camp Pendleton MCB for realignment. In FY91, Camp Pendleton MCB formed a technical review committee responsible for communicating cleanup progress with the community. The installation prepared a community relations plan in FY92, which was updated in FY01. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY02, FY04, FY07, and FY09.

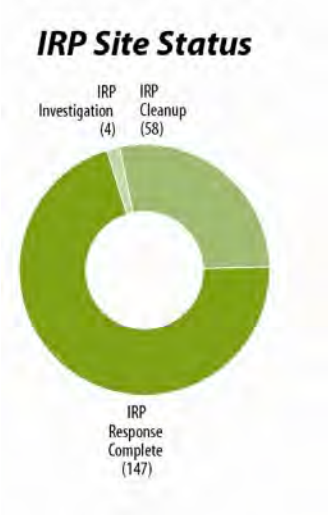
To date, the installation has completed five Records of Decision (RODs), which selected cleanup actions for environmental restoration sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Camp Pendleton MCB continued cleanup actions at USTs in Areas 11 through 17, 21, 22, 24, 26, 43, 53, and 62. The installation also began groundwater treatment at Site 1D and pilot studies at Sites 21 and 1115. Camp Pendleton MCB also prepared an engineering evaluation and cost analysis, action memorandum, and cleanup work plan for Site 33, and submitted cleanup completion reports for Sites 1A and 1H. Additionally, the installation completed work plans and fieldwork for site inspections at Sites 1116, 1117, 1118, and a remedial investigation (RI) at Site 1114. The cost of completing environmental restoration has changed significantly due to technical issues.

FY10 MMRP Progress

Camp Pendleton MCB has identified no MMRP sites.



Plan of Action

Plan of action items for Camp Pendleton Marine Corps Base are grouped below according to program category.

IRP

- Continue cleanup actions at USTs in Area 11 through 16, 21, 22, 24, 26, 43, 53, and 62 in FY11-FY12.
- Begin cleanup at Site 33 in FY11-FY12.
- Prepare RIs and feasibility studies to evaluate cleanup alternatives for Sites 21 and 1115 in FY11-FY12.
- Prepare a ROD determining that no further cleanup actions are necessary for multiple sites in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Castle Air Force Base

NPL/BRAC 1991

FFID:	CA957002455100	**Contaminants:**	Spent solvents, PCBs, POLs, pesticides, cyanide, cadmium, VOCs, SVOCs, metals	**Five-Year Review Status:**	Completed and planned
Location (Size):	Atwater, California (2,777 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-8
Mission:	Trained tanker crews and serviced KC-135 stratotanker	**Funding to Date:**	$ 174.9 million		
HRS Score:	27.93; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 8.2 million (FY2044)		
IAG Status:	IAGs signed in 1989 and 2004	**IRP Sites (Final RIP/RC):**	261 (FY2006)		
		MMRP Sites (Final RIP/RC):	1 (FY2008)		

Introduction

Castle Air Force Base (AFB) formerly trained tanker crews and serviced KC-135 stratotanker. Castle AFB has identified landfills, underground storage tanks, discharge areas, chemical disposal pits, fire training areas, fuel spill areas, and polychlorinated biphenyl (PCB) spill areas at the installation. The potential risk to human health and the environment was significant enough for EPA to place Castle AFB on the NPL in July 1987. DoD and EPA signed interagency agreements (IAGs) in 1989 and 2004 to outline how they were going to proceed with cleanup. In July 1991, the BRAC Commission recommended closure of the installation and Castle AFB closed in September 1995. The installation formed a BRAC cleanup team in FY92 to develop a process for cleanup of sites at Castle AFB, and a Restoration Advisory Board in FY95 to discuss the installation's cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY99, FY04, and FY09.

Castle AFB grouped restoration sites at the installation into three operable units (OUs): OUs 1 and 2 (groundwater), and the source control OU. Castle AFB has signed Records of Decision selecting cleanup for sites across the base, groundwater, OUs 1 and 2, Castle Vista, and all source control OU sites, which selected cleanup activities for these sites. The installation closed seven sites suspected to contain contamination for the Installation Restoration Program (IRP) and transferred all remaining property in FY07. In FY04, Castle AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Castle AFB continued to pursue regulatory closure for six soil vapor extraction (SVE) sites. The installation also implemented enhanced groundwater, SVE, and landfill treatment and monitoring procedures.

Regulatory issues delayed closure of the SVE sites, which required additional sampling.

FY10 MMRP Progress

The installation conducted no MMRP actions.

Plan of Action

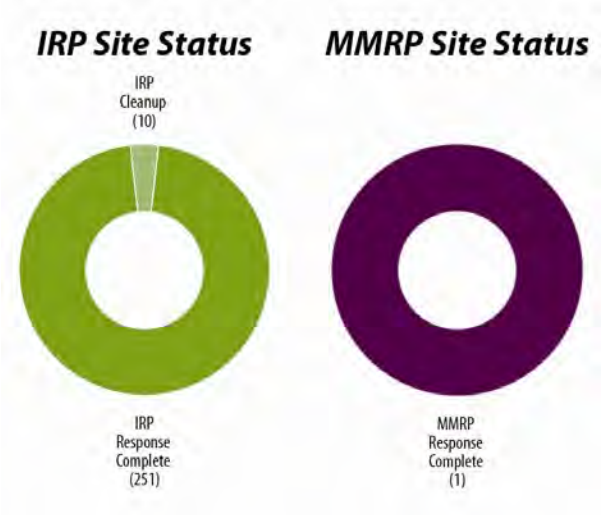
Plan of action items for Castle Air Force Base are grouped below according to program category.

IRP

- Continue to pursue regulatory closure for six SVE sites in FY11.
- Continue enhanced groundwater, SVE, and landfill cleanup actions in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Cecil Field Naval Air Station

NPL/BRAC 1993

FFID:	FL417002247400	**Contaminants:**	Waste fuel oil, solvents, heavy metals, halogenated aliphatics, phthalate esters, SVOCs, lead, VOCs	**MMRP Sites (Final RIP/RC):**	2 (FY2019)
Location (Size):	Jacksonville, Florida (30,895 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Provide facilities, services, and material support for maintenance of Naval weapons and aircraft	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-53
HRS Score:	31.99; placed on NPL in November 1989	**Funding to Date:**	$ 68.0 million		
IAG Status:	FFA signed in October 1990	**Est. CTC (Comp Year):**	$ 10.4 million (FY2029)		
		IRP Sites (Final RIP/RC):	29 (FY2008)		

Introduction

The Cecil Field Naval Air Station (NAS) supports the maintenance of Naval weapons and aircraft. Operations that caused contamination include equipment maintenance, storage and disposal of fuel and oil, fire training, and training on target ranges. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in November 1990 to outline how they were going to proceed with cleanup. In July 1993, the BRAC Commission recommended closure of this installation and relocation of its aircraft, personnel, and equipment to other stations. BRAC 1995 redirected associated bombing ranges to Jacksonville NAS, reducing the BRAC footprint at Cecil Field NAS to 17,225 acres. Formed in FY94, the installation converted its technical review committee responsible for communicating cleanup progress with the community to a Restoration Advisory Board in FY95. The installation also formed a BRAC cleanup team in FY94 to develop a process for the cleanup of sites. To ensure continuous monitoring and improvement, Cecil Field NAS completed five-year review reports in FY00 and FY05.

To date, the installation has signed 26 Records of Decision, which selected cleanup actions at environmental restoration sites. The installation also has found approximately 17,043 acres suitable to transfer and delisted approximately 16,584 of these acres from the NPL. Cecil Field NAS conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); two MMRP sites were identified.

FY10 IRP Progress

Cecil Field NAS continued long-term management (LTM) at 35 sites and continued air sparging systems at Sites 36, 37, 59, and at the North Fuel Farm. The installation also found 20.5 acres to be suitable for transfer and signed the deed for these areas to the Jacksonville Aviation Authority. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

Cecil Field NAS continued the site inspection at Unexploded Ordnance (UXO) 1. The installation also identified a new site (UXO 2) for the MMRP.

Plan of Action

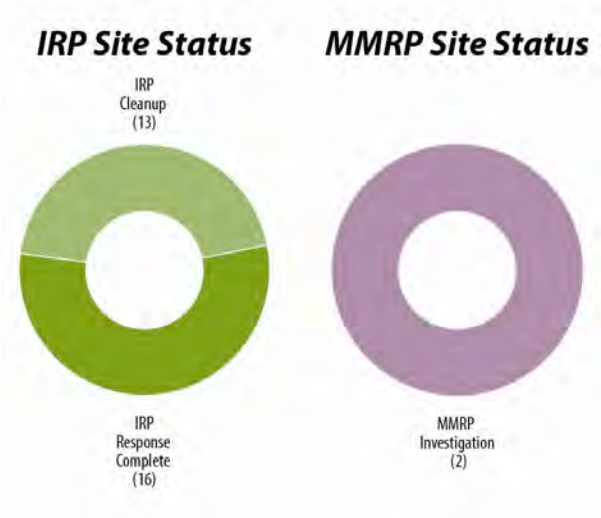
Plan of action items for Cecil Field Naval Air Station are grouped below according to program category.

IRP

- Close the air sparging system at North Fuel Farm in FY11.
- Continue LTM at 33 sites in FY11.
- Continue air sparging systems at Sites 36, 37, and 59 in FY11-FY12.

MMRP

- Begin remedial investigation and feasibiity study to evaluate cleanup alternatives for UXO 1 in FY11.
- Begin removal action at UXO 2 in FY11.



Chanute Air Force Base

Proposed NPL/BRAC 1988

FFID:	IL557002475700	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-23
Location (Size):	Rantoul, Illinois (2,174 acres)	**Funding to Date:**	$ 150.1 million		
Mission:	Served as technical training center and airport	**Est. CTC (Comp Year):**	$ 9.7 million (FY2016)		
HRS Score:	Pending	**IRP Sites (Final RIP/RC):**	78 (FY2014)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	13 (FY2011)		
Contaminants:	POLs, chlorinated solvents, metals, UXO, VOCs, SVOCs	**Five-Year Review Status:**	Completed and planned		

Introduction

Chanute Air Force Base (AFB) was one of five Air Training Command Technical Training Centers providing specialized training for officers, airmen, and civilian employees of the Air Force and other DoD agencies. Sites identified at the facility include landfills, fire training areas, oil-water separators, a petroleum sludge disposal pit, jet engine test cells, and underground storage tanks. The potential risk to human health and the environment was significant enough for EPA to propose the Operable Unit 2 portion of the installation be placed on the NPL in FY01. DoD and EPA signed an interagency agreement (IAG) in 1990 to outline how they were going to proceed with cleanup. In 1988, the BRAC Commission recommended Chanute AFB for closure. The installation signed a memorandum of understanding with the state of Illinois, and closure occurred in 1993. The majority of the installation has been leased to the Village of Rantoul for use as an airport. In FY94, Chanute AFB formed a BRAC cleanup team to develop a process for cleanup of contaminated sites, and formed a Restoration Advisory Board to discuss cleanup progress with the community. Chanute AFB updated the community relations plan in FY07.

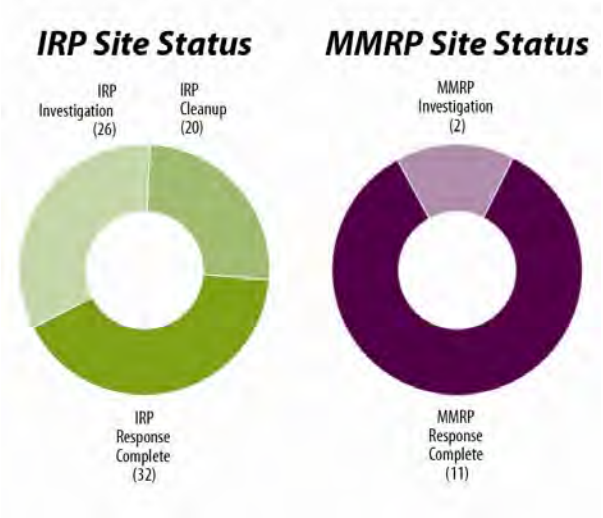
There are 78 sites within the Installation Restoration Program (IRP) at Chanute AFB, which are divided into 59 sites regulated under CERCLA and 19 non-CERCLA sites. Chanute AFB has completed the remedial investigation phase for 77 of the 78 IRP sites. In concurrence with Illinois EPA, the installation closed 14 non-CERCLA sites, 111 former fuel storage tank sites, and 11 areas of concern prior to FY06. Between FY05 and FY09, the installation transferred 876 acres, primarily to the Village of Rantoul. Between FY07 and FY09, the installation completed five Records of Decision (RODs) determining that no further cleanup was required at 18 CERCLA sites. In FY04, Chanute AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); 13 MMRP sites were identified.

FY10 IRP Progress

Regulatory and administrative issues delayed 3 RODs addressing 22 sites, which furthermore delayed cleanup at 8 additional sites. Administrative issues also delayed the five-year review report and four decision documents (DDs) to select cleanup actions at four non-CERLCA sites.

FY10 MMRP Progress

Regulatory and administrative issues delayed the closure of the final two sites.



Plan of Action

Plan of action items for Chanute Air Force Base are grouped below according to program category.

IRP

- Complete 7 RODs addressing 35 sites and 3 non-CERCLA DDs addressing 3 additional sites in FY11.
- Complete the five-year review report FY11.
- Complete construction of cleanup systems at 38 sites in FY11.
- Complete two RODs addressing six sites in FY12.
- Complete construction of cleanup systems at six sites in FY12.

MMRP

- Close the remaining sites in FY11.

Charleston Naval Complex

BRAC 1993

FFID:	SC417002434300, SC417002757100, SC417002267000, SC417002425800, SC417002256000	**IAG Status:**	N/A	**Est. CTC (Comp Year):**	$ 3.5 million (FY2021)
Location (Size):	Charleston, South Carolina (2,922 acres)	**Contaminants:**	POLs, solvents, petroleum hydrocarbons, SVOCs, VOCs, asbestos, cyanide, decontaminating agents, heavy metals, paints, PCBs, pesticides	**IRP Sites (Final RIP/RC):**	125 (FY2014)
Mission:	Repaired, maintained, and overhauled Navy ships	**Media Affected:**	Groundwater, Sediment, Soil	**MMRP Sites (Final RIP/RC):**	2 (FY2007)
HRS Score:	N/A	**Funding to Date:**	$ 56.6 million	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
				IRP/MMRP Status Table:	Refer to page E-7-47

Introduction

The Charleston Naval Complex (Charleston NC) housed five major naval commands (Naval Shipyard, Naval Station, Naval Fleet and Industrial Supply Center, Fleet and Mine Warfare Training Center, and Naval Reserve Center) and several small organizations. In July 1993, the BRAC Commission recommended closure of Charleston NC; operational closure occurred on April 1, 1996. The installation converted its technical review committee which was formed in FY05 and responsible for communicating cleanup progress with the community into a Restoration Advisory Board in 1996. In 1994, CNC formed a BRAC cleanup team to develop a process for cleanup of sites at the installation. Concurrently, the State of South Carolina formed a local redevelopment agency. The installation updated its community relations plan in FY01.

The Navy divided transfer of Charleston NC's 2,922 acres into four phases; all transfers are complete. The installation completed the final economic development conveyance consisting of 436 acres via early transfer in 2005. Other significant transfers include the sale of 24 acres of the Chicora Tank Farm in 2004 and transfer of 1,677 acres to other federal entities. In FY02, Charleston NC conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); two MMRP sites were identified.

FY10 IRP Progress

Charleston NC completed the RCRA facility investigation studies for the remaining sites. The installation also continued corrective measures at 7 sites, and monitored cleanup using natural processes at 14 sites.

Regulatory issues delayed the RCRA permit renewal.

FY10 MMRP Progress

Charleston NC completed and submitted the Final Explosives Hazard Assessment and Mitigation Measures Study for Areas of Concern 500 and 502.

Plan of Action

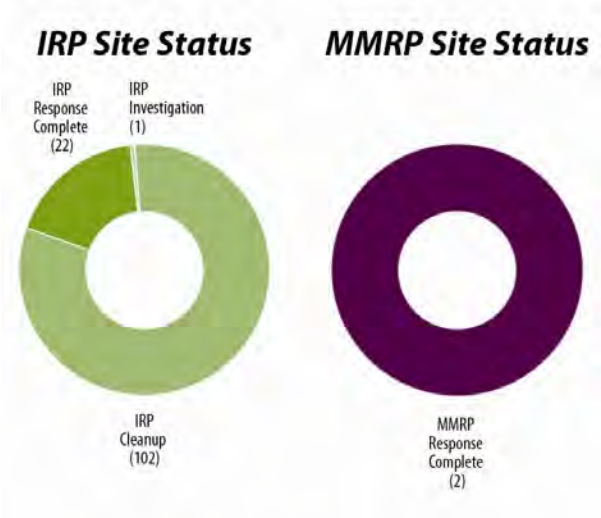
Plan of action items for Charleston Naval Complex are grouped below according to program category.

IRP

- Finalize RCRA permit with the South Carolina Department of Health and Environmental Control in FY11.
- Continue corrective measures at 7 sites and long-term management of cleanup at 14 sites in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Cherry Point Marine Corps Air Station

NPL/BRAC 2005 Realignment

FFID:	NC417302726100	**Contaminants:**	SVOCs, explosives, propellants, VOCs, PCBs, petroleum hydrocarbons, solvents, heavy metals	**Five-Year Review Status:**	Completed and planned
Location (Size):	Cherry Point, North Carolina (29,139 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-123
Mission:	Maintain and operate support facilities; provide services and materials for marine aircraft	**Funding to Date:**	$ 97.1 million		
HRS Score:	70.71; placed on NPL in December 1994	**Est. CTC (Comp Year):**	$ 95.6 million (FY2042)		
IAG Status:	FFA signed in January 2005 and January 2008	**IRP Sites (Final RIP/RC):**	108 (FY2017)		
		MMRP Sites (Final RIP/RC):	3 (FY2019)		

Introduction

Cherry Point Marine Corps Air Station (MCAS) provides services and materials for marine aircraft. Military activities have resulted in environmental contamination at the installation. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in December 1994. DoD and EPA signed federal facility agreements (FFAs) in FY05 and FY08 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Cherry Point MCAS for realignment. Formed in FY91, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY95. In FY93, the installation formed two information repositories, and in FY95, completed a community relations plan. Cherry Point MCAS finalized its community involvement plan in FY05. To ensure continuous monitoring and improvement, the installation completed five-year review reports for eight sites in FY03 and FY08.

To date, the installation has completed 10 Records of Decision (RODs), which selected cleanup actions for 15 sites and determined that no further cleanup actions were necessary for 5 sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

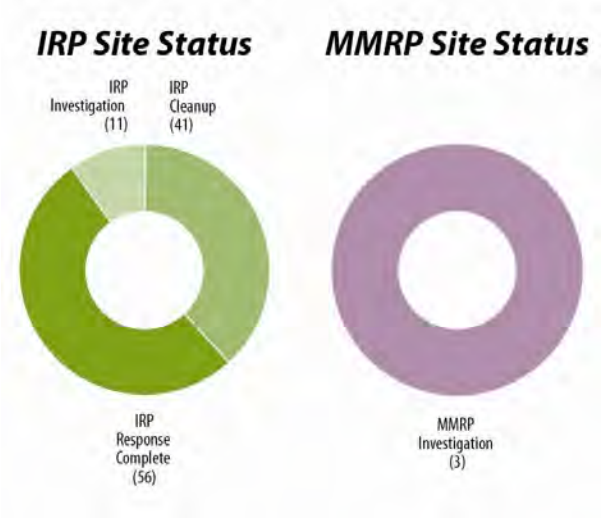
Cherry Point MCAS began design and started cleanup operations at Operable Unit (OU) 14 (Site 90). The installation also completed RODs determining that no further cleanup actions were necessary for OU 1 (Sites 14, 15, 17, 18, and 40). Cherry Point MCAS also completed a draft feasibility study (FS) to evaluate cleanup alternatives for the central groundwater plume at OU 1. The installation also completed Phase I of the vapor intrusion investigation for OU 1.

Administrative issues delayed the optimization study to identify opportunities for streamlining cleanup for groundwater at OU 2.

FY10 MMRP Progress

Cherry Point MCAS completed the site inspections (SIs) at Unexploded Ordnance (UXO) Sites 1 and 3.

Administrative issues delayed the completion of the SI at UXO Site 2.



Plan of Action

Plan of action items for Cherry Point Marine Corps Air Station are grouped below according to program category.

IRP

- Complete optimization study for groundwater at OU 2 in FY11.
- Finalize the FS and proposed plan for the central groundwater plume at OU 1 in FY11.
- Finalize the FS for OU 1 (Sites 16 and 83) in FY11.
- Complete proposed cleanup plan, revised ROD, and cleanup design for OU 2 (Site 10) in FY11.
- Perform Phase II of the vapor intrusion study and implement treatability study at OU 1 in FY11.
- Complete proposed cleanup plan and ROD for OU 1 (Sites 16 and 83) in FY12.

MMRP

- Complete the final focused remedial investigation, including surface removal, at Site 1 in FY11.
- Conduct watershed contaminant source pilot investigation at UXO Site 2 in FY11.
- Complete SI for UXO Site 2 in FY11.

Cornhusker Army Ammunition Plant

NPL

FFID:	NE721382023400	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-105
Location (Size):	Hall County, Nebraska (4,020 acres)	**Funding to Date:**	$ 75.1 million		
Mission:	Manufactured ammunition	**Est. CTC (Comp Year):**	$ 15.2 million (FY2019)		
HRS Score:	51.3; placed on NPL in July 1987	**IRP Sites (Final RIP/RC):**	66 (FY2004)		
IAG Status:	FFA signed in December 1994	**MMRP Sites (Final RIP/RC):**	1 (FY2013)		
Contaminants:	Explosives and heavy metals	**Five-Year Review Status:**	Completed and planned		

Introduction

Cornhusker Army Ammunition Plant (AAP) is a former ammunition manufacturing facility. In FY83, the installation identified an explosives-contaminated groundwater area migrating off-site. The off-site contamination affected more than 250 private residences in Grand Island. In FY86 and FY95, the installation extended the Grand Island municipal water distribution system to all affected residences. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed a federal facility agreement (FFA) in July 1990, to outline how they were going to proceed with cleanup. In FY01, the installation completed the transfer of disposal responsibility for Cornhusker AAP from the Army Materiel Command to the U.S. Army Corps of Engineers. The community formed a local redevelopment authority in FY89. To ensure continuous monitoring and improvement, Cornhusker AAP completed a five-year review report in FY04.

To date, the installation has completed five Records of Decision, which selected cleanup actions at environmental restoration sites. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

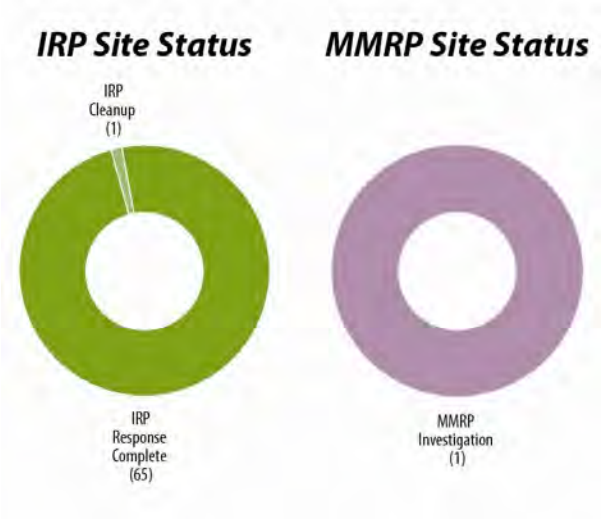
Cornhusker AAP continued the injection program to accelerate cleanup at the groundwater explosives contaminated area, and continued to accelerate the operation of the cleanup system at Operable Unit (OU) 1.

Regulatory issues delayed approval of the Freon site inspection (SI) for No DoD Action Indicated and public transfer at four sites.

FY10 MMRP Progress

Cornhusker AAP began explosives removal and sampling at the open burning and open detonation (OB/OD) ground.

Technical issues delayed completion of the explosives removal and sampling at the OB/OD ground. Regulatory issues delayed the approval of the engineering evaluation and cost analysis (EE/CA) for the OB/OD ground.



Plan of Action

Plan of action items for Cornhusker Army Ammunition Plant are grouped below according to program category.

IRP

- Obtain regulatory approval of the Freon SI for No DoD Action Indicated and public transfer at four sites in FY11.
- Complete sampling at OU 3 in FY11.
- Continue injection program to accelerate cleanup at the groundwater explosives contaminated area in FY11-FY12.
- Continue to accelerate the operation of the cleanup system at OU 1 in FY11-FY12.

MMRP

- Obtain regulatory approval of EE/CA for OB/OD ground in FY11.
- Submit and receive approval of an addendum to the explosive safety submission for OB/OD ground in FY11.
- Continue the removal and destruction of explosives and soil sampling at the OB/OD ground in FY11-FY12.

Dallas Naval Air Station

BRAC 1993

FFID:	TX617002278600	**Media Affected:**	Sediment, Soil, Groundwater	**IRP/MMRP Status Table:**	Refer to page E-7-49
Location (Size):	Dallas, Texas (832 acres)	**Funding to Date:**	$ 84.6 million		
Mission:	Served as a pilot training center	**Est. CTC (Comp Year):**	$ 6.2 million (FY2018)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	47 (FY2007)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	2 (FY2005)		
Contaminants:	VOCs, SVOCs, POLs, solvents, asbestos, heavy metals	**Five-Year Review Status:**	Completed and planned		

Introduction

Dallas Naval Air Station (NAS) served as a pilot training center. In July 1993, the BRAC Commission recommended closure of the Dallas NAS. The installation closed in September 1998. After the base was closed, operations transferred to Fort Worth NAS. A number of the industrial operations that supported the installation's military mission contributed to contamination. In FY94, Dallas NAS formed a BRAC cleanup team to develop a process for cleanup of sites, and developed a BRAC cleanup plan with community input to prioritize sites requiring environmental restoration. The installation formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community, and established an information repository. The RAB adjourned in FY05. The installation established a local redevelopment authority and adopted a land reuse plan. During FY96, the installation completed a community relations plan.

The installation has completed a RCRA facility assessment, which identified solid waste management units and areas of concern. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); two MMRP sites were identified.

FY10 IRP Progress

Dallas NAS continued monitoring at 12 groundwater contaminated areas.

FY10 MMRP Progress

The installation conducted no MMRP actions.

Plan of Action

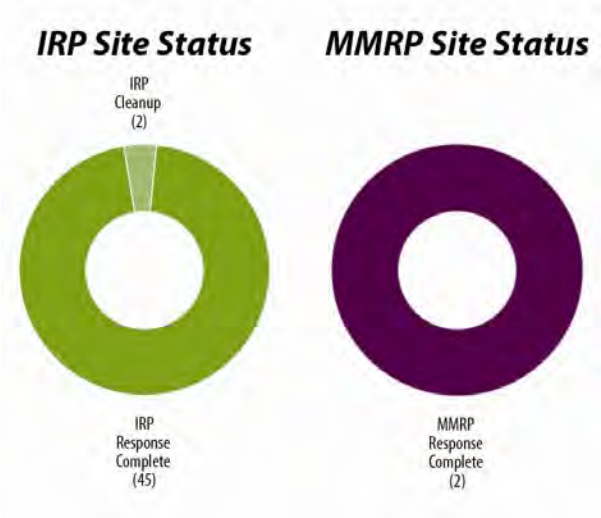
Plan of action items for Dallas Naval Air Station are grouped below according to program category.

IRP

- Continue monitoring at 12 groundwater contaminated areas in FY11-FY12.
- Conduct survey of three groundwater contaminated areas in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Davisville Naval Construction Battalion Center

NPL/BRAC 1991

FFID:	RI117002203600	**Contaminants:**	Heavy metals, PCBs, pesticides, petroleum hydrocarbons, POLs, VOCs, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Davisville, Rhode Island (1,285 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-143
Mission:	Provided mobilization support to Naval Construction Forces	**Funding to Date:**	$ 66.5 million		
HRS Score:	34.52; placed on NPL in November 1989	**Est. CTC (Comp Year):**	$ 15.5 million (FY2043)		
IAG Status:	FFA signed in March 1992	**IRP Sites (Final RIP/RC):**	25 (FY2014)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

The Davisville Naval Construction Battalion Center (NCBC) provided mobilization support to Naval Construction Forces. Site types at the installation include landfills, solvent storage and disposal areas, transformer storage areas, spill areas, underground storage tanks, and fire training areas. Contaminants include solvents, polychlorinated biphenyls (PCBs), petroleum/oil/lubricants (POLs), and pesticides. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in March 1992 to outline how they were going to proceed with cleanup. In July 1991, the BRAC Commission recommended closure of the installation. Construction battalion training and mobilization activities transferred to the Naval Construction Battalion Center, Gulfport, Mississippi, and to the Naval Construction Battalion Center, Port Hueneme, California. The installation closed in April 1994. The installation established an administrative record and information repository in FY89. The installation converted its technical review committee, which was formed in FY88 and responsible for communicating cleanup progress with the community, to a Restoration Advisory Board in FY94. Also in FY94, the installation formed a BRAC cleanup team to develop a process for cleanup at Davisville NCBC. In FY95, a BRAC cleanup plan was completed to prioritize sites requiring environmental restoration, and in FY96 and FY97, the BRAC cleanup team prepared BRAC business plans and a community relations plan, respectively. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY03 and FY08.

The installation has completed three Records of Decision (RODs), which selected cleanup actions at environmental restoration sites. In addition, the installation has completed six No Further Action RODs, which determined no further cleanup activities were necessary. Davisville NCBC conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Davisville NCBC conducted fieldwork for the feasibility study (FS) to evaluate cleanup alternatives for Site 16. The installation also conducted long-term monitoring and landfill maintenance at Sites 7 and 9. In addition, Davisville NCBC received regulator concurrence that no further cleanup actions were necessary at Site EBS21. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed the investigation of source areas at Site 7.

FY10 MMRP Progress

Davisvillle NCBC has identified no MMRP sites.

Plan of Action

Plan of action items for Davisville Naval Construction Battalion Center are grouped below according to program category.

IRP

- Conduct investigation of source areas at Site 7 in FY11.
- Complete FS, proposed cleanup plan, and ROD for soil and groundwater at Site 16 in FY11.
- Complete revision to long-term management sampling programs for Sites 7 and 9 in FY11.
- Conduct stressed vegetation evaluation at Site 9 in FY11-FY12.
- Continue long-term monitoring and landfill maintenance at Sites 7 and 9 in FY11-FY12.
- Complete risk evaluation, proposed cleanup plan, and ROD for soils at Sites 1 through 4 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Defense Distribution Depot Memphis

NPL/BRAC 1995

FFID:	TN497152057000	**Contaminants:**	POLs, VOCs, pesticides, heavy metals, chlorinated solvents	**Five-Year Review Status:**	Completed and planned
Location (Size):	Memphis, Tennessee (642 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-48
Mission:	Stored and distributed clothing, food, medical supplies, electronic equipment, petroleum products, and industrial chemicals	**Funding to Date:**	$ 59.4 million		
HRS Score:	58.06; placed on NPL in October 1992	**Est. CTC (Comp Year):**	$ 0.0 million (FY2016)		
IAG Status:	FFA signed in March 1995	**IRP Sites (Final RIP/RC):**	116 (FY2010)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Defense Distribution Depot (DDD) Memphis stored and distributed clothing, food, medical supplies, electronic equipment, petroleum products, and industrial chemicals until FY97. Contamination resulted from leakage, spillage, disposal, and the normal application of pesticides. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in 1992. DoD, EPA, and the Tennessee Department of Environment and Conservation signed a federal facility agreement (FFA) in 1995 to outline how they were going to proceed with cleanup. In 1995, the BRAC Commission recommended closure of DDD Memphis. The BRAC cleanup team developed a BRAC cleanup plan with community input in FY96 to prioritize sites requiring environmental restoration. In FY93, the installation formed a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community. In FY98, DDD Memphis developed a community relations plan. In FY01 and FY02, the RAB received funding for technical assistance for public participation. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY03 and FY08.

DDD Memphis is divided into two areas: the Main Installation and Dunn Field. The installation divided all CERCLA sites and former underground storage tanks into four operable units. DDD Memphis has signed two Records of Decision (RODs), which selected cleanup actions for the Main Installation and Dunn Field. The installation amended the Dunn Field ROD in FY09. DDD Memphis has transferred 374 acres of the Main Installation and 41 acres of Dunn Field. In FY95, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one sit was identified.

FY10 IRP Progress

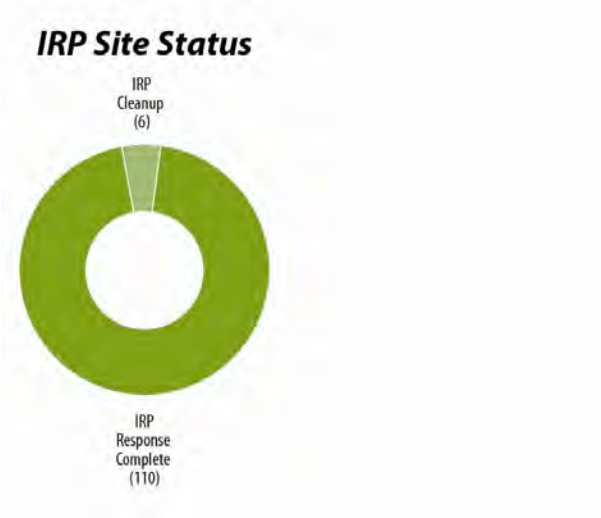
DDD Memphis completed documents finding the remainder of Dunn Field and the Main Installation suitable for transfer, and conducted public comment on the documents. The installation obtained EPA concurrence and Department of Army signature on the documents finding the remainder of Dunn Field and the Main Installation suitable for transfer, completing the transfer of all 642 acres of the Depot. Regulators approved operating properly and successfully at the Main Installation and Dunn Field. The installation also completed construction and began operation of the off-depot groundwater cleanup action northwest of Dunn Field; annual inspections of land use controls, which restrict use of and access to the Main Installation and Dunn Field; a preliminary closeout report documenting that construction is complete for selected remedies at the installation; and abandonment of the Dunn Field groundwater and discharge system. DDD Memphis obtained BRAC cleanup team concurrence to adjourn.

DDD Memphis obtained RAB concurrence to adjourn and conducted the final RAB meeting.

DLA transferred Defense Distribution Depot Memphis to the Army in early FY11. The Army will report the cost-to-complete estimate in the FY11 annual report.

FY10 MMRP Progress

DDD Memphis has identified no sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP).



Plan of Action

Plan of action items for Defense Distribution Depot Memphis are grouped below according to program category.

IRP

- Complete closeout of the BRAC cleanup plan as part of the BRAC cleanup team adjournment process in FY11.
- Continue operating soil vapor extraction (SVE) remedy on Dunn Field and air sparge with SVE in the groundwater contaminated area west of Dunn Field in FY11-FY12.
- Conduct groundwater long term monitoring of groundwater at the Main Installation and Dunn Field in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Defense Distribution Depot San Joaquin, Sharpe Facility
Formerly Sharpe Army Depot

NPL

FFID:	CA997152083200	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-33
Location (Size):	Lathrop, California (724 acres)	**Funding to Date:**	$ 81.4 million		
Mission:	Receive, store, and distribute supplies, materials, and equipment	**Est. CTC (Comp Year):**	$ 101.8 million (FY2047)		
HRS Score:	42.24; placed on NPL in July 1987	**IRP Sites (Final RIP/RC):**	152 (FY2012)		
IAG Status:	IAG signed in March 1989	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	VOCs, heavy metals, POLs, TCE, pesticides	**Five-Year Review Status:**	Competed and planned		

Introduction

Defense Distribution Depot (DDD) San Joaquin, Sharpe Facility began operation in 1941 as a supply and maintenance center. Activities at the property have included overhauls, repairs, painting, paint stripping, metal finishing, and degreasing of aircraft and heavy construction equipment. Investigations have identified contaminated groundwater, soil, and building sites. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed an interagency agreement (IAG) in March 1989 to outline how they were going to proceed with cleanup. DDD San Joaquin, Sharpe Facility developed a community relations plan, which the installation updated in FY07. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY04 and FY09.

To date, DDD San Joaquin, Sharpe Facility has completed two Records of Decision (RODs), which selected cleanup actions for Operable Unit (OU) 1 groundwater cleanup in FY93 and the OU 2 soil cleanup in FY96.

FY10 IRP Progress

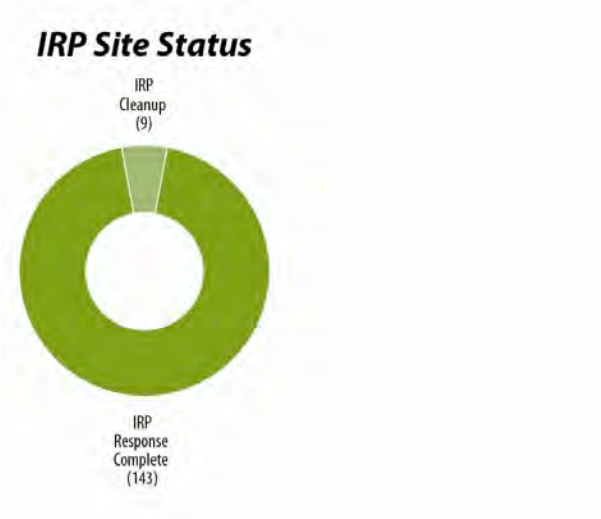
DDD San Joaquin, Sharpe Facility continued operations and maintenance (O&M) of groundwater treatment systems, associated compliance actions, and groundwater monitoring. The installation completed the third alternative pilot study technology evaluation. The installation also completed the work plan and installation of the soil vapor extraction (SVE) system at Site P-5A. The cost of completing environmental restoration has changed significantly due to regulatory issues and changes in estimating criteria.

Regulatory issues delayed the ROD amendment for OU 2. Administrative issues delayed the start of an engineering evaluation and cost analysis (EE/CA), proposed plan (PP), and a ROD amendment for OU 1.

The installation submitted an update to the 2007 community relations plan.

FY10 MMRP Progress

DDD San Joaquin, Sharpe Facility has identified no sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP).



Plan of Action

Plan of action items for Defense Distribution Depot San Joaquin, Sharpe Facility are grouped below according to program category.

IRP

- Complete ROD amendments for OUs 1 and 2 in FY11.
- Complete the feasibility study to evaluate cleanup alternatives, in place of the EE/CA, and a PP for OU 1 in FY11.
- Complete the community relations plan update in FY11.
- Continue operation of the SVE system at Site P-5A in FY11-FY12.
- Continue O&M of groundwater treatment, associated compliance actions, and groundwater monitoring in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Defense Distribution Depot San Joaquin, Tracy Facility

NPL

FFID:	CA997150682700	**Contaminants:**	Chlorinated solvents, heavy metals, pesticides, POLs, VOCs	**Five-Year Review Status:**	Completed, underway, and planned
Location (Size):	Tracy, California (908 acres)	**Media Affected:**	Soil and Groundwater	**IRP/MMRP Status Table:**	Refer to page E-6-34
Mission:	Store and distribute medical, textile, food, electronic, industrial, construction, chemicals, and other supplies and equipment	**Funding to Date:**	$ 109.8 million		
		Est. CTC (Comp Year):	$ 20.7 million (FY2024)		
HRS Score:	37.16; placed on NPL in August 1990	**IRP Sites (Final RIP/RC):**	75 (FY2012)		
IAG Status:	FFA signed in 1991	**MMRP Sites (Final RIP/RC):**	None		

Introduction

Defense Distribution Depot (DDD) San Joaquin, Tracy Facility stores and distributes supplies and equipment for DoD. Sites include burn and disposal pits, underground storage tanks, hazardous waste storage sites, and other contaminated areas. The installation identified contaminated on-site soil and groundwater, and off-site groundwater. The potential risk to human health and the environment was significant enough for EPA to place DDD San Joaquin, Tracy Facility on the NPL in 1990. DoD and EPA signed a federal facility agreement (FFA) in 1991 to outline how they were going to proceed with cleanup. The installation established a community relations plan in 1994, and updated it in FY04 and FY06. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY05.

To date, DDD San Joaquin, Tracy Facility has signed two Records of Decision (RODs): one selected cleanup actions for groundwater contamination, and the other selected cleanup actions for all sites at the installation.

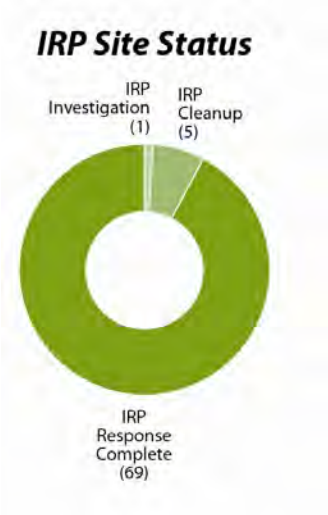
FY10 IRP Progress

DDD San Joaquin completed the feasibility study to evaluate cleanup alternatives for the northwest corner of the North Depot Dieldrin Site, and completed a work plan to install and operate the soil vapor extraction (SVE) system at Solid Waste Management Unit (SWMU) 20. The installation prepared and submitted their a second five-year review draft report. The installation also conducted sampling at Area 1/Bldg 237 to determine if no further cleanup actions are necessary. The cost of completing environmental restoration has changed significantly due to regulatory issues and changes in estimating criteria.

Administrative issues delayed the completion of the proposed plan (PP) and ROD Amendment for the northwest corner of the North Depot Dieldrin Site. Technical issues delayed installation and operation of the SVE system at SWMU 20. Technical issues also delayed the completion of preliminary close out report for all sites.

FY10 MMRP Progress

The Tracy Site has not identified any sites suspected to contain contamination for the Military Munitions Response Program (MMRP).



Plan of Action

Plan of action items for Defense Distribution Depot San Joaquin, Tracy Facility are grouped below according to program category.

IRP

- Complete PP and ROD for northwest corner of the North Depot Dieldrin Site in FY11.
- Install and operate the SVE at the SWMU 20 in FY11.
- Complete second five-year review report in FY11.
- Complete the preliminary close out report for all sites in FY11.
- Implement the groundwater remedy at the northwest corner of the Depot in FY11.
- Implement the soil remedy at Building 237 in FY11.
- Finalize an explanation of significant differences with the ROD to address soil remedies in FY11.
- Perform vapor intrusion assessments at Areas 1, 2, and 3 to determine if cleanup is complete in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Defense Supply Center Philadelphia
Formerly Defense Personnel Support Center

BRAC 1993

FFID:	PA397154266500	**HRS Score:**	N/A	**IRP Sites (Final RIP/RC):**	48 (FY2003)
Location (Size):	Philadelphia, Pennsylvania (87 acres)	**IAG Status:**	N/A	**MMRP Sites (Final RIP/RC):**	None
Mission:	Procured and distributed food, clothing and textiles, medical supplies and equipment, and general and industrial items in support of the DoD military services, federal and civil agencies, and foreign countries; and to ensure military readiness	**Contaminants:**	POLs, PCBs, pesticides, asbestos	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
		Media Affected:	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-138
		Funding to Date:	$ 34.2 million		
		Est. CTC (Comp Year):	$ 10.3 million (FY2015)		

Introduction

The mission of Defense Supply Center (DSC) Philadelphia (formerly Defense Personnel Support Center Site) was procurement and distribution of food, clothing and textiles, medical supplies and equipment, and general and industrial items. Sites include underground storage tanks, aboveground storage tanks, pesticide management areas, hazardous waste management areas, polychlorinated biphenyl (PCB)-containing transformers, asbestos-contaminated areas, and former railroad track areas. Studies have indicated that the contamination originated off-site and migrated onto DSC Philadelphia. In July 1993, the BRAC Commission recommended closure of the installation, and relocated its mission to the Naval Support Activity Philadelphia. DSC Philadelphia formed a BRAC cleanup team in FY94 to develop a process for the cleanup of sites. In FY95, the installation established a Restoration Advisory Board to discuss the installation's cleanup progress with the community. In FY05, the installation began to establish an administrative record.

The only Installation Restoration Program (IRP) site currently open and undergoing cleanup is the subsurface groundwater petroleum hydrocarbon-contaminated site, which lies under large portions of the installation and is managed by the Defense Energy Support Center. The installation closed five IRP sites in FY01, one IRP site in FY03, and three IRP sites in FY04. All other IRP sites, aside from the hydrocrabon-contaminated area, were closed prior to FY01.

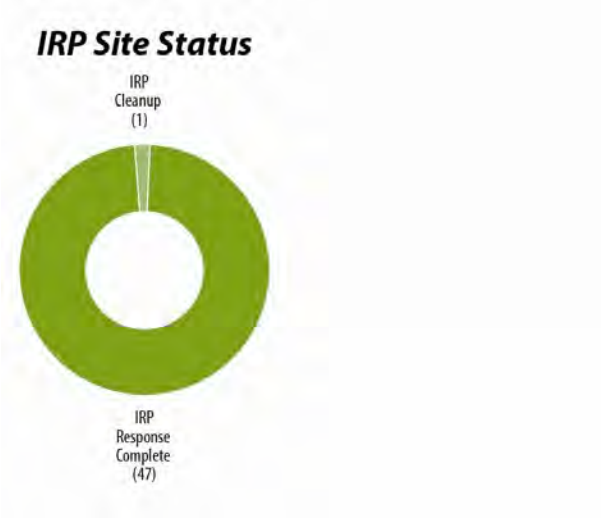
FY10 IRP Progress

DSC Philadelphia conducted groundwater sampling in the shallow, intermediate and deep wells. The installation also continued to operate the vacuum-enhanced product recovery system.

Administrative issues delayed submission of the Pennsylvania Act 2 documentation including the public involvement plan, remedial investigation (RI) report, and final cleanup plan. Administrative issues also delayed operation of the cleanup system on the Philadelphia Housing Authority, and access agreements for the construction of new monitoring wells at the former Passyunk Homes Site.

FY10 MMRP Progress

DSC Philadelphia has identified no sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP).



Plan of Action

Plan of action items for Defense Supply Center Philadelphia are grouped below according to program category.

IRP

- Submit Pennsylvania Act 2 documentation including the public involvement plan, RI report, and final cleanup plan in FY11.
- Restart operation of the cleanup system on the Philadelphia Housing Authority Site in FY11.
- Obtain access agreements for the construction of new monitoring wells at the former Passyunk Homes Site in FY11.
- Replace the underground storage tank with an aboveground storage tank to complete system repair in FY11.
- Continue groundwater sampling in the shallow, intermediate and deep wells and install three deep wells in FY11.

MMRP

- There are no MMRP actions scheduled for FY10 or FY11.

Defense Supply Center Richmond

NPL

FFID:	VA397152075100	**Contaminants:**	POLs, VOCs, PAHs, solvents, pesticides, metals, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Richmond, Virginia (565 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-173
Mission:	Provide logistics support (aviation weapon system and environmental) for DoD	**Funding to Date:**	$ 65.9 million		
HRS Score:	33.85; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 17.6 million (FY2035)		
IAG Status:	IAG signed in 1991	**IRP Sites (Final RIP/RC):**	32 (FY2012)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Defense Supply Center (DSC) Richmond provides aviation weapon systems and environmental logistics support for DoD. Petroleum/oil/lubricants (POLs), polyaromatic hydrocarbons (PAHs), chlorinated volatile organic compounds (VOCs), solvents, metals, and pesticides in the groundwater and soil are the primary contaminants at the installation. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed an interagency agreement (IAG) in 1991 to outline how they were going to proceed with cleanup. In FY02, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community, and implemented a community relations plan. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY97, FY99, FY02, FY05, and FY08.

Sites have been grouped into 13 Operable Units (OUs). To date, DSC Richmond has signed nine Records of Decision (RODs), which selected cleanup actions for nine OUs. In FY04, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

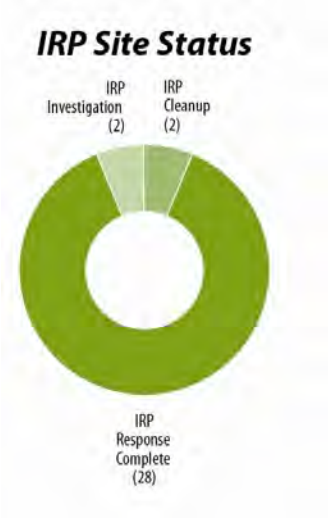
FY10 IRP Progress

DSC Richmond completed the feasibility study (FS) to evaluate cleanup alternatives for OU 7, and a proposed plan (PP) for OU 13. The installation completed construction of cleanup systems at OU 2, and an additional groundwater investigation at OU 8. The installation also completed the implementation plan and inspections for land use controls (LUCs), which restrict use of and access to all sites. The cost of completing environmental restoration has changed significantly due to regulatory issues and changes in estimating criteria.

Administrative issued delayed the completion of the FS for OU 6. Regulatory issues delayed completion of the ROD for OU 13.

FY10 MMRP Progress

DSC Richmond has identified no sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP).



Plan of Action

Plan of action items for Defense Supply Center Richmond are grouped below according to program category.

IRP

- Complete ROD for OU 3 in FY11.
- Complete FS and PP for OU 6 in FY11.
- Complete proposed cleanup plan for OU 7 in FY11-FY12.
- Complete the design for cleanup at OU 13 in FY11-FY12.
- Complete inspection and maintenance for the LUC implemenation plan in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Deseret Chemical Depot

BRAC 2005 Closure

FFID:	UT821382026500	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-164
Location (Size):	Tooele, Utah (19,364 acres)	**Funding to Date:**	$ 24.9 million		
Mission:	Plan and execute the storage and disposal of chemical weapons	**Est. CTC (Comp Year):**	$ 128.1 million (FY2016)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	33 (FY2014)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	6 (FY2016)		
Contaminants:	Solvents, heavy metals, explosives, VOCs	**Five-Year Review Status:**	Planned		

Introduction

Deseret Chemical Depot (CD) opened in 1943 as a storage facility for chemical agents. The primary mission of Deseret CD is the storage, surveillance, and demilitarization of chemical ammunition, and to provide installation support for chemical weapons disposal at its two permitted treatment facilities: Tooele Chemical Agent Disposal Facility and Chemical Agent Munitions Disposal Systems. Tooele Chemical Agent Disposal Facility is a full-scale treatment facility with four incinerators used for various decontamination activities associated with chemical agents and munitions. Chemical Agent Munitions Disposal Systems is a research and development facility used to demonstrate technology for chemical munitions handling, disassembly, incineration, pollution control, and treatment of waste. The installation has tested and evaluated various alternatives to incineration for destruction of chemical and conventional munitions at the facility. Past operations and disposals at Deseret CD have resulted in various types of contaminants across the installation. Solvents, heavy metals, and explosives are the primary contaminants, with chemical agent breakdown products being detected at several sites. In 2005, the BRAC Commission recommended Deseret CD for closure after completion of its chemical demilitarization mission.

FY10 IRP Progress

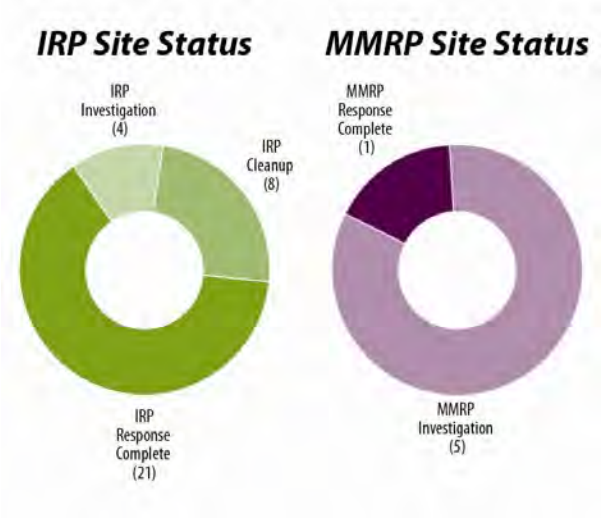
Deseret CD completed groundwater monitoring, sampling, and analysis. The installation also completed a geophysical investigation at solid waste management unit (SWMU) 29. Deseret CD also awarded a contract for an investigation at the Sanitary Landfill (SWMU 26). The cost of completing environmental restoration has changed significantly due to technical issues.

Technical issues delayed completion of cleanup at SWMU 3 and updates to the Phase II investigation. Technical issues also delayed completion of the environment condition of property (ECP) report, which is delayed indefinitely based on the determination that the ECP may not be necessary for Deseret CD. Regulatory issues delayed completion of the soil gas study and soil vapor intrusion sampling at SWMU 19.

FY10 MMRP Progress

Deseret CD awarded a contract for the investigation at Combat Training Range (DCD-001-R-01) and Old Demolition Pit (DCD-004-R-01).

Technical issues delayed completion of the soil gas investigation at DCD 006-R-01; the investigation is delayed indefinitely while the installation determines the best method for investigation.



Plan of Action

Plan of action items for Deseret Chemical Depot are grouped below according to program category.

IRP

- Complete cleanup at SWMU 3 and update the Phase II investigation in FY11.
- Complete the soil gas study and soil vapor intrusion sampling at SWMU 19 in FY11.
- Continue site-wide groundwater sampling in FY11-FY12.
- Complete removal activities at SWMU 37 in FY11-FY12.

MMRP

- Conduct interim removal activities and investigation at DCD 002-R-01 and DCD 006-R-01 in FY11.
- Complete Final Work Plan for the investigation at DCD-001-R-01 and DCD-004-R-01 in FY11-FY12.

Dover Air Force Base

NPL

FFID:	DE357182401000	**Contaminants:**	Solvents, VOCs, petroleum products, SVOCs, metals	**Five-Year Review Status:**	Completed and planned
Location (Size):	Dover, Delaware (3,730 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-52
Mission:	Provide airlift support for troops, cargo, and equipment	**Funding to Date:**	$ 89.7 million		
HRS Score:	35.89; placed on NPL in March 1989	**Est. CTC (Comp Year):**	$ 16.7 million (FY2032)		
IAG Status:	FFA signed in August 1989	**IRP Sites (Final RIP/RC):**	60 (FY2007)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Dover Air Force Base (AFB) has provided airlift support for troops, cargo, and equipment since 1942. Contaminated site types include solvent spills, fire training areas, landfills, fuel spills, and leaks. Former waste management practices contaminated the shallow groundwater aquifer with petroleum products and volatile organic compounds (VOCs). The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in March 1989. DoD and EPA signed a federal facility agreement (FFA) in August 1989 to outline how they were going to proceed with cleanup. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY03 and FY08.

To date, all of the sites have installed operational cleanup systems or require no further cleanup actions. The installation has signed 6 Records of Decision, selecting cleanup actions for 39 sites. In FY05, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Dover AFB continued operations, maintenance, monitoring, and reporting of groundwater cleanup systems at 23 sites. The Air Force, the state of Delaware, and EPA signed cleanup completion reports, which enabled Dover AFB to close eight sites. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

Dover AFB has identified no MMRP sites.

Plan of Action

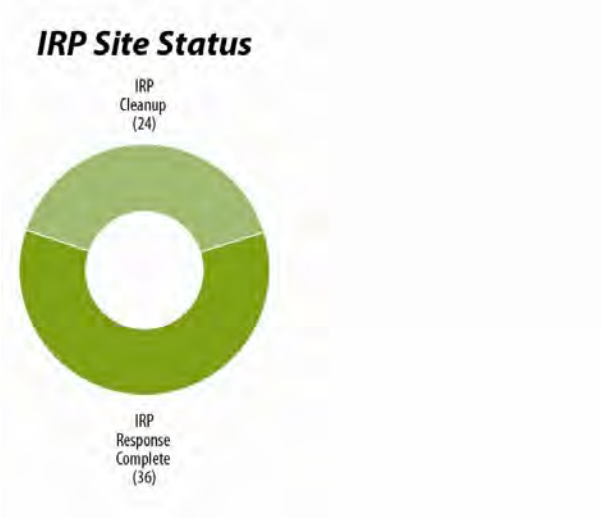
Plan of action items for Dover Air Force Base are grouped below according to program category.

IRP

- Continue operations, maintenance, monitoring, and reporting of groundwater cleanup systems at 23 sites in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Eaker Air Force Base

BRAC 1991

FFID:	AR657002447300	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-7
Location (Size):	Blytheville, Arkansas (3,401 acres)	**Funding to Date:**	$ 31.0 million		
Mission:	Supported bomber and tanker aircraft operations	**Est. CTC (Comp Year):**	$ 3.7 million (FY2061)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	16 (FY2013)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	9 (FY2002)		
Contaminants:	POLs, VOCs, UXO, metals, SVOCs, petroleum hydrocarbons	**Five-Year Review Status:**	Completed and planned		

Introduction

Eaker Air Force Base (AFB) formerly supported bomber and tanker aircraft operations. Typical environmental site types include underground storage tanks, aboveground storage tanks, oil-water separators, petroleum/oil/lubricant (POL) spill sites, and landfills. Other sites include a fire training area, waste and material storage areas, an explosive ordnance disposal range, a small arms firing range, a trap and skeet range, a JP-4 jet fuel hydrant system, and a bulk fuel storage tank farm. In July 1991, the BRAC Commission recommended closure of Eaker AFB. The installation closed in December 1992. In FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. In FY97 and FY05, the BRAC cleanup team updated the BRAC cleanup plan, which prioritizes sites requiring environmental restoration. In FY94, the installation formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community. The RAB adjourned in FY00 due to successful cleanup efforts and declining community interest. Eaker AFB completed a community relations plan in FY95. To ensure continuous monitoring and improvement, Eaker AFB completed a five-year review report in FY06 and FY10.

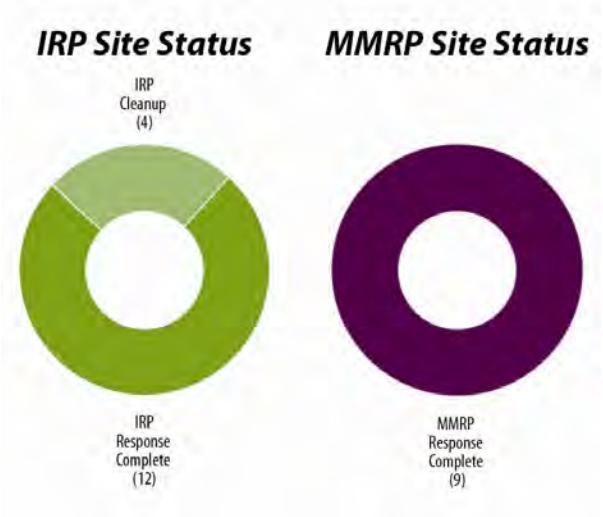
Environmental studies have identified sites at Eaker AFB suspected to contain contamination for the Installation Restoration Program (IRP). EPA and Eaker AFB signed an administrative consent order indicating that 30 sites were subject to RCRA corrective action and would be addressed under a RCRA facility investigation. In FY99, the installation confirmed no further construction of cleanup systems was required at any IRP sites. The installation completed the deed for the 110-acre golf course and transferred a 155-acre parcel in FY00. In FY04, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified. In FY07, Eaker AFB finalized the closure of all MMRP sites.

FY10 IRP Progress

Eaker AFB completed a five-year review report. The installation also completed the annual long-term management (LTM) report. In addition, Eaker AFB reevaluated current operations of cleanup systems and continued cleanup systems operations and maintenance (O&M), LTM, and groundwater monitoring at four sites.

FY10 MMRP Progress

The installation conducted no MMRP actions.



Plan of Action

Plan of action items for Eaker Air Force Base are grouped below according to program category.

IRP

- Continue LTM, O&M, and groundwater monitoring in FY11-FY12.
- Implement recommendations from investigations at ST005, ST012 and SS003 in FY11-12.
- Continue free-product removal at SS003 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Earle Naval Weapons Station

NPL

FFID:	NJ217002217200	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-35
Location (Size):	Colts Neck, New Jersey (11,134 acres)	**Funding to Date:**	$ 33.0 million		
Mission:	Handle, store, renovate, and ship munitions	**Est. CTC (Comp Year):**	$ 6.2 million (FY2037)		
HRS Score:	37.21; placed on NPL in August 1990	**IRP Sites (Final RIP/RC):**	69 (FY2011)		
IAG Status:	FFA signed in December 1990	**MMRP Sites (Final RIP/RC):**	1 (FY2005)		
Contaminants:	VOCs, SVOCs, heavy metals, hydrocarbons, petroleum products, explosives, propellants	**Five-Year Review Status:**	Completed and planned		

Introduction

Earle Naval Weapons Station handles, stores, renovates, and ships munitions. The sites include landfills, production areas, storage areas, maintenance areas, and disposal areas. Releases of volatile organic compounds (VOCs) and heavy metals from landfills and production areas have contaminated groundwater and soil at the installation. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed a federal facility agreement (FFA) in December 1990 to outline how they were going to proceed with cleanup. Formed in FY90, the installation converted its technical review committee responsible for communicating cleanup progress with the community to a Restoration Advisory Board in FY95. The installation completed a community relations plan in FY90, which was updated in FY98. The installation also established an information repository containing a copy of the administrative record. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY03 and FY08.

To date, the installation has completed Records of Decision (RODs), which selected cleanup actions at 21 environmental restoration sites. Earle Naval Weapons Station has also signed RODs which determined no further cleanup actions were necessary at 13 sites. The installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Earle Naval Weapons Station began to establish Classification Exception Areas at Sites 3 through 6, 10, 13, 17, 19, and 26. The installation began RODs determining that no further cleanup actions were necessary at Sites 9, 41, and 46. For FY09, Earle completed a proposed cleanup plan, and prepared the work plan for a landfill cap, and ROD for Site 7.

FY10 MMRP Progress

Earle Naval Weapons Station conducted no MMRP actions.

Plan of Action

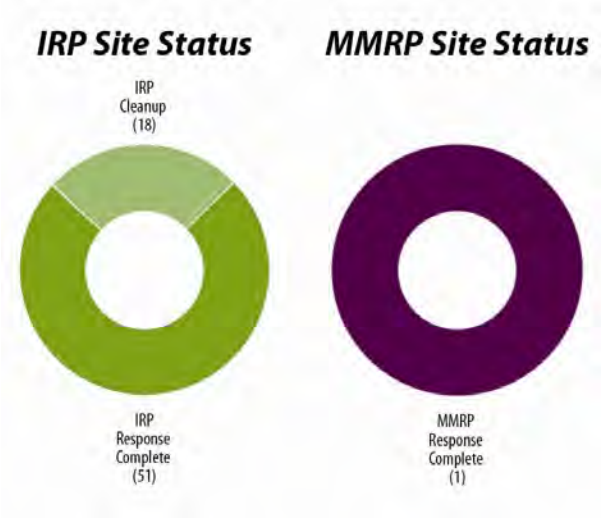
Plan of action items for Earle Naval Weapons Station are grouped below according to program category.

IRP

- Complete the one-time maintenance action, the ROD determining that no further cleanup actions are necessary, and construct the landfill cap at Site 7 in FY11.
- Continue to establish Classification Exception Areas at Sites 3 through 6, 10, 13, 17, 19, and 26 in FY11.
- Prepare feasibility studies to evaluate cleanup alternatives and RODs determining that no further cleanup action is necessary at Sites 9, 41, and 46 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Edwards Air Force Base

NPL/BRAC 2005 Realignment

FFID:	CA957172450400	**Contaminants:**	Waste oils, solvents, petroleum hydrocarbons, POLs, rocket fuel, potential CWM, metals, VOCs, SVOCs, PCBs	**MMRP Sites (Final RIP/RC):**	21 (FY2016)
Location (Size):	Kern County, California (301,000 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Planned for future
Mission:	Conduct aerospace research, development, testing, and evaluation, and provide support to United States and allies	**Funding to Date:**	$ 407.7 million	**IRP/MMRP Status Table:**	Refer to page E-6-31
HRS Score:	33.62; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 993.7 million (FY2038)		
IAG Status:	FFA signed in 1990	**IRP Sites (Final RIP/RC):**	270 (FY2020)		

Introduction

Edwards Air Force Base (AFB) conducts aerospace research, development, testing, and evaluation. Decades of operational storage and use of hazardous materials have resulted in releases to soil and groundwater. Contaminants include waste oils, solvents, petroleum hydrocarbons, petroleum/oil/lubricants (POLs), rocket fuel, dioxin, furans, potential chemical warfare materiel, metals, volatile organic compounds (VOCs), semi-volatile organic compound (SVOCs), and polychlorinated biphenyls (PCBs). The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed a federal facility agreement (FFA) in 1990 to outline how they were going to proceed with cleanup and set review process timeframes. In 2005, the BRAC Commission recommended Edwards AFB for realignment. In 1994, the installation formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community.

To date, studies have identified sites and areas of concern that are divided into 10 operable units (OUs). The installation has signed six Records of Decision (RODs), which selected cleanup actions for OUs 2, 3, 6, 7 (Chemical Warfare Material [CWM]), 4/9 (South Air Force Research Labratory [AFRL]), and 4/9 (Soil and Debris). In 2002, Edwards AFB completed an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Edwards AFB completed a Feasibility Study (FS) to evaluate cleanup alternatives for OU 7. The installation also completed a Proposed Plan (PP) for OU 7 (Site 3). Edwards AFB completed a cleanup work plan for OU 2 (Site 5/14), and vapor monitoring for indoor air at South AFRL. The installation completed soil cleanup at OU 4/9 and awarded a contract for the removal action and fieldwork for contaminated areas at OUs 5/10 (Site 231) and 7 (Sites 280, 294, and 339). The cost of completing environmental restoration has changed significantly due to regulatory and technical issues, and changes in estimating criteria.

Technical issues delayed the completion of the FSs to evaluate cleanup alternatives for OUs 5/10 and 9. Technical issues also delayed the completion of the PP for OU 1, and administrative issues delayed completion of the PP for OU 8 (Site 25). Technical issues delayed completion of the cleanup action work plans for OU 2 (Sites 76 and 86). Technical and administrative issues delayed completion of the ROD to select cleanup actions for OU 4/9 (AFRL, Arroyos Site).

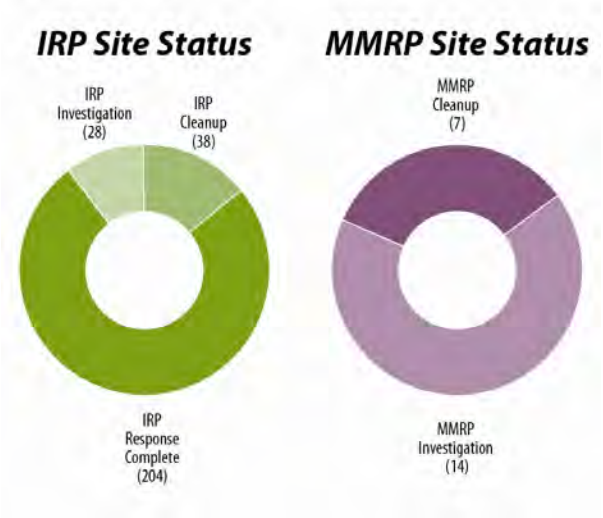
The RAB held quarterly meetings.

FY10 MMRP Progress

Edwards AFB completed a site inspection (SI) for three Munitions Response Areas (MRAs) and began an expanded SI for two MRAs. The installation also began removal actions at Munition Response Sites (MRSs). Edwards AFB awarded a contract for a remedial investigation (RI).

Administrative issues delayed the completion of the RI.

The installation provided quarterly MMRP progress briefings to the RAB.



Plan of Action

Plan of action items for Edwards Air Force Base are grouped below according to program category.

IRP

- Complete FS for OU 9 (Northeast AFRL) in FY11.
- Complete PPs for OUs 1 and 2 (Site 29) in FY11.
- Complete ROD for OU 4/9 (AFRL, Arroyos Site) and OU 7 (Site 3) in FY11.
- Complete cleanup work plans for OU 2 (Sites 76 and 86) in FY11.
- Complete construction of cleanup systems at OU 2 (Sites 5/14, 76, 86) and landfill covers at OU 7 (Site 442) in FY11.
- Complete removal actions at OUs 5/10 (Sites 231 and 242), 7 (Sites 280, 294, and 339), and 8 (Sites 257, 299, and 300) in FY11.
- Complete cleanup work plan for OU 7 (Site 3), ROD amendment for OU 2 (Site 29), and a five-year review report for OU 4 (South AFRL) in FY12.
- Complete the PP for OU 7, revised FS for OU8, and FS and groundwater modeling for OU 8 (Site 25) in FY12.

MMRP

- Complete expanded SI for two MRAs in FY11.
- Complete surface clearance of three MRSs in FY11.
- Complete RI in FY11.

Eielson Air Force Base

FFID:	AK057302864600	**Contaminants:**	POLs, benzene, VOCs, SVOCs, PCBs, solvents, heavy metals	**Five-Year Review Status:**	Completed and planned
Location (Size):	Fairbanks, North Star Borough, Alaska (19,790 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-5
Mission:	Provide tactical air support to Pacific Air Forces	**Funding to Date:**	$ 64.6 million		
HRS Score:	48.14; placed on NPL in November 1989	**Est. CTC (Comp Year):**	$ 20.0 million (FY2032)		
IAG Status:	IAG signed in May 1991	**IRP Sites (Final RIP/RC):**	86 (FY2006)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

The mission of Eielson Air Force Base (AFB) is to provide tactical air support to Pacific Air Forces. Sites include fire training areas, landfills, spill sites (SSs), aboveground storage tanks, underground storage tanks, and disposal pits. Primary contaminants affecting groundwater and soil are petroleum/oil/lubricants (POLs), benzene, and chlorinated solvents. Additional contaminants include heavy metals, volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs). The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed an interagency agreement (IAG) in May 1991 to outline how they were going to proceed with cleanup. The 2005 BRAC Commission recommended Eielson AFB for realignment. In FY95, the installation converted its technical review committee, responsible for communicating cleanup progress with the community, into a Restoration Advisory Board (RAB). The RAB was combined with the RAB for a Formerly Used Defense site located near the Fairbanks in FY06. To ensure continuous monitoring and improvement, Eielson AFB completed five-year review reports in FY98, FY03, and FY08.

Eielson AFB cleanup sites are grouped into 6 operable units (OUs); 24 sites require no further cleanup actions. To date, the installation has signed six Records of Decision (RODs), which selected cleanup actions, for OUs 1 - 8. There are amendments to the RODs for OUs 2 - 5. In FY05, Eielson AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Eielson AFB conducted a groundwater treatment study at SS 57 and Waste Pit (WP) 45. The installation completed a risk evaluation for Garrison Slough, and site evaluations and a work plan for the base. Eielson AFB also conducted a source evaluation process Phase I investigation near Engineer Hill, and determined that no further cleanup actions are necessary. The installation installed a replacement water supply well at Well C. The cost of completing environmental restoration has changed significantly due to regulatory and technical issues.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.

Plan of Action

Plan of action items for Eielson Air Force Base are grouped below according to program category.

IRP

- Evaluate options for SS 57 and WP 45 in FY11.
- Propose plan of action at Site SER001-2008 in FY11.
- Conduct installation-wide groundwater monitoring in FY11.
- Prepare Quality Program Plan for Garrison Slough to determine effectiveness of continued removal of PCB-laden sediments in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

El Toro Marine Corps Air Station

NPL/BRAC 1993

FFID:	CA917302320800	**IAG Status:**	FFA signed in October 1990	**IRP Sites (Final RIP/RC):**	25 (FY2015)
Location (Size):	Irvine, California (4,738 acres)	**Contaminants:**	Herbicides, SVOCs, heavy metals, TCE and other VOCs, petroleum hydrocarbons, PCBs, pesticides	**MMRP Sites (Final RIP/RC):**	None
Mission:	Served as the primary Marine Corps jet fighter facility on the West Coast; provide materials and support for Marine Corps aviation activities; provide housing for Marine Corps personnel	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	40.83; placed on NPL in February 1990	**Funding to Date:**	$ 156.3 million	**IRP/MMRP Status Table:**	Refer to page E-6-25
		Est. CTC (Comp Year):	$ 59.4 million (FY2043)		

Introduction

El Toro Marine Corps Air Station (MCAS) served as the primary Marine Corps jet fighter facility on the West Coast, providing materials and support for Marine Corps aviation activities. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1990. DoD and EPA signed a federal facility agreement (FFA) in October 1990 to outline how they were going to proceed with cleanup. In July 1993, the BRAC Commission recommended closure of this installation with a transfer of its aircraft, personnel, equipment, and support to Miramar Naval Air Station and Camp Pendleton Marine Corps Base. In FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites, and developed a BRAC cleanup plan to prioritize sites requiring environmental restoration. The technical review committee, which was responsible for communicating cleanup progress with the community, converted to a Restoration Advisory Board in FY94. In FY05, the installation updated its community relations plan. To ensure continuous monitoring and improvement, El Toro MCAS completed a five-year review report in FY09.

To date, approximately 3,736 acres have been transferred or found suitable for transfer. The installation has completed 12 Records of Decision (RODs), which selected cleanup actions for environmental restoration sites. El Toro MCAS also has signed RODs and obtained regulatory concurrence that no further cleanup action is necessary at 399 underground storage tank sites, 12 aerial-photography anomaly sites, and 12 aboveground storage tanks. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

El Toro MCAS continued cleanup at Sites 8 and 12 to achieve unrestricted use at these sites. The installation also obtained an operating properly and successfully designation for Site 24 and continued cleanup at Sites 3 and 5. Additionally, El Toro MCAS completed a ROD and began the design for cleanup at Anomaly Area 3. The installation also began a pilot study for groundwater and a feasibility study to evaluate cleanup alternatives for groundwater at Sites 1 and 2. The installation completed some field activities for soil at Site 1 and continued long-term monitoring and associated documentation for Sites 2, 16, and 17.

FY10 MMRP Progress

El Toro MCAS has identified no MMRP sites.

Plan of Action

Plan of action items for El Toro Marine Corps Air Station are grouped below according to program category.

IRP

- Complete the cleanup completion report for Sites 8 and 12 in FY11.
- Complete the proposed plan for groundwater at Sites 1 and 2 in FY11.
- Continue long-term monitoring and associated documentation for Sites 2, 3, 5, 16, 17, 18, and 24 in FY11.
- Complete the cleanup design and work plan for Anomaly Area 3 in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Ellsworth Air Force Base

NPL

FFID:	SD857212464400	**Contaminants:**	Solvents (including TCE), POLs, lead, low-level radioactive waste, metals, VOCs, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Rapid City, South Dakota (4,858 acres)	**Media Affected:**	Soil and Groundwater	**IRP/MMRP Status Table:**	Refer to page E-6-149
Mission:	Maintain a combat-ready force capable of executing long-range bombardment operations	**Funding to Date:**	$ 93.0 million		
HRS Score:	33.62; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 19.5 million (FY2022)		
IAG Status:	FFA signed in January 1992	**IRP Sites (Final RIP/RC):**	35 (FY2002)		
		MMRP Sites (Final RIP/RC):	1 (FY2003)		

Introduction

Ellsworth Air Force Base (AFB) maintains a combat-ready force capable of executing long-range bombardment operations. Site types include landfills, underground storage tanks, maintenance areas, a fire training area, and a low-level radioactive waste burial site. Groundwater and soil contamination resulted from releases of trichloroethylene (TCE), dioxin, furans, and petroleum/oil/lubricants (POLs) at these sites. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed a federal facility agreement (FFA) in January 1992 to outline how they were going to proceed with cleanup. In FY95, the base formed a Restoration Advisory Board to discuss the installation's cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports for 13 sites in FY00, FY05, and FY10.

To date, Ellsworth AFB has grouped sites into 12 operable units (OUs). The installation signed Records of Decision (RODs) for OUs 01 through 12, which selected cleanup actions at these sites. Two sites are not located on Ellsworth AFB: Other (OT) site 18 (Badlands Bombing Range) and Radioactive Waste (RW) site 27 (Sundance Portable Medium Power Plant [PM] 1 Reactor Site). In FY05, the installation updated its inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Ellsworth AFB continued long-term management (LTM) for RW 27 (Sundance PM 1 Reactor Site). The installation completed an engineering evaluation and cost analysis and awarded a contract and began cleanup of Unexploded Ordnance (UXO) at OT 18 (Badlands Bombing Range). The installation completed its third five-year review report; continued LTM and cleanup system optimization; and began a focused feasibility study (FS) to evaluate cleanup alternatives at OU 11. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Administrative issues delayed completion of the ROD to select cleanup activities for RW 27 (Sundance PM 1 Reactor Site).

FY10 MMRP Progress

There were no MMRP actions scheduled for FY10.

Plan of Action

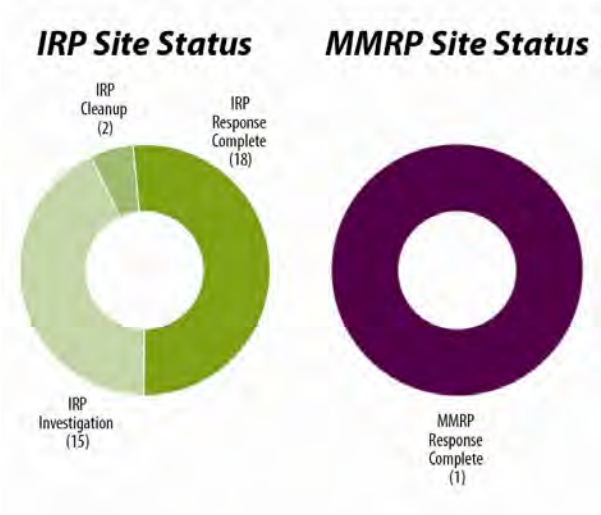
Plan of action items for Ellsworth Air Force Base are grouped below according to program category.

IRP

- Complete the ROD and continue LTM at RW 27 (Sundance PM 1 Reactor Site) in FY11.
- Perform cleanup of UXO at OT 18 (Badlands Bombing Range) in FY11-12.
- Continue LTM and cleanup system optimization for groundwater at OU 11 in FY11-FY12.
- Complete the focused FS and ROD amendment for OU 11 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Elmendorf Air Force Base

FFID:	AK057302864900	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-5
Location (Size):	Anchorage, Alaska (13,452 acres)	**Funding to Date:**	$ 101.8 million		
Mission:	Serve as headquarters to the Alaskan Command	**Est. CTC (Comp Year):**	$ 73.6 million (FY2038)		
HRS Score:	45.91; placed on NPL in August 1990	**IRP Sites (Final RIP/RC):**	136 (FY2012)		
IAG Status:	FFA signed in November 1991	**MMRP Sites (Final RIP/RC):**	7 (FY2019)		
Contaminants:	VOCs, SVOCs, POLs, solvents, PCBs, pesticides, heavy metals	**Five-Year Review Status:**	Completed and planned		

Introduction

Elmendorf Air Force Base (AFB) serves as headquarters to the Alaskan Command. Sites include old construction landfills (LFs), petroleum spill sites (SS), and underground storage tanks. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed a federal facility agreement (FFA) in November 1991 to outline how they were going to proceed with cleanup. The 2005 BRAC Commission recommended Elmendorf AFB for realignment. In FY92, the installation formed a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community. In FY97, the RAB revised its charter to focus on all environmental activities, and transitioned into a Community Advisory Board. In FY97, the installation also developed a community relations plan, which was revised in FY00. To ensure continuous monitoring and improvement, Elmendorf AFB completed five-year review reports in FY98, FY04, and FY09.

The FFA covers 38 sites, grouped into 6 operable units (OUs). An additional 42 sites are designated as petroleum/oil/lubricant (POL)-contaminated sources; Elmendorf AFB is performing cleanup activities under the State of Alaska cleanup regulations. To date, Elmendorf AFB has completed Records of Decision to select cleanup sites for OUs 1 through 6 and Disposal Pit (DP) 98. The installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

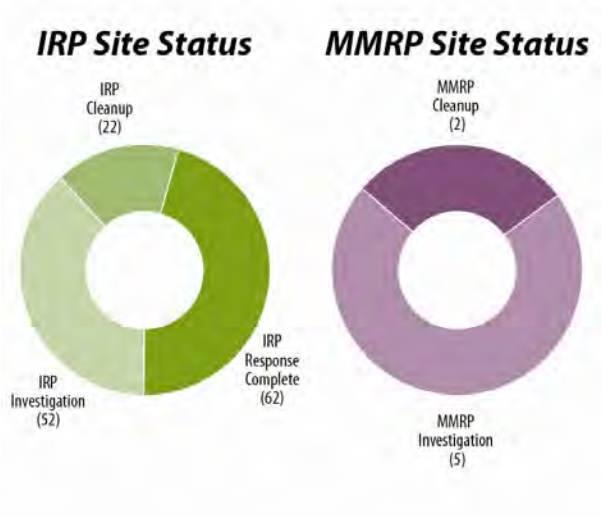
FY10 IRP Progress

Elmendorf AFB completed the cleanup requirements report for DP 98, and began Phase III remedial investigation (RI) fieldwork for SS 22. The installation continued the operations of the cleanup system at Fire Training Site 23 and the engineered wetland system at OU 5, and conducted annual debris removal at LF 04.

Technical issues delayed finalizing decision documents to select cleanup actions for Storage Tanks 36, 66, and 61. Regulatory issues delayed preparing the closure report for LF 02.

FY10 MMRP Progress

Elmendorf AFB completed a preliminary assessment/site investigation of potential environmental hazards at all MMRP sites.



Plan of Action

Plan of action items for Elmendorf Air Force Base are grouped below according to program category.

IRP

- Assume environmental restoration responsibilities from Fort Richardson in FY11.
- Complete optimization of engineered wetland system in FY11.
- Begin fourth five-year review report in FY12.
- Complete RI and feasibility study report to evaluate cleanup alternatives for SS 22 in FY12.

MMRP

- Conduct removal actions at Trap and Skeet Range 003 and Small Arms Range 001 in FY11.
- Conduct light detection and ranging survey in FY11.

England Air Force Base

BRAC 1991

FFID:	LA657002445200	**Contaminants:**	Industrial waste, spent solvents, fuels, waste oil, paints, pesticides, low-level radioactive waste, chlorine gas, PCBs, TCE, POLs, alkali, medical waste, VOCs, SVOCs, metals	**IRP Sites (Final RIP/RC):**	46 (FY2001)
Location (Size):	Alexandria, Louisiana (2,284 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**MMRP Sites (Final RIP/RC):**	8 (FY2011)
Mission:	Supported flying operations for fighter and attack aircraft	**Funding to Date:**	$ 38.7 million	**Five-Year Review Status:**	Completed and planned
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 3.4 million (FY2055)	**IRP/MMRP Status Table:**	Refer to page E-7-27
IAG Status:	N/A				

Introduction

England Air Force Base (AFB) was established in 1943 and supported flying operations for various aircraft throughout its history. Sites identified at the installation include landfills, underground storage tanks, aboveground storage tanks, fire training areas, oil-water separators, a sewage treatment pond, a low-level radiation site, and gas training kit burial sites. In July 1991, the BRAC Commission recommended closure of England AFB and the installation closed in December 1992. The installation formed a BRAC cleanup team in FY93 to develop a process for cleanup of sites. The BRAC cleanup plan, developed with community input to prioritize sites requiring environmental restoration, was updated in FY95 and FY04. In FY94, the installation formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community. The RAB adjourned in FY00 due to lack of interest. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY08.

Environmental studies have identified sites suspected to contain contamination for the Installation Restoration Program (IRP). A RCRA facility assessment conducted in FY92 identified areas of concern and solid waste management units. To date, more than 1,700 acres have been transferred, primarily to the local redevelopment authority. In FY04, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified. Two additional MMRP sites were identified in FY08.

FY10 IRP Progress

England AFB completed the RCRA permit renewal and closed one petroleum site ahead of schedule. The installation prepared and reviewed the draft document finding the remaining 576 acres suitable for transfer.

Administrative issues delayed the finalization of the operating properly and successfully determination for Spill Site (SS) 045.

FY10 MMRP Progress

Administrative issues delayed the removal action of munitions and explosives of concern (MEC) at one site. Administrative issues also delayed submittal of closure documentation for all MMRP sites to the Air Force Safety Center and the DoD Explosive Safety Board.

Plan of Action

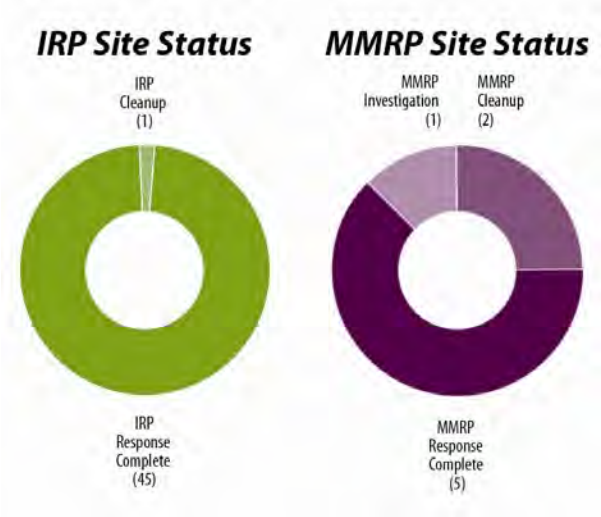
Plan of action items for England Air Force Base are grouped below according to program category.

IRP

- Finalize the operating properly and successfully determination at SS 045 in FY11.
- Complete site inspection at three areas within the SS 045 groundwater contaminated area in FY11.
- Complete the property transfer of the remaining 576 acres in FY11.

MMRP

- Complete removal action of MEC at one site in FY11.
- Submit closure documentation for all MMRP sites to the Air Force Safety Center and the DoD Explosive Safety Board in FY11.



F.E. Warren Air Force Base

NPL

FFID:	WY857212417900	**Contaminants:**	Oils, solvents, metals, acids, petroleum, explosives residues, pesticides, VOCs, SVOCs, PCBs, PAHs	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Cheyenne, Wyoming (5,866 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Serve as host to the 90th Space Wing, which support missile and space launch operations	**Media Affected:**	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-181
HRS Score:	39.23; placed on NPL in February 1990	**Funding to Date:**	$ 132.7 million		
IAG Status:	FFA signed in September 1991	**Est. CTC (Comp Year):**	$ 31.3 million (FY2036)		
		IRP Sites (Final RIP/RC):	35 (FY2012)		

Introduction

F.E. Warren Air Force Base (AFB) serves as the host to the 90th Space Wing Support and missile and space launch operations. Restoration activities began at F.E. Warren AFB in FY84. Contaminants at this installation include oils, solvents, metals, acids, petroleum, explosive residues, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and polyaromatic hydrocarbons (PAHs). The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1990. DoD and EPA signed a federal facility agreement (FFA) in September 1991, which included 19 sites, to outline how they were going to proceed with cleanup. In FY05, three additional sites were added to the FFA. In FY95, F.E. Warren AFB formed a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY99, FY04, and FY09.

Remedial investigations have identified sites within 14 operable units and 5 investigative zones. The installation has signed Records of Decision (RODs), selecting cleanup actions for 20 sites; 11 sites required no further cleanup action. In FY05, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

The installation completed the feasibility study (FS) to evaluate cleanup alternatives for the closed firing ranges. The cost of completing environmental restoration has changed significantly due to technical issues and changes in estimating criteria.

Technical and regulatory issues delayed completion of the ROD to select cleanup actions for the closed firing ranges. Technical issues delayed completion of an additional ROD to select cleanup actions for and implementation of cleanup actions at Spill Site (SS) 08.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.

Plan of Action

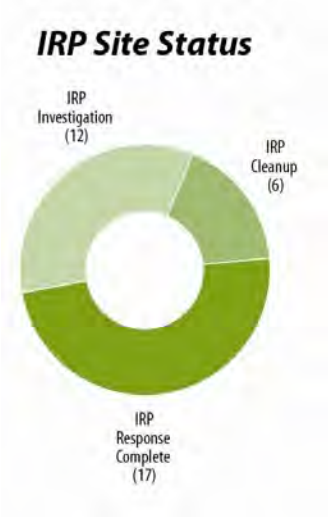
Plan of action items for F.E. Warren Air Force Base are grouped below according to program category.

IRP

- Complete the ROD and implement the design for cleanup for the closed firing ranges in FY11.
- Complete the FS, ROD, and the design for cleanup for SS 08 in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



FFID:	WA057212464700		chemicals, paints, thinners, pesticide residues, PCBs, VOCs, SVOCs, metals, radioactive materials, PAHs	**MMRP Sites (Final RIP/RC):**	10 (FY2014)
Location (Size):	Spokane County, Washington (4,300 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Provide aerial refueling and airlift services	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-177
HRS Score:	31.98; placed on NPL in March 1989	**Funding to Date:**	$ 64.2 million		
IAG Status:	FFA signed in March 1990	**Est. CTC (Comp Year):**	$ 53.9 million (FY2029)		
Contaminants:	Solvents, fuels, electroplating chemicals, cleaning solutions, corrosives, photographic	**IRP Sites (Final RIP/RC):**	50 (FY2012)		

Introduction

Fairchild Air Force Base (AFB) provides aerial refueling and airlift services. Sites include contaminated fire training areas, landfills, radioactive waste sites, spill sites (SSs), waste pits (WPs), disposal pits, and ditches. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in March 1989. DoD and EPA signed a federal facility agreement (FFA) in March 1990 to outline how they were going to proceed with cleanup. The 2005 BRAC Commission recommended Fairchild AFB for realignment. In FY95, the installation formed a Restoration Advisory Board to discuss the installation's cleanup progress with the community. In FY00, a partial NPL delisting effort began with the Washington State Department of Ecology and EPA. The installation prepared 22 sites for removal from the NPL. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01 and FY08.

Fairchild AFB has signed three Records of Decision (RODs), which selected cleanup actions for 28 sites. The installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); ten MMRP sites were identified.

FY10 IRP Progress

Fairchild AFB began the proposed plan (PP) for WP 36. The cost of completing environmental restoration has changed significantly due to regulatory and technical issues.

Regulatory issues delayed the completion of the ROD to select cleanup actions, and the start of the design for and cleanup actions at SS 39. Technical issues delayed completion of the feasibility study (FS) to evaluate cleanup alternatives for WP 36.

FY10 MMRP Progress

Fairchild AFB performed an engineering evaluation and cost analysis for Skeet Range munitions response area (MRA), and awarded a contract to perform the Skeet Range MRA cleanup.

The installation also completed the site inspections at all remaining sites.

Plan of Action

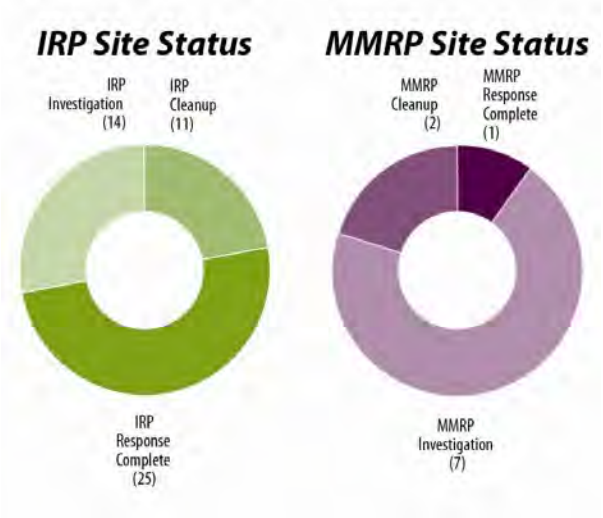
Plan of action items for Fairchild Air Force Base are grouped below according to program category.

IRP

- Complete the ROD, and begin the cleanup design for and cleanup actions at SS 39 in FY11.
- Complete the Priority Three (P3) PP and draft the P3 ROD in FY11.
- Complete the WP 36 FS and obtain regulatory approval in FY11-FY12.

MMRP

- Complete soil cleanup action for Skeet Range MRA in FY11.
- Obtain administrative closure determining that no further munitions response actions are necessary in FY11-FY12.



Fike-Artel Chemical

NPL

FFID:	WV39799F789200	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-56
Location (Size):	Nitro, West Virginia (12 acres)	**Funding to Date:**	$ 0.7 million		
Mission:	Manufactured smokeless powder (private party operated a batch chemical plant)	**Est. CTC (Comp Year):**	$ 0.2 million (FY2018)		
HRS Score:	36.3; placed on NPL in September 1983	**IRP Sites (Final RIP/RC):**	1 (FY2018)		
IAG Status:	None	**MMRP Sites (Final RIP/RC):**	1 (FY2004)		
Contaminants:	Organic and inorganic chemicals, metals, dioxin	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.		

Introduction

Fike-Artel Chemical is part of a 16,000-acre former government plant (Powder Plant "C") that manufactured smokeless powder. Environmental restoration sites are grouped into five operable units (OUs): disposal of storage tank and drum contents (OU 1); decontamination and disposal of storage tanks, surface drums, and aboveground structures (OU 2); removal of buried drums (OU 3); remedial investigation (RI) and feasibility study efforts to evaluate cleanup alternatives in groundwater and soil (OU 4); and RI of the cooperative sewage treatment plant (OU 5). The potential risk to human health and the environment was significant enough for EPA to place the property on the NPL in September 1983. Numerous potentially responsible parties (PRPs), responsible for cleanup, and commonly referred to as "the Trust," finance and perform some of the cleanup actions at the property.

In FY96, the Army conducted an inventory of sites suspected to contain muntiions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

The United States Army Corps of Engineers monitored the Trust's progress and processed payment requests to the Department of Justice for reimbursement costs.

FY10 MMRP Progress

The installation conducted no MMRP actions, and there are no further MMRP actions planned at this property.

Plan of Action

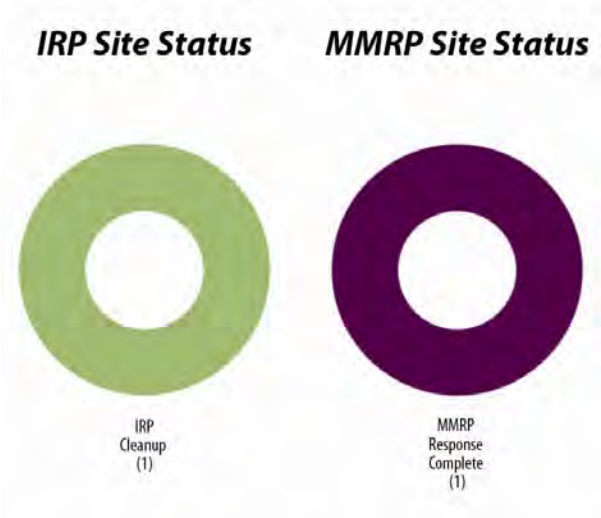
Plan of action items for Fike-Artel Chemical are grouped below according to program category.

IRP

- Continue to process payment requests to the Deprtment of Justice for remimbursement costs in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Former Nansemond Ordnance Depot

NPL

FFID:	VA39799F156700	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-173
Location (Size):	Suffolk, Virginia (975 acres)	**Funding to Date:**	$ 48.7 million		
Mission:	Served as ordnance depot	**Est. CTC (Comp Year):**	$ 47.3 million (FY2023)		
HRS Score:	70.0; placed on NPL in July 1999	**IRP Sites (Final RIP/RC):**	12 (FY2019)		
IAG Status:	IAG negotiations on hold with EPA concurrence	**MMRP Sites (Final RIP/RC):**	1 (FY2023)		
Contaminants:	TNT, solvents, fuels, pesticides, heavy metals, MEC, SVOCs, VOCs, propellants, explosives	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.		

Introduction

The Army acquired the Former Nansemond Ordnance Depot (Nansemond) between 1917 and 1929 and used the Depot from World War I until November 1950, leasing the property to the Navy. In 1960, the Army transferred the property to the Beazley Foundation, Inc. Nansemond covers approximately 975 acres and is located in Suffolk, Virginia at the convergence of the James and Nansemond rivers. The current list of landowners at Nansemond includes: Tidewater Community College (TCC); the General Electric Company; Ashley Capital; Dominion Lands, Inc.; Bridgeway LP; Suffolk Towers; SYSCO Food Services; Hampton Roads Sanitation District; Lockheed Martin; the City of Suffolk Industrial Development Authority; and the Virginia Department of Transportation. Contaminants identified at the property include TNT, fuels, heavy metals, volatile organic compounds (VOCs), solvents, pesticides, and munitions and explosives of concern. The potential risk to human health and the environment was significant enough for EPA to place the property on the NPL in July 1999. A federal facility agreement (FFA) is currently under negotiation between DoD and EPA to outline how they are going to proceed with cleanup. EPA delisted the impregnite kit area soils from the NPL in FY03. In FY97, Nansemond held its first Restoration Advisory Board meeting to discuss cleanup progress with the community.

To date, the U.S. Army Corps of Engineers (USACE) has signed two Records of Decision and one Decision Document, which determined that no further cleanup actions were necessary at 14 project sites.

FY10 IRP Progress

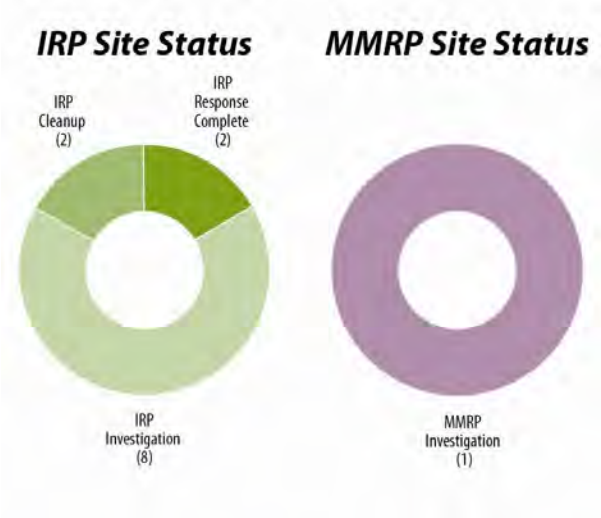
USACE continued remedial investigations (RIs) and feasibility studies (FSs) to evaluate cleanup alternatives at Horseshoe Pond, James River Beach Front, Nansemond River Beach Front, TNT Area, and The Main Burning Ground. USACE also began the site inspection (SI) for TCC Lake and J Lake; an Arsenic Investigation at Area of Concern (AOC) 22; and new RI activities at AOC 10 (Track G Magazine Line), AOC 11 (Track H and I Magazine Lines), and the impregnation kit area. USACE completed a soil and groundwater background investigation report.

Regulatory issues delayed completion of the SI for TCC Lake, and completion of the RI/FSs at Horseshoe Pond, James River Beachfront, and the Main Burning Ground. Regulatory issues also delayed completion of the proposed plans (PPs) at Horseshoe Pond, James River Beachfront, and the Main Burning Ground. Regulatory and technical issues delayed completion of the FS at the Nansemond River Beachfront and TNT Area.

FY10 MMRP Progress

USACE began a shoreline geophysics investigation.

Regulatory issues delayed the completion of a comprehensive SI for all remaining areas of Nansemond, an SI for J Lake and TCC Lake, and an FS for shoreline stabilization at James River Beachfront.



Plan of Action

Plan of action items for Former Nansemond Ordnance Depot are grouped below according to program category.

IRP

- Complete SI for TCC Lake in FY11.
- Complete PPs at Horseshoe Pond, James River Beachfront, and the Main Burning Ground in FY11.
- Complete RIs at AOC 10 (Track G Magazine Line) and and AOC 11 (Track H and I Magazine Lines) in FY11-FY12.
- Complete RI/FSs at the TNT Area, James River Beachfront, Horseshoe Pond, Nansemond River Beachfront, and Main Burning Ground in FY11-FY12.

MMRP

- Complete Comprehensive SI for all remaining areas of Nansemond in FY11.
- Complete an SI for J Lake and TCC lake in FY11.
- Complete an FS for shoreline stabilization at James River Beachfront in FY11.
- Conduct MMRP RI on the shoreline in FY11-FY12.

Fort Crowder
Pools Prairie

NPL

FFID:	MO79799F034700	**HRS Score:**	50.00; placed on NPL in October 1999	**IRP Sites (Final RIP/RC):**	3 (FY2003)
Location (Size):	Newton County, Missouri (42,786 acres)	**IAG Status:**	None	**MMRP Sites (Final RIP/RC):**	1 (FY2006)
Mission:	Served as World War II Signal Corps training facility; Korean conflict-era reception station; disciplinary barracks; Atlas missile rocket engine manufacture and testing facility; and jet engine and component manufacture and repair facility	**Contaminants:**	VOCs, TCE, carbon tetrachloride	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
		Media Affected:	Groundwater	**IRP/MMRP Status Table:**	Refer to page E-7-32
		Funding to Date:	$ 2.5 million		
		Est. CTC (Comp Year):	$ 0.6 million (FY2006)		

Introduction

The Army used the former Fort Crowder during World War II as a Signal Corps training center and again during the Korean conflict as a reception station. The property is located near the City of Neosho, in southwestern Missouri. In 1956, the Army transferred approximately 3,650 acres to the Air Force for the establishment of Air Force Plant 65. Approximately 4,360 acres were leased to the Missouri National Guard for a training facility, known as Camp Crowder. Air Force Plant 65 operated until 1968 as an Atlas missile manufacturing and testing facility and, until 1980, as a jet engine overhaul and testing facility. The potential risk to human health and the environment was significant enough for EPA to place the property on the NPL in October 1999. In FY99, the U.S. Army Corp of Engineers (USACE) signed two administrative orders on consent for removal actions.

In FY05, USACE conducted an inspection of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP), MMRP sites were identified.

FY10 IRP Progress

USACE continued technical and legal support to the Department of Justice. USACE continued monitoring the potentially responsible partie's (PRP's) execution of the pre-remedial investigation (RI), feasibility study (FS) to evaluate cleanup alternatives, and three removal actions.

FY10 MMRP Progress

USACE completed a draft proposed plan and will prepare a decision document (DD) to select cleanup actions for the chemical warfare materiel (CWM) site. USACE also continued long-term management (LTM) of the CWM site.

Plan of Action

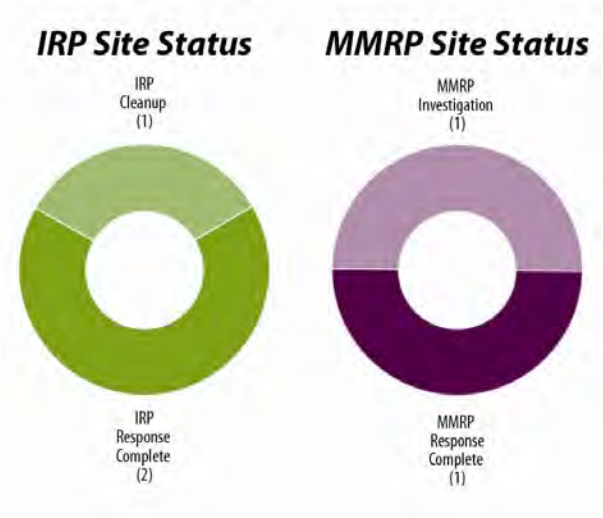
Plan of action items for Fort Crowder are grouped below according to program category.

IRP

- Continue technical and legal support to the Department of Justice in FY11-FY12.
- Continue monitoring the PRP's execution of the pre-RI, FS, and three removal actions in FY11-FY12.

MMRP

- Complete DD for CWM site in FY11.
- Continue LTM of the CWM site in FY11.



Fort Detrick

NPL

FFID:	MD321162026700	**HRS Score:**	49.52; placed on NPL in April 2009	**IRP Sites (Final RIP/RC):**	44 (FY2015)
Location (Size):	Frederick County, Maryland (1,212 acres)	**IAG Status:**	N/A	**MMRP Sites (Final RIP/RC):**	None
Mission:	Supports a multi-governmental community that conducts biomedical research and development, medical materiel management, worldwide communications, and the study of foreign plant pathogens	**Contaminants:**	VOCs, metals, biological materials, radionuclides	**Five-Year Review Status:**	Complete and underway
		Media Affected:	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-90
		Funding to Date:	$ 51.1 million		
		Est. CTC (Comp Year):	$ 11.1 million (FY2021)		

Introduction

Fort Detrick is a premier quad-services installation committed to excellence. As an Army Medical Installation, it is home to the United States Army Medical Research and Materiel Command, the National Cancer Institute, and 37 mission partners. The primary missions include biomedical research and development, medical materiel management and global telecommunications. Fort Detrick currently houses the National Interagency Confederation for Biological Research and National Interagency Biodefense Campus. The installation supports approximately 8,800 military, civilian, and contractor employees conducting biomedical research and development, medical material management, and communications. Identified restoration sites include 12 disposal and landfill (LF) areas, 10 buildings, 4 storage areas, 4 storage tank sites, 2 contaminated groundwater sites, 2 wash racks, a sewer line, a sewage treatment plant, a small arms range, a burn area, burn/open detonation area, and 4 other areas. Contaminants identified at the site include volatile organic compounds (VOCs), biological materials, metals, and radionuclides. The environmental investigations of former operations that have caused groundwater contamination at Fort Detrick have been ongoing since 1992, when the installation first identified off-post groundwater contamination. The potential risk to human health and the environment was significant enough for EPA to place the Area B groundwater site on the NPL in April 2009. Fort Detrick established a Restoration Advisory Board to discuss cleanup progress with the community in June 1993.

To date, Fort Detrick has completed cleanup or determined no further action is necessary at 35 of the 42 waste sites identified at Areas A, B, and C. The remaining seven sites are located in Area B. LF caps are being constructed on six of the seven sites. The only remaining open site at Fort Detrick is Area B Groundwater.

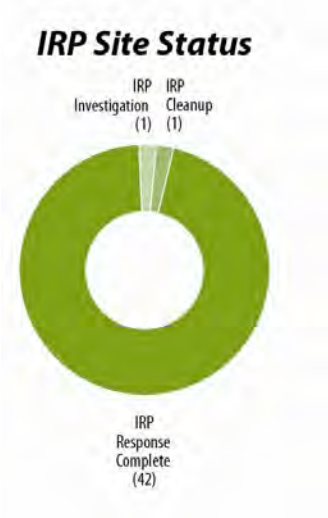
FY10 IRP Progress

Fort Detrick finalized the remedial investigation (RI) workplan and awarded a contract for Area B groundwater. The installation also completed construction and began long-term management of six LF caps in Area B, and continued sampling residential wells and provided alternate water supplies to five residential locations. Fort Detrick began a five-year review report for the wastewater treatment plant in Area C and the 568 trichloroethylene (TCE) spill site in Area A, and began an Archival Search Report for previously unknown historical activities. The archive search resulted in a preliminary assessment for the historical testing of herbicides at Areas A and B.

Regulatory issues delayed the start of fieldwork for the Area B groundwater RI. Administrative issues delayed completion of the five-year review report for the wastewater treatment plant in Area C and the 568 TCE spill site in Area A.

FY10 MMRP Progress

Fort Detrick has identified no sites suspected to contain munition contamination for the Military Munitions Response Program (MMRP).



Plan of Action

Plan of action items for Fort Detrick are grouped below according to program category.

IRP

- Begin fieldwork for the Area B groundwater RI, and complete a feasibility study to evaluate cleanup alternatives for the area in FY11.
- Complete five-year review report for the wastewater treatment plant in Area C and the 568 TCE spill sitein Area A in FY11.
- Complete the archival search report and the preliminary assessment for the historical outdoor herbicide testing in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Fort Devens

NPL/BRAC 1991/BRAC 2005 Realignment

FFID:	MA121042027000	**Media Affected:**	Sediment and Groundwater	**IRP/MMRP Status Table:**	Refer to page E-6-93
Location (Size):	Fort Devens, Massachusetts (9,302 acres)	**Funding to Date:**	$ 153.4 million		
Mission:	Supported Reserve component training	**Est. CTC (Comp Year):**	$ 27.4 million (FY2042)		
HRS Score:	42.24; placed on NPL in November 1989	**IRP Sites (Final RIP/RC):**	76 (FY2018)		
IAG Status:	IAG signed in November 1991	**MMRP Sites (Final RIP/RC):**	12 (FY2011)		
Contaminants:	VOCs, heavy metals, petroleum products, PCBs, pesticides, herbicides, explosive compounds	**Five-Year Review Status:**	Completed and planned		

Introduction

Prior to closure in July 1991, Fort Devens supported Reserve component training. Identified sites included landfills (LFs), vehicle and equipment maintenance and storage yards, the Defense Reutilization and Marketing Office scrap yard, motor pools, and underground storage tanks. Investigations revealed soil and groundwater contamination. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in 1989. DoD and EPA signed a federal facility agreement (FFA) in November 1991 to outline how they were going to proceed with cleanup. In July 1991, the BRAC Commission recommended closure of Fort Devens. In FY96, the Army closed Fort Devens and replaced it with the Devens Reserve Forces Training Area, which assumed the Army mission. The Devens Reserve Forces Training Area is also referred to as Fort Devens. In FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. In 2005, the BRAC Commission recommended Fort Devens for realignment. In FY94, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, Fort Devens completed five-year review reports in FY00 and FY05.

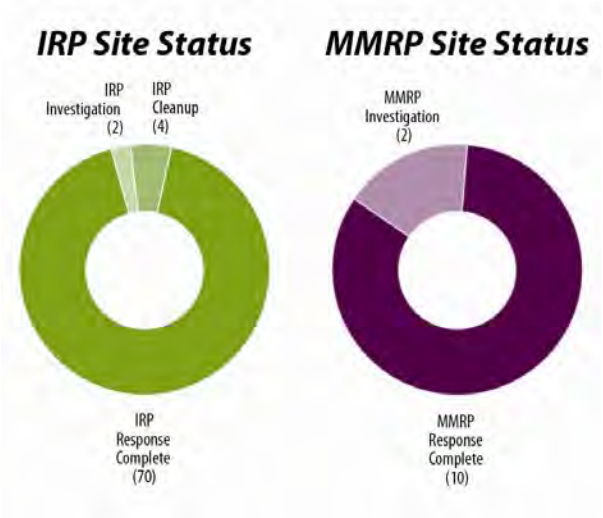
To date, DoD and EPA have signed multiple Records of Decision (RODs) and decision documents, which selected cleanup actions at 30 environmental and 294 restoration sites respectively. The Army, EPA, and the State have determined that no further cleanup actions were necessary at multiple sites. To date, the Army has conveyed 2,902 acres to the local redevelopment authority; 22 acres to the U.S. Department of Labor; 222 acres to the U.S. Bureau of Prisons; and 836 acres to the U.S. Fish and Wildlife Service. In FY03, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Regulatory issues delayed completion of the remedial investigation (RI) report for Area of Concern (AOC) 72. Administrative issues delayed completion of the final feasibility study (FS) to evaluate cleanup alternatives for Shepley's Hill LF. Administrative issues also delayed completion of the pesticide-contaminated soil cleanup at the former housing areas.

FY10 MMRP Progress

Administrative issues delayed completion of the draft site inspection (SI) report for Munitions and Explosives of Concern (MEC) at Oak/Maple Housing Area. Administrative issues also delayed completion of the SI report for Markley Range.



Plan of Action

Plan of action items for Fort Devens are grouped below according to program category.

IRP

- Complete the RI report and the engineering evaluation and cost analysis for removal actions for AOC 72 in FY11.
- Complete the focused FS and update the ROD for Shepley's Hill LF in FY11.
- Complete pesticide-contaminated soil cleanup at the former housing areas in FY11.

MMRP

- Complete the Oak/Maple MEC SI report in FY11.
- Complete the Markley Range MEC SI Report in FY11.

FFID:	VA321372032100	**IAG Status:**	FFA signed in March 2008	**MMRP Sites (Final RIP/RC):**	17 (FY2015)
Location (Size):	Newport News, Virginia (8,248 acres)	**Contaminants:**	PCBs, VOCs, pesticides, heavy metals, SVOCs, petroleum products	**Five-Year Review Status:**	Completed and planned
Mission:	Serve as host to the Army Transportation Center; provide training in all modes of transportation, including rail and marine; aviation maintenance; involved in amphibious operations	**Media Affected:**	Surface Water, Sediment, Soil, Groundwater	**IRP/MMRP Status Table:**	Refer to page E-6-168
		Funding to Date:	$ 60.2 million		
HRS Score:	50.00; placed on NPL in December 1994	**Est. CTC (Comp Year):**	$ 13.9 million (FY2017)		
		IRP Sites (Final RIP/RC):	31 (FY2013)		

Introduction

Fort Eustis, home to the Army Transportation Center, is where soldiers receive education and training in all modes of transportation, aviation maintenance, logistics and deployment doctrine, and research. Identified sites include landfills, underground storage tanks, pesticide storage areas, range/impact areas, and surface impoundments. The migration of contaminants from some sites to creeks and estuaries, and the potential migration through surface water and the upper water table to the James River are the greatest concerns at the installation. Analysis of samples indicated the presence of polychlorinated biphenyls (PCBs), pesticides, polyaromatic hydrocarbons (PAHs), and lead in surface water and sediment. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in December 1994. DoD and EPA signed a federal facility agreement (FFA) in July 2008 to outline how they were going to proceed with cleanup. The 2005 BRAC Commission recommended the realignment of Fort Eustis garrison functions as part of the Joint Basing effort. During FY96, the installation established an administrative record and set up information repositories at three local libraries. Since FY00, Fort Eustis has held two technical review committee meetings each year. Fort Eustis updated its community relations plan in FY06. To ensure continuous monitoring and improvement, Fort Eustis completed a five-year review report in FY08.

To date, Fort Eustis and EPA have signed five Records of Decision (RODs), which selected cleanup actions at four sites. In FY03, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

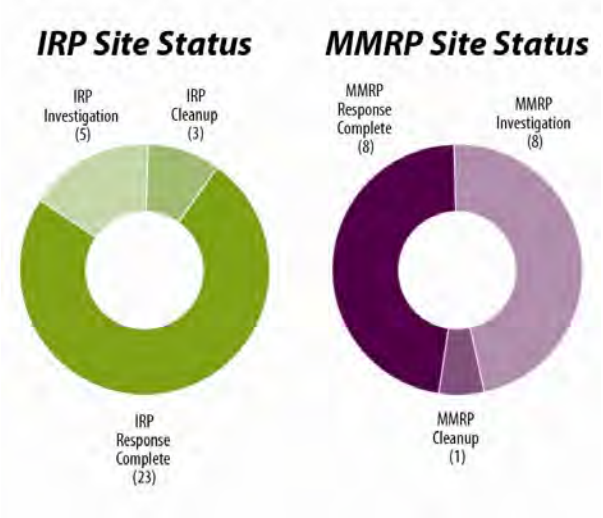
FY10 IRP Progress

Fort Eustis awarded a Performance-Based Acquisition (PBA) for seven sites, completed the remedial investigation (RI) for Felker Airfield, and the proposed plan (PP) for Bailey Creek. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed completion of the feasibility study (FS) to evaluate the cleanup alternatives, PP, and ROD for the Fire Training Area site; and completion of the FS, PP, and ROD for the Skeet Range Wetland. Regulatory issues also delayed completion of the FS, PP, and ROD for Felker Airfield. Administrative issues delayed the ROD for Bailey Creek.

FY10 MMRP Progress

Fort Eustis awarded a PBA for six sites.



Plan of Action

Plan of action items for Fort Eustis are grouped below according to program category.

IRP

- Complete the FS, PP, and ROD for the Fire Training Area site, Felker Airfiled and the Skeet Range Wetland in FY11.
- Complete the ROD for Bailey Creek in FY11.
- Complete the design for cleanup and cleanup actions at Eustis Lake in FY11.

MMRP

- Complete the RI/FS, PP, ROD, design for cleanup, and cleanup actions at the 1,000-inch Rifle Range in FY11.
- Complete the RI at Langley Field Gunnery Range, Bombing Target H, Camp Wallace Firing Fan, Skeet Range, and Skeet Range-TD in FY11.

Fort George G. Meade

NPL/BRAC 1988

FFID:	MD321022056700	**Contaminants:**	Chloronated solvents, metals, munitions and explosives of concern, petroleum hydrocarbons, VOCs, SVOCs, explosives, propellants, PAHs , pesticides	**IRP Sites (Final RIP/RC):**	45 (FY2014)
Location (Size):	Fort Meade, Maryland (5,142 acres)			**MMRP Sites (Final RIP/RC):**	9 (FY2012)
Mission:	Served as administrative post for various DoD tenants	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	52.0; placed on NPL in July 1998; Tipton Airfield delisted from NPL in November 1999	**Funding to Date:**	$ 107.8 million	**IRP/MMRP Status Table:**	Refer to page E-6-90
IAG Status:	FFA signed in June 2009	**Est. CTC (Comp Year):**	$ 12.6 million (FY2026)		

Introduction

Fort George G. Meade (Fort Meade) served as an administrative post for various DoD tenants, primarily the National Security Agency. Investigations beginning in FY88 identified several areas of concern, including landfills, petroleum and hazardous waste storage areas, aboveground storage tanks, underground storage tanks, asbestos-containing material in structures, and unexploded ordnance (UXO). The potential risk to human health and the environment was significant enough for EPA to place Fort Meade on the NPL in July 1998. EPA delisted the Tipton Airfield parcel from the NPL in November 1999. DoD and EPA signed a federal facility agreement (FFA) in 2009 to outline how they were going to proceed with cleanup. In December 1988, the BRAC Commission recommended closing the Fort Meade range and training areas and realigning the installation as an administrative center. In July 1995, the BRAC Commission recommended additional realignment, reducing Kimbrough Army Community Hospital to a clinic. The installation formed a BRAC cleanup team in FY94 to develop a process for cleanup of sites, and a Restoration Advisory Board (RAB) in FY95 to communicate cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY05.

To date, the installation has completed three No Further Action Records of Decision (RODs), which determined that no further cleanup activities were necessary at Tipton Airfield and the Clean Fill Dump. In FY04, the Army conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Fort Meade continued BRAC property long-term management (LTM) and inspections of land-use controls (LUCs), which restrict use of or access to sites. The installation completed a remedial investigation (RI) and feasibility study (FS) to evaluate cleanup alternatives for the Trap and Skeet Range 17. The installation also submitted the Ordnance Demolition Area proposed plan (PP) and completed the Performance-Based Contract (PBC) requirements for the former Granite Nike Site.

Fort Meade submitted a five-year review report for the Clean Fill Dump and Tipton Airfield Parcel Sites.

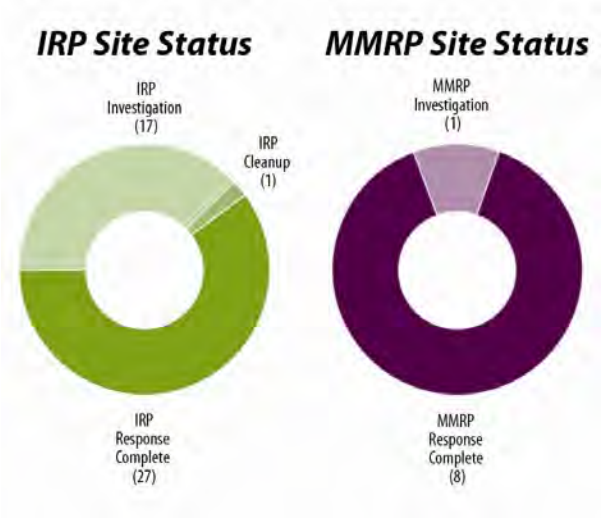
Technical issues delayed completion of the RI/FS at the former Pesticide Shop and Manor View Dump Site. Technical issues also delayed the start of cleanup at the Trap and Skeet Range 17. Regulatory issues delayed completion of the PPs and RODs for the Defense Reutilization and Marketing Office (DRMO), former Pesticide Shop and the Architect of the Capital sites. Technical and regulatory issues delayed completion of the PBC requirements for Operable Unit (OU) 4, the DRMO, and the former Trap and Skeet Range.

Fort Meade held bimonthly RAB meetings.

FY10 MMRP Progress

Fort Meade completed a UXO investigation of the Little Patuxent River and former landfill sites to maintain LUCs for the Tipton Airfield Parcel and High Explosives Impact Area sites.

Technical issues delayed completion of the RI/FS for the Mortar Range.



Plan of Action

Plan of action items for Fort George G. Meade are grouped below according to program category.

IRP

- Complete RI/FS for the former Pesticide Shop and Manor View Dump site in FY11.
- Complete PPs and RODs for the DRMO, former Pesticide Shop, and the Architect of the Capitol sites in FY11.
- Complete PBC requirements for OU 4, the DRMO, and the former Trap and Skeet Range in FY11.
- Continue BRAC property LTM and inspections of LUCs in FY11.
- Complete design for cleanup and cleanup of the Trap and Skeet Range 17 in FY11.
- Submit Ordnance Demolition Area ROD in FY11.
- Finalize five-year review report for the Clean Fill Dump and Tipton Airfield Parcel in FY11.
- Begin cleanup at the Trap and Skeet Range 17 in FY12.

MMRP

- Complete RI/FS for the Mortar Range in FY11.
- Complete explanation of significant differences with the ROD for the Tipton Airfield Parcel and PP for the High Explosives Impact Area in FY11-FY12.
- Complete removal actions and five-year review reports for Tipton Airfield Parcel in FY11-FY12.
- Continue LUC activities at the Tipton Airfield Parcel and High Explosives Impact Area in FY11-FY12.

Fort Gillem

BRAC 2005 Closure

FFID:	GA421402004600	**Media Affected:**	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-19
Location (Size):	Forest Park, Georgia (1,426 acres)	**Funding to Date:**	$ 35.1 million		
Mission:	Supported FORSCOM readiness missions	**Est. CTC (Comp Year):**	$ 8.5 million (FY2015)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	15 (FY2013)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	1 (FY2011)		
Contaminants:	Metals, PAHs, VOCs, pesticides, POLs, chlorinated solvents, SVOCs	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.		

Introduction

Fort Gillem supports Army Forces Command readiness missions and is home for many Army Forces Command and Fort McPherson activities. The Eastern Distribution Region of the Army and Air Force Exchange Service uses approximately 60 acres for storage. Fort Gillem also supports the Federal Emergency Management Agency disaster relief activities by providing warehouse and office space. The 2005 BRAC Commission recommended Fort Gillem, a sub-installation of Fort McPherson, for closure. The installation is comprised of approximately 1,426 acres and is surrounded by residential and commercial properties. In FY07, the installation solicited public interest in establishing a Restoration Advisory Board (RAB) to discuss cleanup progress with the community, but concluded that there was not enough interest to convene a RAB.

FY10 IRP Progress

Fort Gillem ensured that all required cleanup actions continue at sites FTG 02, 07, 09 and 13, and completed cleanup actions at site FTG 11. The installation continued the cleanup and monitoring of Building 610 leaking underground storage tank (UST) sites, and continued the cleanup and baseline risk assessment for sites FTG 03, 05, 06, 08 and 14. Fort Gillem installed two pump and treatment systems to keep contamination from migrating off-site and began the acquisition process to complete the cleanup of sites FTG 01, 04, 07, 09, 10 and 13.

Technical issues delayed closure of Building 610 leaking UST sites. Technical, administrative, and regulatory issues delayed completion of cleanup actions at site FTG 10.

FY10 MMRP Progress

Fort Gillem finalized the work plan for the Trap and Skeet Range and completed the fieldwork in support of the site inspection, remedial investigation, and baseline risk assessment for the Trap and Skeet Range.

Plan of Action

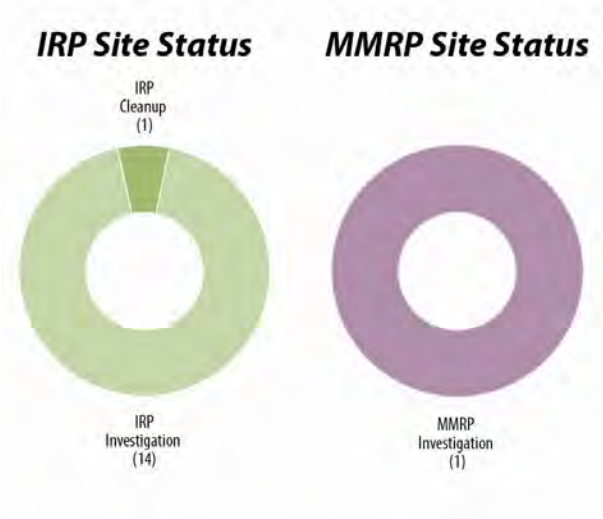
Plan of action items for Fort Gillem are grouped below according to program category.

IRP

- Award contract to complete the remedial investigations for sites FTG 01, 04 and 09 in FY11-FY12.
- Continue the closure of USTs throughout the installation including Building 610 UST sites in FY11-FY12.
- Receive regulatory concurrence determining that no further cleanup actions are necessary on sites FTG 02, 03, 05, 08, 11 and 14 in FY11-FY12.
- Continue to monitor the reuse plans with the BRAC cleanup team and the Local Redevelopment Authority in FY11-FY12.

MMRP

- Obtain regulatory approval for cleanup method at the Trap and Skeet Range in FY11.



Fort Lewis
Logistics Center

NPL

FFID:	WA021402050600		(Logistics Center), placed on NPL in November 1989	**Est. CTC (Comp Year):**	$ 8.0 million (FY2017)
Location (Size):	Fort Lewis, Washington (86,176 acres)	**IAG Status:**	IAG signed in January 1990	**IRP Sites (Final RIP/RC):**	57 (FY2012)
Mission:	Serve as host to I Corps Headquarters; plan and execute Pacific, NATO, or other contingency missions; provide troop training, airfield, medical center, and logistics	**Contaminants:**	PAHs, VOCs, battery electrolytes, PCBs, heavy metals, POLs	**MMRP Sites (Final RIP/RC):**	15 (FY2013)
		Media Affected:	Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	42.78 (Landfill No. 5), placed on NPL in July 1987, delisted from NPL in May 1995; 35.48	**Funding to Date:**	$ 96.1 million	**IRP/MMRP Status Table:**	Refer to page E-7-55

Introduction

Fort Lewis is located approximately 15 miles south of Tacoma, Washington. Its mission includes planning and executing Pacific, NATO, and other contingency missions; providing troop training; operating an airfield and medical center; and providing logistical support. Contaminated sites identified at Fort Lewis include landfills (LFs), former ranges, and spill sites. Primary contaminants include organic solvents, heavy metals, and fuels. The potential risk to human health and the environment was significant enough for EPA to place two Fort Lewis sites on the NPL in July 1987 and November 1989. DoD and EPA signed an interagency agreement (IAG) in January 1990 to outline how they were going to proceed with cleanup. EPA removed LF 5 from the NPL in May 1995. In 2005, the BRAC Commission recommended Fort Lewis for realignment. Fort Lewis developed a community relations program, but due to lack of public interest the installation has not formed a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, Fort Lewis completed five-year review reports in FY97, FY02, and FY07.

To date, Fort Lewis has signed three Records of Decision (RODs), which selected cleanup actions at four environmental restoration sites, and decision documents for five other sites. In FY07, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Fort Lewis completed a feasibility study to evaluate cleanup alternatives at seven state sites and drafted an explanation of significant difference for five sites in the Logistics Center ROD. The installation also completed the draft technical memoranda for closure of six sites listed in the federal facility agreement (FFA).

Regulatory issues delayed completion of an explanation of significant differences for the Logistics Center ROD, and soil removal at former Miller Hill Range and Skeet Ranges.

FY10 MMRP Progress

Fort Lewis began an investigation at the B-Range.

Regulatory issues delayed cleanup at the former Skeet Range.

Plan of Action

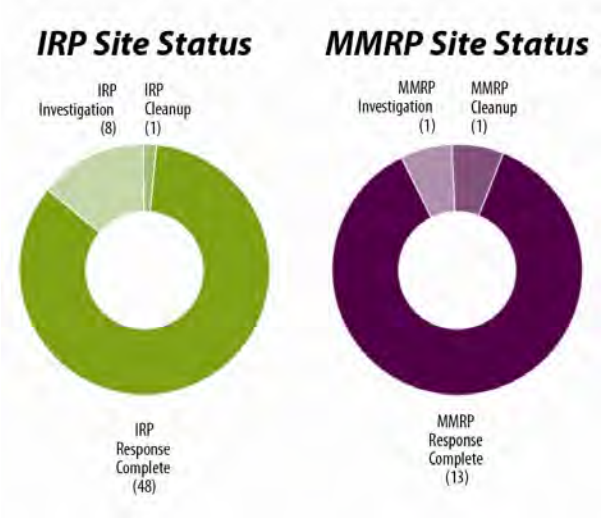
Plan of action items for Fort Lewis are grouped below according to program category.

IRP

- Complete soil removal at Miller Hill Range and Skeet Ranges in FY11.
- Obtain EPA approval for explanations of significant differences and technical memoranda for Logistics Center ROD in FY11.
- Assume environmental restoration responsibilities from McChord Air Force Base in FY11.

MMRP

- Complete cleanup at the former Skeet Range in FY11.
- Complete invesitgation and clearance at the B-Range in FY11.



Fort McClellan

BRAC 1995

FFID:	AL421372056200	**Contaminants:**	VOCs, SVOCs, pesticides, explosives, metals, UXO, radioactive sources, non-stockpile chemical warfare materiel	**MMRP Sites (Final RIP/RC):**	7 (FY2030)
Location (Size):	Anniston, Alabama (41,191 acres)			**Five-Year Review Status:**	Planned
Mission:	Served as host to the U.S. Army Chemical School, the U.S. Army Military Police School, and the DoD Polygraph Institute	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-1
		Funding to Date:	$ 254.9 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 213.1 million (FY2030)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	130 (FY2018)		

Introduction

The mission of Fort McClellan was to serve as host to the U.S. Army Chemical School, the U.S. Army Military Police School, and the DoD Polygraph Institute. Studies since FY90 have identified the following site types at Fort McClellan: maintenance facility areas; training and range areas; underground storage tanks; landfills; incinerators; storage handling areas for toxic and hazardous materials; and chemical agent and radioactive substance training, storage, and disposal areas. The main contaminants of concern are chlorinated volatile organic compounds (VOCs) in groundwater and lead in soils. In July 1995, the BRAC Commission recommended closing most Fort McClellan facilities. In FY95, the installation established information repositories at three locations, and the community formed a local redevelopment authority.The installation formed a BRAC cleanup team in FY96 to develop a process for cleanup of sites, and completed a BRAC cleanup plan with community input in FY98 to prioritize sites requiring environmental restoration. In FY96, the installation formed a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community. The installation provided funding for technical assistance for public participation to the RAB in FY02 through FY05, and FY08 through FY10. To ensure continuous monitoring and improvement, the installation completed a five-year review report for the General Service Administration warehouse area in FY09.

To date, the installation has transferred 18,522 acres. The installation also has completed 6 action memoranda and 95 decision documents, which selected cleanup actions at environmental restoration sites. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Fort McClellan completed fieldwork at the ranges near Training Area T 24A for the baseline assessment of potential risks to the environment. The installation also completed the cleanup of lead contaminated soil at Baby Bains Gap Road Range 20.

The installation awarded funding for technical assistance for public participation to the RAB, and the BRAC cleanup team held facilitated meetings.

FY10 MMRP Progress

Fort McClellan completed an interim removal action on 240 acres in the Charlie Area.

Plan of Action

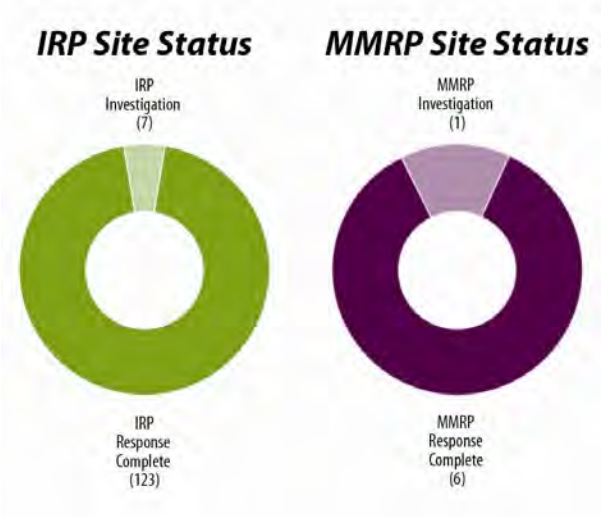
Plan of action items for Fort McClellan are grouped below according to program category.

IRP

- Complete the remedial investigation for the ranges near Training Area T 24A and the Baby Bains Gap Road Ranges in FY11-FY12.
- Complete the feasibility study to evaluate cleanup alternatives for the 81mm Mortar Range and Bains Gap Road Ranges in FY11-FY12.

MMRP

- Complete the engineering evaluation and cost analysis for the Charlie Area in FY11-FY12.



Fort McPherson

BRAC 2005 Closure

FFID:	GA421402056500	**IAG Status:**	N/A	**MMRP Sites (Final RIP/RC):**	4 (FY2011)
Location (Size):	Atlanta, Georgia (487 acres)	**Contaminants:**	POLs, metals, solvents, VOCs	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Mission:	Served as host to the U.S. Army Forces Command Headquarters, the U.S. Army Reserve Command, and the Headquarters of the Third U.S. Army.	**Media Affected:**	Groundwater	**IRP/MMRP Status Table:**	Refer to page E-7-19
		Funding to Date:	$ 10.2 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 0.4 million (FY2014)		
		IRP Sites (Final RIP/RC):	13 (FY2014)		

Introduction

Fort McPherson houses the U.S. Army Forces Command Headquarters, the U.S. Army Reserve Command, and the Headquarters of the Third U.S. Army. Sites include a contaminated fill area, a surface disposal area, four oil-water separators, former small arms ranges, an active small arms range, aboveground storage tanks, and multiple underground storage tanks (USTs). In 2005, the BRAC Commission recommended Fort McPherson for closure and disposal. In FY07, Fort McPherson established a Restoration Advisory Board to discuss the installation's cleanup progress with the community.

Fort McPherson conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP) in FY06; MMRP sites were identified.

FY10 IRP Progress

Fort McPherson awarded a contract to conduct a site inspection (SI) at the former Crematory Site.

Technical issues delayed completion of the SI at the former Crematory Site and the SI for the former Water Tower, which is delayed indefinitely because suspected contamination is below maximum contaminant level and cleanup is no longer necessary. Regulatory issues delayed determination that no further cleanup actions are necessary for the Ash Disposal Dump Site (FTMP 06).

FY10 MMRP Progress

Fort McPherson conducted an SI for the former Trap and Skeet Range.

Plan of Action

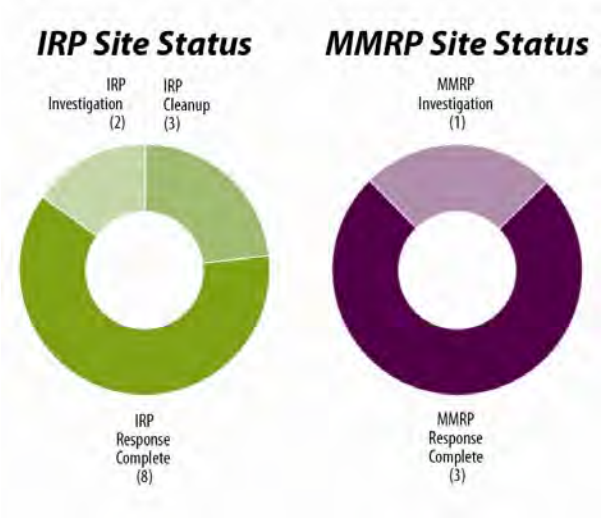
Plan of action items for Fort McPherson are grouped below according to program category.

IRP

- Conduct SI at the former Crematory Site in FY11.
- Complete sampling and receive determination that no further cleanup actions are necessary on the Ash Disposal Dump Site (FTMP 06) in FY11.

MMRP

- Develop proposed plan for the former Trap and Skeet Range in FY11.
- Conduct SI of the Small Arms Range (FTMP 12) in FY11.



FFID:	NJ221382059700	**Contaminants:**	Petroleum hydrocarbons, VOCs, SVOCs, PCBs, heavy metals, radionuclides	**Five-Year Review Status:**	Completed and planned
Location (Size):	Monmouth County, New Jersey (1,338 acres)	**Media Affected:**	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-110
Mission:	Conducted research and development of C4ISR systems	**Funding to Date:**	$ 29.4 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 17.3 million (FY2015)		
IAG Status:	FFA signed in July 1990	**IRP Sites (Final RIP/RC):**	55 (FY2011)		
		MMRP Sites (Final RIP/RC):	1 (FY2008)		

Introduction

Fort Monmouth's mission is to conduct research and development. Prominent sites at Fort Monmouth include landfills, underground storage tanks, hazardous waste storage areas, polychlorinated biphenyl (PCB) spill areas, asbestos areas, and radiological storage and spill areas. Contaminants in groundwater and soil include chlorinated solvents, volatile organic compounds (VOCs), and heavy metals. DoD and EPA signed a federal facility agreement (FFA) in July 1990 to outline how they were going to proceed with cleanup. In 1993, the BRAC Commission recommended realignment of Fort Monmouth. This realignment resulted in the closure of the Evans Area; the transfer of part of the Charles Wood Area to the Navy; and the relocation of personnel from the leased space, the Evans Area, and Vint Hill Farms Station to the Main Post and the Charles Wood Area. To accelerate transfer, the Army divided the Fort Monmouth BRAC property into eight parcels: the Charles Wood Housing Area and seven parcels in the Evans Area. In 2005, the BRAC Commission recommended closure of the Fort Monmouth Main Post and Charles Wood Area. In FY94, the Evans Area formed a BRAC cleanup team to develop a process for cleanup of sites and completed the BRAC cleanup plan to prioritize sites requiring environmental restoration. In FY96, the Evans Area formed a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community. In FY07, the installation formed another RAB for the BRAC 2005 Main Post and Charles Wood Area. To ensure continuous monitoring and improvement, Fort Monmouth completed a five-year review report in FY06.

To date, the installation has transferred the Evans Area Parcels D and F by deed. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

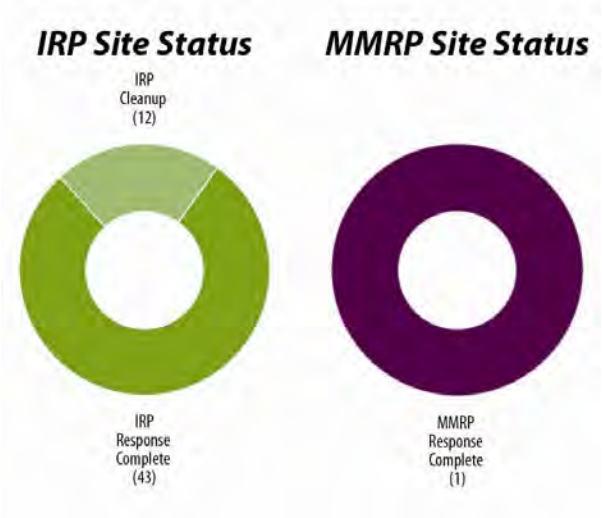
FY10 IRP Progress

The cost of completing environmental restoration has changed significantly due to regulatory issues.

Regulatory issues delayed completion of cleanup at the Building 9004 septic tank and transfer of the remaining two acres. Administrative issues delayed assignment of Parcel D to the Department of Education and support transfer to Brookdale College.

FY10 MMRP Progress

Fort Monmouth conducted no MMRP activities.



Plan of Action

Plan of action items for Fort Monmouth are grouped below according to program category.

IRP

- Complete cleanup at the Building 9004 septic tank and transfer the remaining two acres in FY11.
- Assign Parcel D to the Department of Education and support transfer to Brookdale College in FY11.
- Continue oxygen injections at Sites M2, M58, M61 and M64 in FY11.
- Continue to inject compounds that release hydrogen at Sites M5, M22 and M59 on the Main Post and the Charles Wood Area in FY11.
- Complete biennial classification exception area reports in FY11.
- Continue to perform pump and treat cleanup at Sites M22 and M53 in FY11.
- Perform five-year review report for FTMM35 Groundwater at Evans Area in FY11

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Fort Monroe

BRAC 2005 Closure

FFID:	VA321372060300	**Contaminants:**	Metals, MEC, explosives, propellants, SVOCs, VOCs	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Location (Size):	Hampton, Virginia (570 acres)	**Media Affected:**	Sediment and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-169
Mission:	Provided quality base operations for five major commands/regional HQs and several national defense agencies	**Funding to Date:**	$ 7.1 million		
		Est. CTC (Comp Year):	$ 72.8 million (FY2016)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	17 (FY2013)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	16 (FY2016)		

Introduction

Fort Monroe provides quality base operations support for several national defense agencies while preparing the Fort Monroe community for the future. Cleanup at Fort Monroe has included the removal of soil or liquid hydrocarbons from leaking underground storage tanks. In 2005, the BRAC Commission recommended closure of Fort Monroe. In FY06, the installation designated a Base Transition Coordinator and an interim BRAC Environmental Coordinator. The installation also formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community. In FY07, the Governor of Virginia established the Fort Monroe Federal Area Development Authority.

Fort Monroe is reverting Approximately 288 acres back to the Commonwealth of Virginia; 77 additional are not yet under a deed and ownership is undetermined. The following sites at Fort Monroe have completed cleanup: Sites 1 and 2 (two former landfills [LFs]), Site 3 (a classified document incinerator), and Site 4, (unexploded ordnance at the whole installation). In FY04, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Fort Monroe was awarded a contract for removal actions and began soil sampling and delineation for three soil removal actions. The installation received regulatory concurrence determining that no further cleanup actions were necessary on 13 expanded site inspection sites. The installation also continued risk assessment and further delineation on three sites in the remedial investigation (RI) phase; Dog Beach LF, the Moat, and Buildings 204/205.

Regulatory and technical issues delayed concurrence determining that no further cleanup actions were necessary at 13 additional sites.

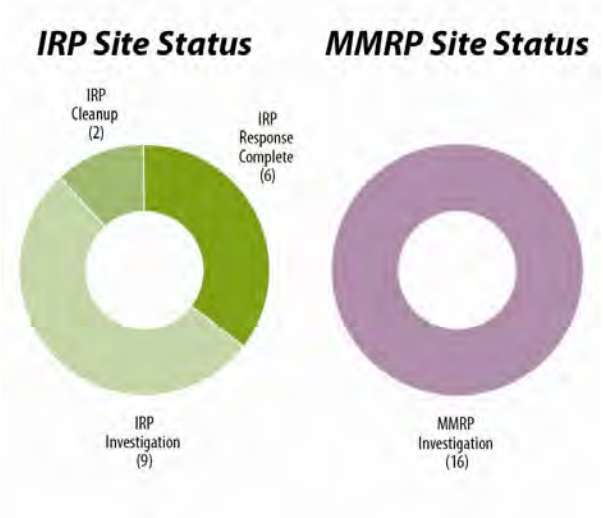
Fort Monroe held quarterly RAB meetings.

FY10 MMRP Progress

Fort Monroe completed the RI and feasibility study to evaluate cleanup alternatives for all land based areas of the post, and prepared the proposed cleanup plan. The installation conducted an anomaly investigation in the moat.

Regulatory and technical issues delayed completion of the proposed cleanup plan and decision document (DD), and completion of the Moat investigation report.

Fort Monroe held quarterly RAB meetings and a public meeting to discuss the proposed cleanup plan. No public comments were received.



Plan of Action

Plan of action items for Fort Monroe are grouped below according to program category.

IRP

- Receive regulatory concurrence that no further cleanup actions are necessary at 13 additional sites in FY11.
- Complete soil removals at three sites in FY11.
- Complete proposed cleanup plan for Dog Beach LF, the Moat, and Buildings 204/205 in FY11.

MMRP

- Complete the land use control implementation control plan, which restricts use of and access to 12 munitions reponse areas in FY11.
- Complete proposed cleanup plan and DD in FY11.
- Complete moat RI/FS to move to land use controls in FY11.

Fort Ord
Presidio of Monterey

NPL/BRAC 1991

FFID:	CA921372067600	**IAG Status:**	FFA signed in July 1990	**MMRP Sites (Final RIP/RC):**	22 (FY2019)
Location (Size):	Marina, California (27,827 acres)	**Contaminants:**	VOCs, petroleum hydrocarbons, heavy metals, pesticides, SVOCs, explosives, propellants	**Five-Year Review Status:**	Completed and planned
Mission:	Served as host to 7th Infantry Division (Light); supports the Defense Language Institute Foreign Language Center, currently at the Presidio of Monterey, California	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-21
		Funding to Date:	$ 501.4 million		
HRS Score:	42.24; placed on NPL in February 1990	**Est. CTC (Comp Year):**	$ 326.4 million (FY2037)		
		IRP Sites (Final RIP/RC):	46 (FY2017)		

Introduction

From 1917 to 1994, Fort Ord served primarily as a training and staging installation for infantry units. In FY87, a hydrogeological investigation identified the Fort Ord sanitary landfills (LFs) as potential sources of contamination. Identified sites including LFs; underground storage tanks; motor pools; family housing areas; fire training areas; an 8,000-acre impact area; and an ordnance and explosives disposal area. In addition, Fort Ord discovered petroleum hydrocarbons and volatile organic compounds (VOCs) had contaminated the groundwater. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in 1990. DoD and EPA signed a federal facility agreement (FFA) in July 1990 to outline how they were going to proceed with cleanup. In 1991, the BRAC Commission recommended closure of Fort Ord and moving the 7th Infantry Division (Light) to Fort Lewis, Washington. The Army closed Fort Ord in September 1994. In FY94, Fort Ord converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board (RAB). The installation also formed a BRAC cleanup team to develop a process for cleanup of sites at Fort Ord. In FY99, the installation reestablished the technical review committee and dissolved the RAB. To ensure continuous monitoring and improvement, Fort Ord completed five-year review reports in FY02 and FY07.

To date, Fort Ord has transferred over 19,100 acres. The installation has completed 15 Records of Decision (RODs), which selected cleanup actions at environmental sites. The installation also conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); 22 MMRP sites were identified.

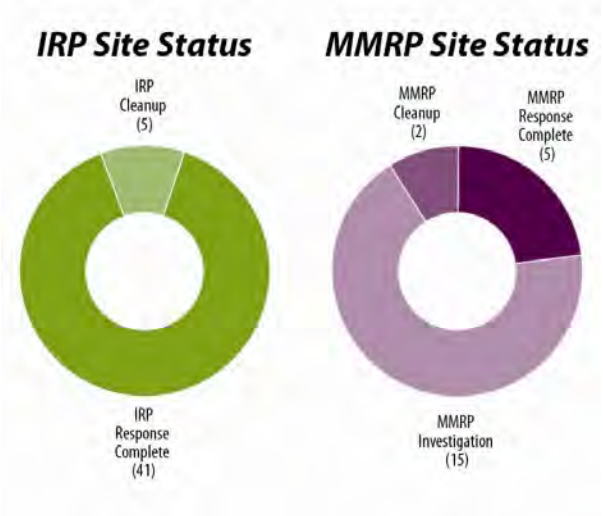
FY10 IRP Progress

Fort Ord began excavation of Site 39 soil and placement of the soil at the operable unit (OU) 2 landfill. The installation completed the explanation of significant differences for the OU 1 off-site treatment system. The installation also continued transferring the properties found suitable to transfer, and continued operation of the groundwater treatment systems at Site 2/12, and OUs 1 and 2. Fort Ord installed additional components of a cleanup system and extraction wells for the OU carbon tetrachloride groundwater treatment project.

FY10 MMRP Progress

The installation completed the prescribed burns and munitions clearance at Burn Units 14 and 19. The installation began the remedial investigation (RI) and feasibility study (FS) to evaluate cleanup alternatives for all remaining munitions response sites (MRSs) from site work plan and preparations for the prescribed burns and munitions clearance at Bureau of Land Management (BLM) Units 15 and 21. As a part of the Environmental Services Cooperative Agreement (ESCA), the installation continued field work in the Group 1 area, and issued a draft RI/FS work plan for the ESCA Group 3 and 4 areas. The installation completed a draft RI/FS, and a Track 1 memo determining that no further cleanup actions are necessary in the County North portion of the area for the ESCA group 2 area.

Technical issues delayed completion of the prescribed burns and munitions clearance at BLM Units 15 and 21. Regulatory issues delayed completion of cleanup at the California State University and Monterey Bay, and the proposed plan (PP) and ROD for the ESCA Group 2 munitions response sites.



Plan of Action

Plan of action items for Fort Ord are grouped below according to program category.

IRP

- Continue transferring properties found suitable to transfer for Site 11 in FY11.
- Continue cleanup actions for the carbon tetrachloride groundwater treatment project in FY11-FY12.
- Continue excavation and placement of the soil at Site 39 in FY11-FY12.
- Continue groundwater treatment at Sites 2 and 12 and OUs 1 and 2 in FY11-FY12.
- Continue evaluation and implementation of optimization efforts for the three groundwater treatment plants in FY11-FY12.

MMRP

- Complete the PP and ROD for the ESCA Group 2 munitions response sites in FY11.
- Continue field work at the ESCA Group 1 area in FY11.
- Continue RI/FS for remaining MRSs from work plan in FY11.
- Conduct prescribed burns and munitions clearance at BLM Units 15 and 21 in FY11.
- Complete the PP and ROD for the ESCA Groups 3 and 4 MRSs in FY11-FY12.

Fort Richardson

NPL

FFID:	AK021452215700	**Contaminants:**	White phosphorus, PCBs, heavy metals, POLs, solvents, pesticides, VOCs, dioxins, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Anchorage, Alaska (64,470 acres)	**Media Affected:**	Surface Water and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-3
Mission:	Support and sustain forces assigned to U.S. Army Alaska	**Funding to Date:**	$ 101.4 million		
HRS Score:	50.00; placed on NPL in May 1994	**Est. CTC (Comp Year):**	$ 74.2 million (FY2018)		
IAG Status:	FFA signed in December 1994	**IRP Sites (Final RIP/RC):**	94 (FY2013)		
		MMRP Sites (Final RIP/RC):	15 (FY2011)		

Introduction

Since World War II, Fort Richardson has supported combat unit training and operations. These activities contaminated soil, surface water, sediment, and groundwater with petroleum/oil/lubricants (POLs), solvents, and polychlorinated biphenyls (PCBs). Parts of a 2,500-acre wetland (Eagle River Flats) that served as an active ordnance impact area contain white phosphorus. The potential risk to human health and the environment was significant enough for EPA to place Fort Richardson on the NPL in May 1994. DoD and EPA signed a federal facility agreement (FFA) in December 1994 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Fort Richardson for realignment. In FY98, the installation formed a Restoration Advisory Board to discuss the installation's cleanup progress with the community. To ensure continuous monitoring and improvement, Fort Richardson completed five-year review reports in FY03 and FY08.

To date, the installation has signed five Records of Decision, which selected cleanup actions at environmental restoration sites. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

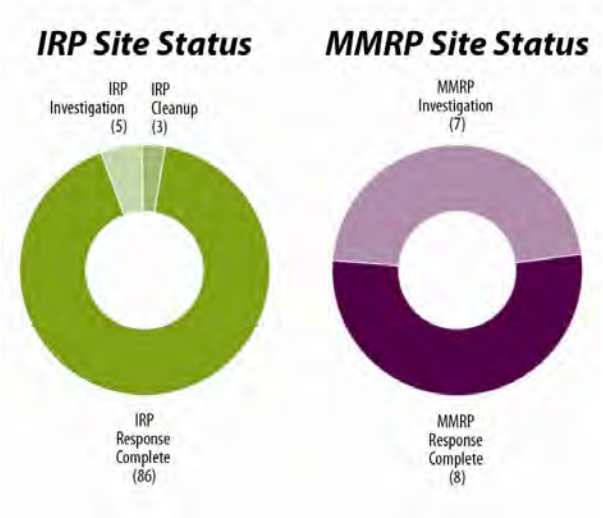
FY10 IRP Progress

Fort Richardson completed long-term management (LTM) plans for Operable Units (OUs) B and E, and implemented the LTM plan for OU C. The installation also completed the bedrock model at Poleline Road, began a remedial investigation (RI) at the Nike Site Summit, and evaluated cleanup requirements for new sites. Fort Richardson transferred 11 compliance restoration sites into the Installation Restoration Program (IRP).

FY10 MMRP Progress

Fort Richardson received concurrence from regulatory agencies determining that no further cleanup actions are necessary for eight sites, and began RI activities at seven sites.

Regulatory issues delayed concurrence from regulatory agencies determining that no further cleanup actions are necessary for three remaining sites.



Plan of Action

Plan of action items for Fort Richardson are grouped below according to program category.

IRP

- Transfer environmental restoration responsibilities to Elmendorf AFB under Air Force management in FY11.
- Complete RI and feasibility study (FS) to evaluate cleanup alternatives and decision document for the Nike Site Summit in FY11.

MMRP

- Complete RI/FS for seven sites in FY11.
- Recieve regulatory concurrence determining that no further cleanup actions are necessary for three sites in FY11.

Fort Riley

NPL

FFID:	KS721402075600	**IAG Status:**	IAG signed in June 1991	**MMRP Sites (Final RIP/RC):**	4 (FY2012)
Location (Size):	Junction City, Kansas (100,656 acres)	**Contaminants:**	Pesticides, lead, VOCs, metals, solvents	**Five-Year Review Status:**	Completed and planned
Mission:	Provide training, readiness, and deployability for three component combat brigades, one combat aviation brigade, and one sustainment brigade; active and reserve component units	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-25
		Funding to Date:	$ 79.5 million		
		Est. CTC (Comp Year):	$ 5.6 million (FY2014)		
HRS Score:	33.8; placed on NPL in August 1990	**IRP Sites (Final RIP/RC):**	75 (FY2014)		

Introduction

Fort Riley provides facilities for several active and reserve Army combat brigades. The installation has five operable units (OUs): Southwest Funston Landfill (LF) (OU 1), Pesticide Storage Facility (OU 2), Dry Cleaning Facilities Area (OU 3), Former Fire Training Area - Marshall Army Airfield (OU 4), and 354 Area Solvent Detections (OU 5). The potential risk to human health and environment was significant enough for EPA to place Fort Riley on the NPL in August 1990. The installation established a Restoration Advisory Board in 1997 to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed one five-year review report for OUs 1 and 2 in FY02, and another for OUs 1, 2, 4, and 5 in FY07.

To date, the installation has completed five Records of Decision for OUs 1 through 5, which selected cleanup actions at these sites. In FY05, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Fort Riley completed monitoring at OU 1 and continued monitoring at OU 3, began cleanup at Sites FTRI 063, 066, and 068 at Camp Funston, and completed the explanation of significant differences at OU 2 and closed the site. The installation also continued monitoring and contracted retreatment of the abandoned gasoline line, and completed a report on cleanup actions at OUs 1 and 4.

Administrative issues delayed site treatment of the abandoned gasoline line. Regulatory issues delayed completion of the report on cleanup actions at OU 5.

FY10 MMRP Progress

Fort Riley completed the remedial investigation work plan and began fieldwork at Sherman Heights Small Arms Range Impact Slope.

Technical issues delayed the start of field work at Forsyth LF Area 2.

Plan of Action

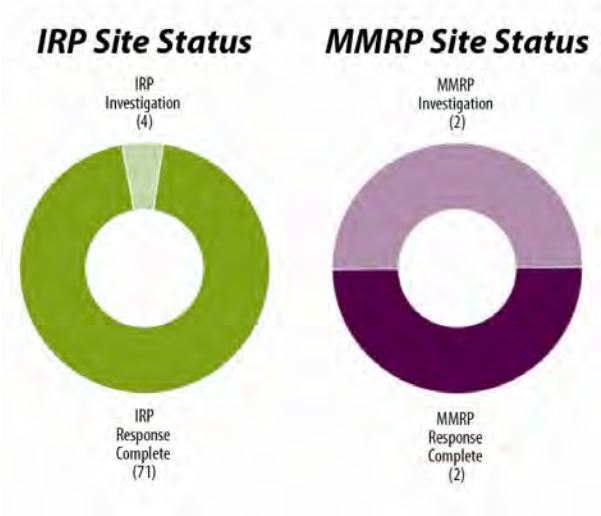
Plan of action items for Fort Riley are grouped below according to program category.

IRP

- Complete report on cleanup for OU 5 in FY11.
- Continue operation of cleanup systems at sites FTRI 063, 066, and 068 in FY11.
- Continue monitoring at OU 3 in FY11.
- Complete site treatment of the abandoned gasoline line in FY11.

MMRP

- Complete fieldwork at Sherman Heights Small Arms Range Impact Slope in FY11.
- Begin report on Sherman Heights Small Arms Range Impact Slope in FY11.
- Begin fieldwork at Forsyth LF Area 2 in FY11.



Fort Sheridan

BRAC 1988

FFID:	IL521402083800	**Contaminants:**	Metals, VOCs, UXO, fuel hydrocarbons, PAHs, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Fort Sheridan, Illinois (709 acres)	**Media Affected:**	Soil	**IRP/MMRP Status Table:**	Refer to page E-7-23
Mission:	Provided administrative and logistical support; non-excess property currently used as Army Reserve installation and Navy housing area	**Funding to Date:**	$ 57.5 million		
		Est. CTC (Comp Year):	$ 3.0 million (FY2015)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	68 (FY2015)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	3 (FY2011)		

Introduction

Fort Sheridan's missions have included cavalry and infantry training, Nike systems maintenance, and administrative and logistical support. Contaminated sites include Landfills (LFs), pesticide storage areas, hazardous material storage areas, underground storage tanks, polychlorinated biphenyl (PCB)-containing transformers, and unexploded ordnance areas. Petroleum hydrocarbons, volatile organic compounds (VOCs), and polyaromatic hydrocarbons (PAHs) affect groundwater and soil. In December 1988, the BRAC Commission recommended closure of Fort Sheridan. The installation formed a BRAC cleanup team in 1994 to develop a process for cleanup of sites. In FY95, the installation formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community. In FY99, the RAB requested and received funding for technical assistance for public participation. To ensure continuous monitoring and improvement, Fort Sheridan completed a five-year review report in FY08.

In FY03, Fort Sheridan conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Administrative issues delayed the completion of the Record of Decision (ROD), which selected cleanup actions for all related cleanup at LF 1.

FY10 MMRP Progress

Administrative issues delayed the completion of a survey of munitions of concern at one of the anti-aircraft artillery firing points.

Plan of Action

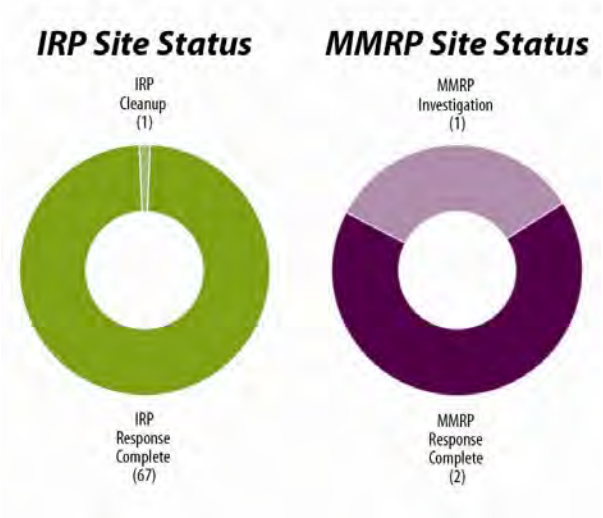
Plan of action items for Fort Sheridan are grouped below according to program category.

IRP

- Complete the ROD and all related cleanup at LF 1 in FY11.

MMRP

- Conduct a survey of munitions of concern at one of the anti-aircraft artillery firing points in FY11.



Fort Wainwright

NPL

FFID:	AK021452242600	**Contaminants:**	PCBs, SVOCs, POLs, heavy metals, solvents, pesticides, paints, UXO, VOCs, Explosives, Propellants	**MMRP Sites (Final RIP/RC):**	15 (FY2013)
Location (Size):	Fairbanks, Alaska (917,993 acres)	**Media Affected:**	Groundwater and Soil	**Five-Year Review Status:**	Completed and planned
Mission:	Serve as headquarters of the 172nd Infantry Brigade (Separate)	**Funding to Date:**	$ 180.9 million	**IRP/MMRP Status Table:**	Refer to page E-6-3
HRS Score:	50.00; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 28.1 million (FY2040)		
IAG Status:	FFA signed in November 1991	**IRP Sites (Final RIP/RC):**	84 (FY2014)		

Introduction

Since World War II, Fort Wainwright has housed light infantry brigades, most recently the 172nd Stryker Brigade Combat Team and the 1-501st Airborne Battalion. Studies at the installation identified drum burial sites, underground storage tanks, a railroad car off-loading facility, an open burn and open detonation area, a former ordnance disposal site, solvent groundwater contaminated areas, petroleum/oil/lubricant (POL) contaminated areas, and pesticide-contaminated soil. The potential risk to human health and the environment was significant enough for EPA to place Fort Wainwright on the NPL in 1990. DoD and EPA signed a federal facility agreement (FFA) in 1991 to outline how they were going to proceed with cleanup. In FY97, Fort Wainwright formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community. The RAB adjourned in FY04 at the recommendation of the community co-chair and community RAB members. The installation determined there was insufficient interest to reestablish the RAB in FY07. To ensure continuous monitoring and improvement, Fort Wainwright completed five-year review reports in FY01 and FY06.

To date, the installation has signed five Records of Decision (RODs), which selected cleanup actions at environmental restoration sites. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

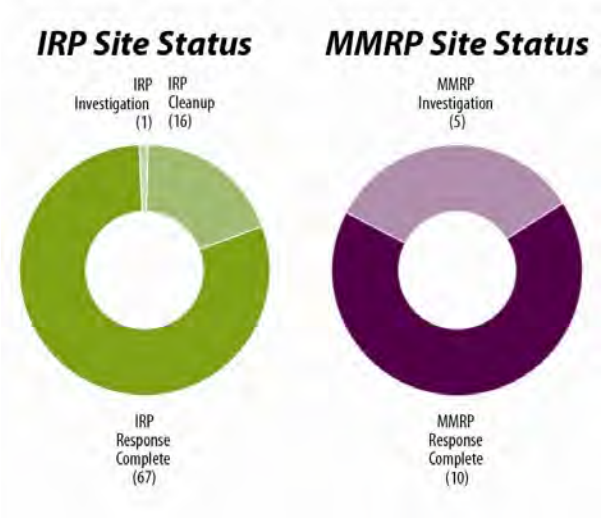
FY10 IRP Progress

Fort Wainwright continued using monitoring and optimization processes to identify opportunities for streamlining cleanup, revise operations and maintenance (O&M) requirements, and evaluate site progress. The installation also began treatability studies at multiple new construction sites that are on or adjacent to known source areas. The cost of completing environmental restoration has changed significantly due to technical issues.

Regulatory issues delayed execution of work plans for decommissioning soil vapor extraction and air sparging systems at Operable Units (OUs) 3 and 5 source areas. Administrative issues delayed the start of a proposed plan (PP), ROD, and feasibility study (FS) to evaluate cleanup alternatives for OU 6.

FY10 MMRP Progress

Fort Wainwright prepared the remaining remedial investigation (RI) work plans for Training Area 101. The installation also prepared work plan and completed site investigations for four sites.



Plan of Action

Plan of action items for Fort Wainwright are grouped below according to program category.

IRP

- Execute work plans for decommissioning soil vapor extraction and air sparging systems at OUs 3 and 5 source areas in FY11.
- Begin PP, ROD, and FS for OU 6 in FY11.
- Negotiate future investigations and O&M requirements at multiple new construction sites that are on or adjacent to known source areas from FY11-FY12.
- Complete the treatability study for OU 2 and propose investigation and removal of abandoned pipelines, product, and associated contaminated soils at other Installation Restoration Program (IRP) sites in FY11.
- Complete treatibility studies at multiple sites in FY11-FY12.

MMRP

- Complete RI report in FY11-FY12.
- Prepare work plan and complete site investigation for the Bombing Range in FY11-FY12.

Fort Wingate

BRAC 1988

FFID:	NM621382097400	**Contaminants:**	UXO, PCBs, pesticides, heavy metals, asbestos, lead-based paint, explosive compounds, VOCs, SVOCs, propellants	**MMRP Sites (Final RIP/RC):**	5 (FY2021)
Location (Size):	Gallup, New Mexico (21,881 acres)			**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Mission:	Stored, shipped, and received ammunition components and disposed of obsolete or deteriorated explosives and ammunition	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-113
		Funding to Date:	$ 52.0 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 134.7 million (FY2021)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	43 (FY2021)		

Introduction

Fort Wingate's former mission was to store, test, and demilitarize munitions. Restoration efforts have focused on land affected by ordnance-related wastes, unexploded ordnance, and other contaminants. The affected areas are the open burning and open detonation (OB/OD) grounds, pistol range soil, pesticide-contaminated soil at Building 5, explosives-contaminated soil at the former bomb washout plant lagoons, polychlorinated biphenyl (PCB) contamination in Buildings 11 and 501, the former explosive washout plant (Building 503), and three solid waste landfills. In 1988, the BRAC Commission recommended closure of Fort Wingate. In FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites at Fort Wingate. In FY95, the BRAC cleanup team revised the BRAC cleanup plan. The installation also formed a Restoration Advisory Board (RAB) in FY94 to discuss the installation's cleanup progress with the community. The RAB adjourned in FY04. In FY06, the installation developed a community relations plan.

To date, the installation has transferred over 5,400 acres. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

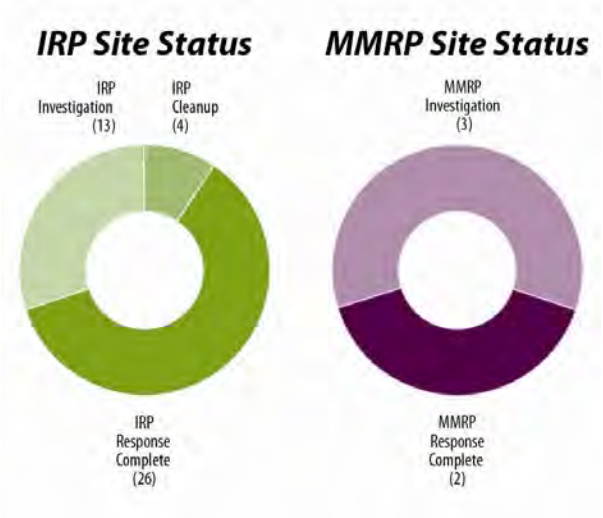
Fort Wingate completed the ecological risk assessment work plan and groundwater sampling for the base. The installation submitted transfer documents for Parcels 4B, 5B, 8 and 25. Fort Wingate completed investigation work plans for Parcels 4A, 5A, 6 and 23, and investigation fieldwork for Parcels 11, 21 and 22.

Regulatory issues delayed the transfer document submission for Parcels 12 and 14.

FY10 MMRP Progress

Fort Wingate continued to remove munitions and explosives of concern from arroyos.

Technical issues delayed the contract to perform the field investigation at the OB/OD unit and Parcel 3. Administrative issues delayed the start of the hazardous waste management removal and the corrective action management unit construction.



Plan of Action

Plan of action items for Fort Wingate are grouped below according to program category.

IRP

- Submit transfer documents for Parcels 12 and 14 in FY11.
- Submit transfer documents for Parcel 10A in FY11-FY12.
- Perform investigation field sampling for Parcels 4A, 6, 10B and 23 in FY11-FY12.
- Award contract for investigation work for Parcels 7, 13, and 18, and Phase II work in Parcels 6, 11, 21, 22, and 23 including removal of the eastern landfill in Parcel 18 in FY11-FY12.

MMRP

- Perform work plan for investigation at Parcel 16 in FY11.
- Continue to remove munitions and explosives of concern from Arroyos in FY11.
- Award a performance based contract and prepare work plan for cleanup at Parcel 3 in FY11-FY12.

Fridley Naval Industrial Reserve Ordnance Plant

NPL

FFID:	MN517002291400	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-98
Location (Size):	Fridley, Minnesota (83 acres)	**Funding to Date:**	$ 39.0 million		
Mission:	Design and manufacture advanced weapons systems	**Est. CTC (Comp Year):**	$ 14.8 million (FY2034)		
HRS Score:	30.83; placed on NPL in November 1989	**IRP Sites (Final RIP/RC):**	5 (FY2002)		
IAG Status:	FFA signed in March 1991	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	POLs, VOCs, SVOCs, TCE, metals, cyanide	**Five-Year Review Status:**	Completed and planned		

Introduction

Fridley Naval Industrial Reserve Ordnance Plant (NIROP) designs and manufactures advanced weapons systems. Site types include waste disposal pits and trenches, source areas beneath the main industrial plant, a foundry core butt disposal area, and site-wide groundwater contamination. Wastes and contaminants associated with these site types include petroleum/oil/lubricants (POLs), solvents, plating sludge, construction debris, and foundry sands. Investigations conducted at this government-owned, contractor-operated installation identified trichloroethylene (TCE) in groundwater, which discharges into the Mississippi River upstream from the Minneapolis drinking water plant. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in March 1991 to outline how they were going to proceed with cleanup. The installation formed a technical review committee responsible for communicating cleanup progress to the community in FY93, and converted it to a Restoration Advisory Board in FY95. The installation prepared the community relations plan in FY91 and updated it in FY97. The installation also compiled an administrative record and established an information repository in FY95. To ensure continuous monitoring and improvement, Fridley NIROP completed five-year review reports in FY04 and FY09.

To date, Fridley NIROP has completed Records of Decision, which selected cleanup actions for Operable Units 1, 2, and 3. In addition, the installation has completed cleanup for Sites 1 and 2. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Fridley NIROP continued operation and maintenance (O&M) and developing an exit strategy. The installation evaluated the replacement of two extraction wells. The installation also completed the annual monitoring report as required. The cost of completing environmental restoration has changed significantly due to technical issues.

FY10 MMRP Progress

Fridley NIROP has identified no MMRP sites.

Plan of Action

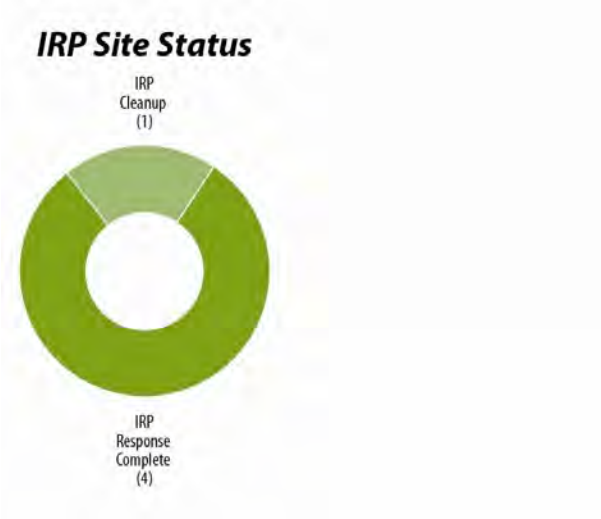
Plan of action items for Fridley Naval Industrial Reserve Ordnance Plant are grouped below according to program category.

IRP

- Continue developing exit strategy in FY11.
- Evaluate and optimize the extraction system in FY11.
- Replace extraction well AT-3A and add an additional extraction well in FY11.
- Continue O&M activities in FY11-FY12.
- Upgrade equipment in FY11-FY12.
- Replace one additional extraction well in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Galena Forward Operating Location

BRAC 2005 Closure

FFID:	AK057302865500	**HRS Score:**	N/A	**IRP Sites (Final RIP/RC):**	27 (FY2013)
Location (Size):	Galena, Alaska (162 acres)	**IAG Status:**	N/A	**MMRP Sites (Final RIP/RC):**	1 (FY2011)
Mission:	Served as an active refueling stop for aircraft bound for the Soviet Union under the Lend-Lease program in World War II, and later as a forward operating location for the Air Force as part of the NORAD Mission	**Contaminants:**	TCE, POLs, benzene, VOCs, SVOCs, metals	**Five-Year Review Status:**	This installation is not required to complete a five-year review report
		Media Affected:	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-5
		Funding to Date:	$ 36.4 million		
		Est. CTC (Comp Year):	$ 65.6 million (FY2020)		

Introduction

Galena Forward Operating Location (FOL) formerly served as an active refueling stop for Soviet Union-bound aircraft, and later as part of the North American Aerospace Defense Command mission. The airport was constructed in 1940, and the Air Force has had joint civilian-military use of the airfield since 1951. Military operations have released hazardous chemicals via spills or historical disposal practices. The Air Force reduced the active duty force at the installation in 1993. In 2005, the BRAC Commission recommended closure of Galena FOL. The installation formed a Restoration Advisory Board to discuss the installation's cleanup progress with the community in 2004, but it adjourned due to insufficient interest. Renewed interest by the community led to re initiation of the RAB in FY10. Galena FOL and the Alaska Department of Environmental Conservation coordinate with local stakeholders (including the Louden Tribal Council, City of Galena, and Galena City Schools) through the Galena Technical Project Team to address environmental concerns.

The installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

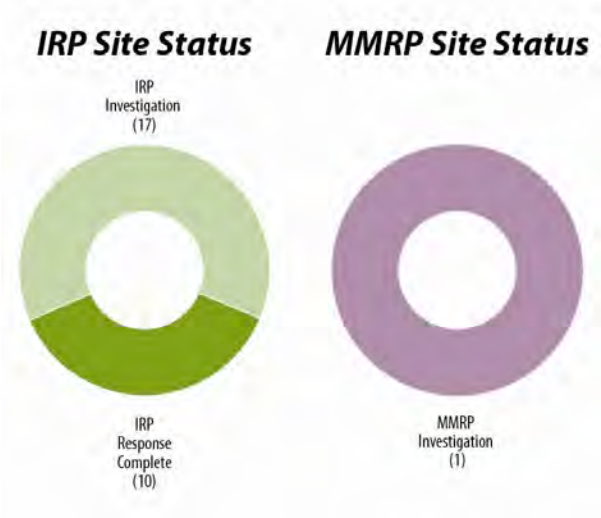
FY10 IRP Progress

Galena FOL conducted preliminary assessments of the entire base and continued operations of the current remediation system. The installation conducted investigations at 26 areas of concern and 6 sites, which included determinations that no further cleanup actions were necessary for multiple areas. The installation conducted cleanup at one site and constructed a bioreactor at another site to evaluate the effectiveness of bioremediation for the cleanup of solvent-contaminated groundwater. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory, technical, and administrative issues delayed completion of remedial investigations (RIs) for 16 sites, preliminary assessments and RIs for 60 sites, and site inspection (SI) and RI fieldwork for 20 sites. Regulatory, technical, and administrative issues also delayed documentation that no further cleanup actions are necessary at 25 sites, and the operation of 13 cleanup systems. The installation adjusted cleanup plans based on data collected in 2009 that showed contamination was more extensive than originally thought; plan of action items are adjusted accordingly.

FY10 MMRP Progress

Galena FOL completed an SI at one site.



Plan of Action

Plan of action items for Galena Forward Operating Location are grouped below according to program category.

IRP

- Complete investigations at IRP sites in FY11.
- Conduct source removal actions at four sites in FY11.
- Construct a cleanup system for contaminated soil in FY11.
- Optimize current cleanup systems in FY11.

MMRP

- Conduct supplemental investigation to support determination that no further cleanup is necessary at one site in FY11.

Gentile Air Force Station
Defense Electronics Supply Center, Dayton

BRAC 1993

FFID:	OH597152435700	**Contaminants:**	Solvents, pile runoff (VOCs and SVOCs), metals, residual POLs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Kettering, Ohio (164 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-43
Mission:	Provided logistical support to the military services by supplying electrical and electronic material	**Funding to Date:**	$ 10.9 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 1.9 million (FY2028)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	22 (FY2002)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Gentile Air Force Station (AFS) formerly provided logistical support to the Military Services by supplying electrical and electronic material. Sites identified at the installation include underground storage tanks; areas of past industrial operations; and landfills containing construction debris, hardfill, waste oil, solvents, asbestos, low-level radioactive waste, and a subsurface material suspected to be paint thinner. Releases from these sites have contaminated soil and groundwater. In July 1993, the BRAC Commission recommended closure of the Defense Electronics Supply Center (Gentile AFS) and relocation of its mission to the Defense Construction Supply Center in Columbus, Ohio. Gentile AFS closed in December 1996. In FY93, the installation's BRAC cleanup team developed a BRAC cleanup plan with community input to prioritize sites requiring environmental restoration. The installation formed a Restoration Advisory Board (RAB) in FY94 to discuss the installation's cleanup progress with the community. The RAB formally adjourned in FY05. A memorandum of agreement with the Air Force Real Property Agency terminated DLA's involvement in environmental restoration at the installation at the end of FY98. To ensure continuous monitoring and improvement, Gentile AFS completed a five-year review report in FY04.

Environmental studies have identified 22 sites suspected to contain contamination. Twelve sites were closed between FY97 and FY01 with decision documents (DDs), which determined that no further cleanup actions were necessary. Eighteen sites have conditional DDs, determining no further cleanup is necessary if future access is limited to commercial or industrial use. Ten sites are included in two Installation Restoration Program (IRP) DDs, which determined that institutional controls, which minimize the potential for human exposure, are needed at all ten sites. In FY04, Gentile AFS conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified. As of FY05, Gentile AFS has transferred all property.

FY10 IRP Progress

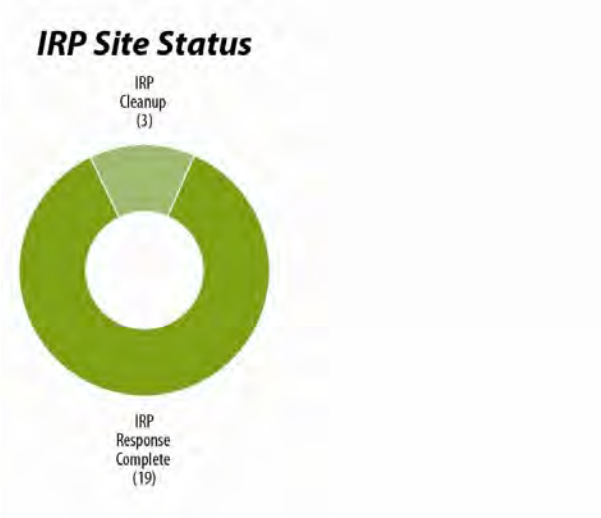
Gentile AFS continued cleanup operations at spill site (SS) 028 and SS 035, and waste pit (WP) 026. The installation also updated the administrative record file and land use control management plan which lays out procedures to manage restricted access to sites.

Technical and administrative issues delayed the completion of the second five-year review report.

The BRAC cleanup team met once to discuss the status of the installation.

FY10 MMRP Progress

Gentile AFS has identified no MMRP sites.



Plan of Action

Plan of action items for Gentile Air Force Station are grouped below according to program category.

IRP

- Continue cleanup operations at SS 028 and SS 035, and WP 026 in FY11.
- Complete the second five-year review report in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

George Air Force Base

NPL/BRAC 1988

FFID:	CA957002445300	**Media Affected:**	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-31
Location (Size):	Victorville, California (5,062 acres)	**Funding to Date:**	$ 124.7 million		
Mission:	Provided tactical fighter operations support	**Est. CTC (Comp Year):**	$ 46.6 million (FY2040)		
HRS Score:	33.62; placed on NPL in February 1990	**IRP Sites (Final RIP/RC):**	77 (FY2012)		
IAG Status:	FFA signed in October 1990	**MMRP Sites (Final RIP/RC):**	8 (FY2012)		
Contaminants:	POLs, VOCs, lead, SVOCs, metals, radioactive materials, other	**Five-Year Review Status:**	Completed and planned		

Introduction

George Air Force Base (AFB) formerly provided tactical fighter operations support. Environmental studies conducted at George AFB have identified landfills, petroleum spill sites, underground storage tanks (USTs), waste storage and disposal units, and fire training areas. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1990. DoD and EPA signed a federal facility agreement (FFA) in October 1990 to outline how they were going to proceed with cleanup. The 1988 BRAC Commission recommended closure of George AFB and the installation closed in December 1992. In FY92, the installation formed a BRAC cleanup team to develop a process for cleanup of sites at George AFB, and converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01 and FY06.

Sites have been grouped into five operable units (OUs). George AFB has completed two Records of Decisions (RODs) for OUs 1 and 3, selecting cleanup actions at these sites. In FY04, George AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); eight MMRP sites were identified.

FY10 IRP Progress

George AFB competed the draft petroleum corrective action plan. The installation also completed the draft feasibility study (FS) to evaluate cleanup alternatives at OU 1. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

George AFB wrote and awarded the contract to prepare a work plan for conducting the MMRP investigation, conducting and preparing detailed risk minimization procedures, and a low complexity biological assessment.

Plan of Action

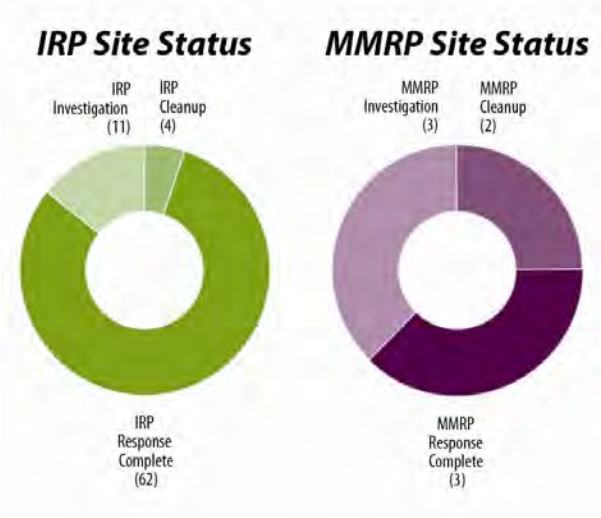
Plan of action items for George Air Force Base are grouped below according to program category.

IRP

- Complete final pesticide corrective action plan and final petroleum corrective action plan in FY11.
- Complete feasibility study (FS), proposed plan (PP) and draft ROD in FY11.
- Submit five-year review report in FY11.
- Complete final FS, PP and final ROD Amendment for OU 1 in FY11-FY12.

MMRP

- Conduct low complexity biological assessment in FY11-FY12.
- Conduct investigation and surface clearance on 77 acres at SR 401; DP 033; and XU 400 in FY11-FY12.
- Remove and dispose of munitions debris on small arms range in FY12.



Griffiss Air Force Base

NPL/BRAC 1993/BRAC 1995

FFID:	NY257002445100		UXO, SVOCs, radioactive materials, explosives, propellants	**Five-Year Review Status:**	Completed and planned
Location (Size):	Rome, New York (3,638 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-119
Mission:	Supported bomber and tanker operations	**Funding to Date:**	$ 152.6 million		
HRS Score:	34.20; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 20.3 million (FY2999)		
IAG Status:	FFA signed in June 1990	**IRP Sites (Final RIP/RC):**	70 (FY2012)		
Contaminants:	Heavy metals, PCBs, grease, degreasers, caustic cleaners, dyes, penetrants, VOCs, TCE,	**MMRP Sites (Final RIP/RC):**	12 (FY2004)		

Introduction

The mission of Griffiss Air Force Base (AFB) was to support bomber and tanker aircraft operations. Sites identified at the installation include landfills (LFs), underground storage tanks (USTs), fire training areas, disposal pits, spill areas, and identified possible off-site groundwater contamination. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed a federal facility agreement (FFA) in June 1990 to outline how they were going to proceed with cleanup. The 1993 BRAC Commission recommended realignment of Griffiss AFB and the 1995 BRAC Commission recommended further realignment. Following the realignment actions, Griffiss AFB retained 136 acres for Rome Laboratory and Air National Guard Northeast Air Defense Sector facilities. In FY95, Griffiss AFB formed a BRAC cleanup team to develop a process for cleanup of sites at the installation and, with community input, completed the BRAC cleanup plan to prioritize sites requiring environmental restoration. Also in FY95, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community. The installation received funding for technical assistance for public participation in FY99. To ensure continuous monitoring and improvement, Griffiss AFB completed a five-year review report in FY05 and FY10.

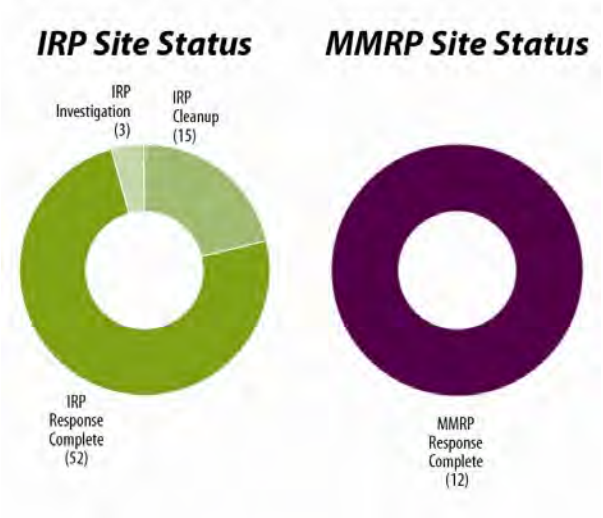
To date, the installation has signed 35 Records of Decision (RODs) which selected cleanup actions at environmental restoration sites. Griffiss AFB has completed eight RODs documenting no further cleanup action is necessary. Interim cleanup conducted at the facility between FY86 and FY91 included modification of an LF cap; and the removal of contaminated soil and USTs from a tank farm, various disposal pits, and the area adjacent to an aircraft nosedock. In FY04, Griffiss AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Griffiss AFB completed and decommissioned the landfarming operations, which treated 150,000 cubic yards of petroleum-contaminated soil that was reused throughout the base. In addition, the installation completed three RODs, two proposed plans (PP), and the second five-year review report. The installation also installed the cleanup system at the fourth and final chlorinated contamination site. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

The installation conducted no MMRP actions.



Plan of Action

Plan of action items for Griffiss Air Force Base are grouped below according to program category.

IRP

- Complete three PPs and four RODs in FY11.
- Award a performance-based contract for cleanup at 43 sites in FY11.
- Complete two PPs and two RODs in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Grissom Air Force Base
Grissom Air Reserve Base

BRAC 1991

FFID:	IN557212447200	**Contaminants:**	Household and industrial waste, radioactive contamination, spent solvents, metals, fuels, SVOCs, lead, waste oils, asbestos, VOCs, explosives, propellants	**IRP Sites (Final RIP/RC):**	40 (FY2012)
Location (Size):	Peru, Indiana (2,722 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**MMRP Sites (Final RIP/RC):**	5 (FY2002)
Mission:	Supports tanker aircraft operations of the 434th Air Refueling Wing; formerly supported bomber aircraft operations	**Funding to Date:**	$ 29.0 million	**Five-Year Review Status:**	Completed and planned
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 12.0 million (FY2999)	**IRP/MMRP Status Table:**	Refer to page E-6-79
IAG Status:	N/A				

Introduction

Grissom Air Force Base (AFB), now divided into the former Grissom AFB and the Grissom Air Reserve Base (ARB), was established as Bunker Hill Naval Air Station in 1942 and became an Air Force installation in 1954 that supported bomber aircraft operations. Grissom AFB has most recently supported tanker aircraft operations of the 434th Air Refueling Wing. Contaminated sites include outdoor and indoor small arms firing ranges, a munitions burn/burial area, a grenade training range, a firing-in butt site, oil-water separator sites, underground storage tank sites, aboveground storage tank sites, a central heat plant site, fire training areas, landfills, and various maintenance shops and spill sites. In July 1991, the BRAC Commission recommended realignment of the installation. Following realignment in September 1994, the Air Force retained 1,400 acres as Grissom Air Reserve Base (ARB). In FY07, the Air Force Real Property Agency used BRAC funding to complete cleanup and transfer the other 1,322 acres to the Miami County Economic Development Authority, the State of Indiana, and several private entities. In FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. The BRAC cleanup team developed a BRAC cleanup plan with community input in FY94 to prioritize sites requiring environmental restoration. In FY95, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, Grissom AFB and Grissom ARB both completed five-year review reports in FY06.

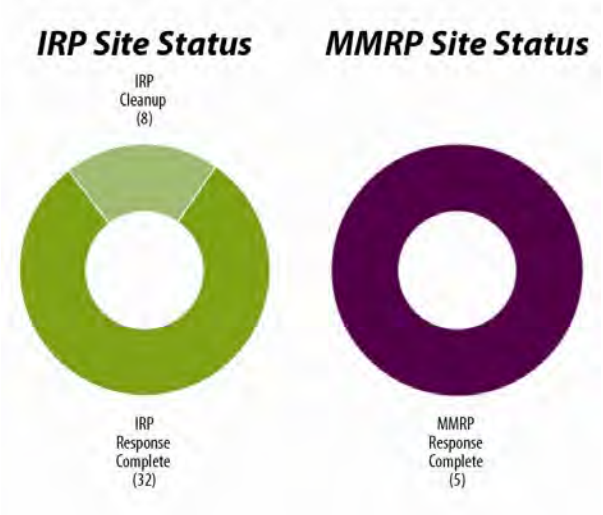
Records of Decision (RODs) or decision documents (DDs) have been signed for 12 sites at Grissom AFB and 27 sites at Grissom ARB, selecting cleanup actions or determining that no further cleanup action is necessary. In FY04, Grissom AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Grissom ARB modified three RODs to remove groundwater restrictions at three sites and removed two sites from future five-year reviews. The installation conducted Interim cleanup actions at two sites and began a five-year review report. Grissom ARB conducted groundwater monitoring at six sites. Grissom AFB continued cleanup using natural processes at five sites. Grissom AFB managed land use controls (LUCs), which restrict the use of or access to 14 sites and institutional controls (ICs), which are tools that minimize the potential for human exposure for the same 14 sites. The cost of completing environmental restoration has changed significantly due to regulatory issues and changes in estimating criteria.

FY10 MMRP Progress

Grissom AFB prepared closure documentation for four MMRP sites.



Plan of Action

Plan of action items for Grissom Air Force Base are grouped below according to program category.

IRP

- Complete five-year review reports for Grissom AFB and Grissom ARB in FY11.
- Award a nine-year, multi-base performance based contract for Grissom AFB in FY11.
- Perform LUC/IC inspections at 14 sites at Grissom AFB in FY11-FY12.
- Monitor groundwater at six sites at Grissom AFB and four sites at Grissom ARB in FY11-FY12.
- Close three sites at Grissom ARB in FY11-FY12.

MMRP

- There are no MMRP actions scheduled at Grissom AFB or Grissom ARB for FY11 or FY12.

Guam Apra Harbor Complex

BRAC 1995

FFID:	GU917002753200, GU917002758300, GU917002758500, and GU917002757600	**HRS Score:**	N/A	**IRP Sites (Final RIP/RC):**	63 (FY2017)
Location (Size):	Apra Harbor, Guam (15,306 acres)	**IAG Status:**	IAG signed in FY93	**MMRP Sites (Final RIP/RC):**	4 (FY2019)
Mission:	Operated facilities; provided services and materials; issued weapons and ordnance in support of operating forces of the Navy; provided services for Guam Naval Activities	**Contaminants:**	PCBs, POLs, pesticides, heavy metals, VOCs, SVOCs	**Five-Year Review Status:**	Completed, underway and planned
		Media Affected:	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-63 and E-7-20
		Funding to Date:	$ 164.7 million		
		Est. CTC (Comp Year):	$ 57.6 million (FY2028)		

Introduction

Guam Apra Harbor Complex consists of Navy commands in the Apra Harbor area and the former Naval Magazine area southeast of the harbor. The BRAC Commission recommended four of the commands (Guam Naval Activities, Naval Fleet and Industrial Supply Center, Naval Ship Repair Facility [NSRF], and Public Works Center) for realignment or closure in 1995. NSRF ceased operations in September 1997. Operations that contributed to contamination included support of naval operating forces and shore activities, photographic and printing shops, a dry cleaning plant, power plants and boilers, pest control operations, and chemical and medical laboratories. Wastes were stored and disposed of in landfills and wastewater treatment plants. DoD and EPA signed an interagency agreement (IAG) in FY93 to outline how they were going to proceed with cleanup. The installation formed a BRAC cleanup team to develop a process for cleanup of sites. Guam Apra Harbor Complex completed a joint community relations plan in FY92 to prioritize sites requiring environmental restoration. In FY94, Guam Apra Harbor Complex established an information repository. Formed in FY94, the complex converted its technical review committee responsible for communicating cleanup progress with the community, into a Restoration Advisory Board in FY95.

To date, the installation has completed cleanup at 44 sites. The installation also transferred 2,725 acres to the Government of Guam and decided to retain NSRF. In FY03, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified. To date, the installation has signed Decision Documents determining no further cleanup activities were necessary for five sites.

FY10 IRP Progress

Guam Apra Harbor Complex continued cleanup actions at 22 Installation Restoration Program (IRP) sites.

FY10 MMRP Progress

Guam Apra Harbor Complex continued cleanup actions at three MMRP sites.

Plan of Action

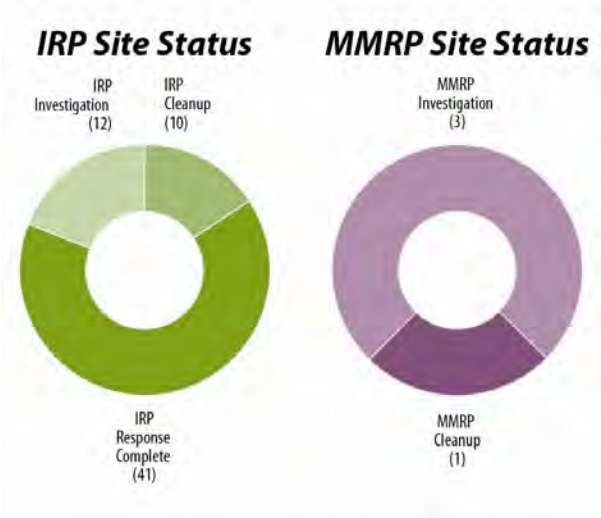
Plan of action items for Guam Apra Harbor Complex are grouped below according to program category.

IRP

There are no IRP actions scheduled for FY11 or FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



FFID:	MA157172442400	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-29
Location (Size):	Bedford, Massachusetts (826 acres)	**Funding to Date:**	$ 39.8 million		
Mission:	Support Headuarters Electronic Systems Center	**Est. CTC (Comp Year):**	$ 8.7 million (FY2020)		
HRS Score:	50.00; placed on NPL in May 1994	**IRP Sites (Final RIP/RC):**	23 (FY2003)		
IAG Status:	FFA signed in September 2009	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	VOCs, SVOCs, gasoline, jet fuel, metals, phenols, PCBs, chlorinated solvents	**Five-Year Review Status:**	Completed and planned		

Introduction

Hanscom Air Force Base (AFB) supports the Air Force Electronic Systems Center. Operations at Hanscom AFB have involved generation, use, and disposal of numerous hazardous substances. Possible sources of contamination include a former industrial wastewater treatment system, a former filter bed and landfill (LF) area, a jet fuel residue and tank sludge area, two LFs, three former fire training areas, a paint waste disposal area, a mercury spill area, former aviation fuel handling and storage facilities, underground storage tanks, and fuel spill areas. The potential risk to human health and the environment was significant enough for EPA to place Hanscom Field/Hanscom AFB on the NPL in May 1994. The NPL site designation includes Hanscom AFB and former portions of the installation leased from the Commonwealth of Massachusetts between 1942 and 1974. The leased property included the flightline and airfield areas of the installation that are now L.G. Hanscom Field, a civilian airport. In September 2009, DoD and EPA signed a federal facility agreement (FFA) to outline how they are going to proceed with cleanup. The 2005 BRAC Commission recommended Hanscom AFB for realignment. In FY95, the installation converted its technical review committee, responsible for communicating cleanup progress with the community, into a Restoration Advisory Board (RAB). To ensure continuous monitoring and improvement, the installation completed three five-year review reports in FY97, FY02, and FY07.

To date, the installation has closed 14 sites; no further construction of cleanup systems is required at the remaining 8 sites. The installation has signed Records of Decisions for operable units (OUs) 1 and 3 (Installation Restoration Program [IRP] Sites 6 and 21), which selected cleanup actions at these sites. Hanscom AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

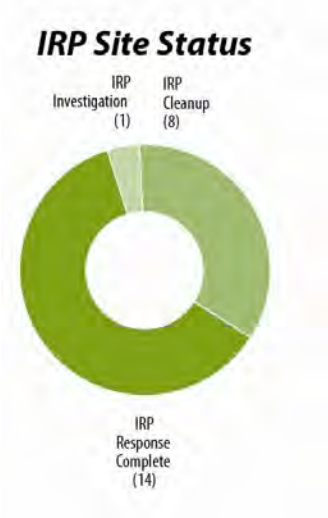
FY10 IRP Progress

Hanscom AFB continued to operate, maintain, and monitor the long-term remedies in place at OUs 1, 2, and 3 (IRP Sites 6 and 21); Army and Air Force Exchange Services service station; and base motor pool sites. The installation continued to monitor and enforce land use controls (LUCs), which restrict activities at all sites.

The RAB held one meeting to discuss the status of the installation.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.



Plan of Action

Plan of action items for Hanscom Air Force Base are grouped below according to program category.

IRP

- Continue to operate, maintain, and monitor the long-term remedies in place at OUs 1, 2, and 3 (IRP Sites 6 and 21); Army and Air Force Exchange Services service station; and base motor pool sites in FY11-FY12.
- Continue to monitor and enforce LUCs at all sites in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Hastings Groundwater Contamination Site

NPL

FFID:	NE79799F041100	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-106
Location (Size):	Hastings, Nebraska (48,753 acres)	**Funding to Date:**	$ 101.9 million		
Mission:	Produce, load, and store ammunition	**Est. CTC (Comp Year):**	$ 50.1 million (FY2014)		
HRS Score:	42.24; placed on NPL in June 1986	**IRP Sites (Final RIP/RC):**	7 (FY2014)		
IAG Status:	IAG signed in 1998	**MMRP Sites (Final RIP/RC):**	1 (FY2002)		
Contaminants:	UXO, VOCs, PAHs, heavy metals, SVOCs, explosives, propellants	**Five-Year Review Status:**	Completed and planned		

Introduction

Operations at the Blaine Naval Ammunition Depot contributed to groundwater and soil contamination at the Hastings Groundwater Contamination Site. The U.S. Army Corps of Engineers (USACE) designated five operable units (OUs) at the property: three OUs for the 2,900-acre Hastings East Industrial Park and two others. The three OUs at the industrial park are divided into: soil (OU 4); the vadose zone (OU 8), which is directly beneath the surface; and groundwater (OU 14). OU 16 includes the explosives disposal area and the bomb and mine complex at the naval yard dump, and OU 15 contains a 44,500-acre area of the former Blaine Naval Ammunition Depot not included in the other OUs. The potential risk to human health and the environment was significant enough for EPA to place the property on the NPL in June 1986. DoD and EPA signed an interagency agreement (IAG) in FY98 to outline how they were going to proceed with cleanup. In FY99, USACE formed a Restoration Advisory Board to discuss the installations cleanup progress with the community. To ensure continuous monitoring and improvement, USACE completed five-year review reports in FY02 and FY09.

To date, the Army has signed Records of Decision (RODs), which selected cleanup actions for two soil contaminants and OU 14 and 15 groundwater. In FY96, the Army conducted an inventory for one site suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one site was identified. The Army approved a cleanup project for the site in FY96 and cleanup is complete.

FY10 IRP Progress

USACE completed the ROD for Site-wide Groundwater (OU 8 and OU 14) and the proposed plan (PP) and ROD for OU 15. In addition, USACE obtained the final Department of Justice settlement payment from the potentially responsible parties.

Administrative issues delayed revision of the focused feasibility study (FS) addendum to evaluate cleanup alternatives at OU 16.

FY10 MMRP Progress

USACE conducted no MMRP actions.

Plan of Action

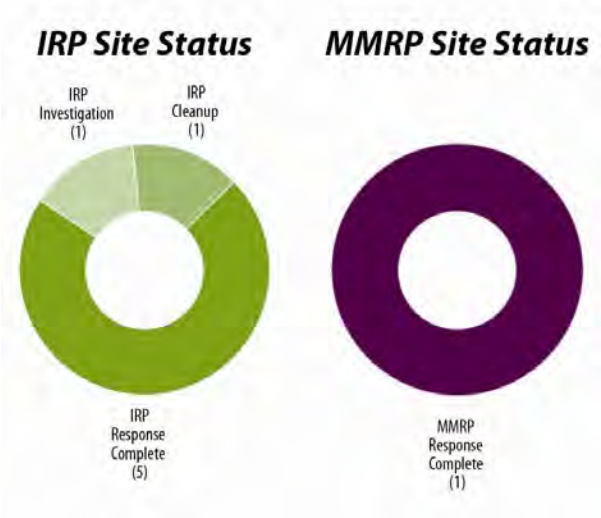
Plan of action items for Hastings Groundwater Contamination Site are grouped below according to program category.

IRP

- Complete the design for and begin construction of the cleanup system for OU 14 groundwater FY11.
- Prepare the PP, ROD, and focused FS addendum for OU 16 in FY11
- Begin five-year review report for the installation in FY11.

MMRP

- Begin five-year review report for the munitions response site in FY11.



FFID:	UT857172435000	**Contaminants:**	Solvents (TCE, PCE, TCA, 1,2 DCA, DCE), metals, petroleum products, PCBs, VOCs, SVOCs	**MMRP Sites (Final RIP/RC):**	22 (FY2016)
Location (Size):	Ogden, Utah (6,698 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
Mission:	Provide logistics support for weapons systems	**Funding to Date:**	$ 350.8 million	**IRP/MMRP Status Table:**	Refer to page E-6-165
HRS Score:	49.94; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 403.3 million (FY2041)		
IAG Status:	FFA signed in April 1991; IAG signed in September 2006	**IRP Sites (Final RIP/RC):**	225 (FY2014)		

Introduction

The mission of Hill Air Force Base (AFB) is to provide logistics support for weapons systems, host two fighter wings, and operate the Utah Test and Training Range. Site types at Hill AFB include disposal pits, landfills, surface impoundments, underground storage tanks, fire training areas, firing ranges, discharge and wastewater ponds, a contaminated building, a munitions dump, and spill sites. Contaminants include solvents (primarily trichloroethylene [TCE]), fuels, acids, bases, and plating solutions. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed a federal facility agreement (FFA) in April 1991 to outline how they were going to proceed with cleanup at Hill AFB. The Air Force also signed an interagency agreement (IAG) in September 2006 that outlined cleanup procedures for covering the Utah Test and Training Range and the Little Mountain Test Annex. The 2005 BRAC Commission recommended Hill AFB for realignment. In FY95, the installation formed a Restoration Advisory Board to discuss the installation's cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY98, FY03, and FY08.

To date, the installation has signed Records of Decision (RODs) which selected cleanup actions for nine operable units (OUs). In FY07, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); eight sites were added to the inventory.

FY10 IRP Progress

Hill AFB submitted a decision document for OU NR 1, proposed plans for OUs 13 and A, a feasibility study (FS) to evaluate cleanup alternatives for OU 9, and a Removal Action Report for OU SR 2 for regulatory review. The installation installed and operated the cleanup system for OU 2, and completed the construction completion report. Hill AFB also investigated vapor intrusion in residences with portable gas chromatography instruments, resulting in the reduced need for cleanup systems. The cost of completing environmental restoration has changed significantly due to regulatory and technical issues, and changes in estimating criteria.

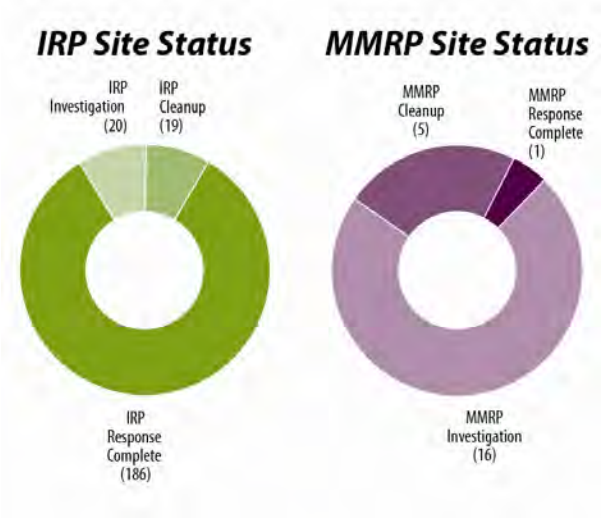
Technical, regulatory, and administrative issues delayed the RODs for OUs NR1, 11, 13, and A.

The RAB held quarterly meetings, provided technical training, and conducted OU and treatability study tours.

FY10 MMRP Progress

Hill AFB completed a preliminary assessment of potential environmental hazards at sites on Bureau of Land Management property.

Administrative issues delayed site inspection (SI) fieldwork, surface clearances, and remedial investigation (RI) fieldwork.



Plan of Action

Plan of action items for Hill Air Force Base are grouped below according to program category.

IRP

- Submit RODs for OUs A and 13 in FY11.
- Complete FS at OUs 11, NR 2, SR 1, and SR 2 in FY11.
- Complete source area removal action at OU 12 in FY11.
- Submit a ROD for OU 9 in FY12.

MMRP

- Complete RI/FS at on-base sites in FY11.
- Perform Surface Clearance Phase III evaluation at Site AL501 in FY11.
- Complete SI at remaining sites on non-DoD property in FY11.

Homestead Air Force Base
Homestead Air Reserve Base

NPL/BRAC 1993/BRAC 2005 Realignment

FFID:	FL457212403700	**Contaminants:**	Pesticides, solvents, VOCs, PCBs, heavy metals, jet fuel, PAHs, cyanide, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Homestead, Florida (2,938 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-55
Mission:	Houses the 482rd Reserve Fighter Wing and is host to several other government agencies	**Funding to Date:**	$ 34.4 million		
HRS Score:	42.24; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 45.2 million (FY2999)		
IAG Status:	FFA signed in February 1991	**IRP Sites (Final RIP/RC):**	42 (FY2006)		
		MMRP Sites (Final RIP/RC):	2 (FY2016)		

Introduction

Homestead Air Force Base (AFB) was established as an Army airfield in 1942 and became an Air Force installation in 1955 to house the Strategic Air Command. Sites identified at the installation include the JP-4 jet fuel leak area, a landfill, fire pit training areas, various spill sites, underground storage tanks (USTs), aboveground storage tanks, and oil-water separators. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed a federal facility agreement (FFA) in February 1991 to outline how they were going to proceed with cleanup. In July 1993, the BRAC Commission recommended realignment of the installation. Following realignment in March 1994, the Air Force retained 852 acres and the Army retained 10 acres. In 2003, the Air Force acquired an additional 1,091 acres that included the airfields; the combined 1,943 acres became known as Homestead Air Reserve Base (ARB). Homestead ARB's environmental restoration program is managed by the Air Force Reserve Command (AFRC). To date, 976 acres of the former Homestead AFB have been transferred, primarily to the local redevelopment authority and other federal agencies; the Air Force Real Property Agency (AFRPA) manages restoration on this 976-acre BRAC property. In 1994, AFRC and AFRPA formed a BRAC cleanup team to develop a process for the cleanup of sites. AFRC and AFRPA formed a Restoration Advisory Board in FY94 to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, AFRC completed a five-year review report for sites on Homestead ARB and sites on the BRAC property in FY05.

Interim cleanup has included the removal of USTs and contaminated soil, groundwater extraction and treatment, and the removal of oil-water separators. By FY95, the installation closed 400 restoration sites after determining that no further cleanup actions were required; the installation consolidated the remaining sites into 5 major fuel areas and 30 operable units (OUs). The installation signed Records of Decision selecting cleanup actions for OUs 1 through 7, 11, 12, 15, 18, 20, 21, and 25 through 31. In FY04, AFRC conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); two MMRP sites were identified.

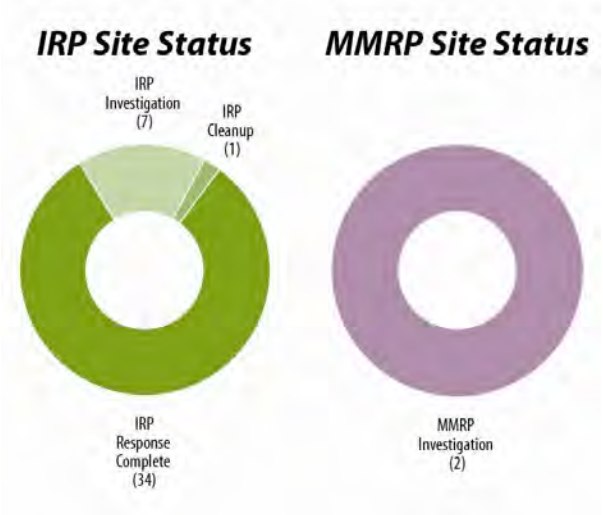
FY10 IRP Progress

Homestead AFB continued cleanup operations and long-term management (LTM). The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed the ARB and BRAC property five-year review reports.

FY10 MMRP Progress

Homestead AFB continued with environmental investigations through site closure at two MMRP sites.



Plan of Action

Plan of action items for Homestead Air Force Base are grouped below according to program category.

IRP

- Complete the ARB and BRAC property five-year review reports in FY11.
- Complete draft work plans in FY11.
- Continue cleanup operations and LTM in FY11-FY12.

MMRP

- Complete follow-up environmental investigations through site closure at two MMRP sites in FY11-FY12.

Hunter's Point Annex-Treasure Island Naval Station

NPL/BRAC 1991

FFID:	CA917002278400	**Contaminants:**	Heavy metals, PCBs, petroleum hydrocarbons, VOCs, SVOCs, explosives and propellants	**Five-Year Review Status:**	Completed and planned
Location (Size):	San Francisco, California (934 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to E-6-30
Mission:	Repaired and maintained ships	**Funding to Date:**	$ 677.5 million		
HRS Score:	48.77; placed on NPL in November 1989	**Est. CTC (Comp Year):**	$ 450.6 million (FY2021)		
IAG Status:	FFA signed in September 1990 and revised in January 1992	**IRP Sites (Final RIP/RC):**	70 (FY2021)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

The mission at Hunter's Point Annex-Treasure Island Naval Station (NS) was to repair and maintain ships. Military activities have resulted in environmental contamination. Site types include landfills and land disposal areas, containing primarily heavy metals, volatile organic compounds (VOCs), and radioactive materials. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) with the Navy in September 1990, which was revised in January 1992, to outline how they were going to proceed with cleanup. In July 1991, the BRAC Commission recommended closure of Hunter's Point Annex-Treasure Island NS. The station ceased operations in April 1994, and is now under the responsibility of Naval Facilities Engineering Command, Southwest. Parts of the installation have been leased to private parties. The installation formed a BRAC cleanup team in FY94 to prioritize sites requiring environmental restoration. The installation also converted its technical review committee, responsible for communicating cleanup progress with the community, into a Restoration Advisory Board in FY94. The installation revised its community relations plan in FY97 and in FY04. The BRAC cleanup team updates the site management plan every quarter.

The installation completed XX Records of Decision (ROD), which determined that no further cleanup activities were necessary at Parcel As and D. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

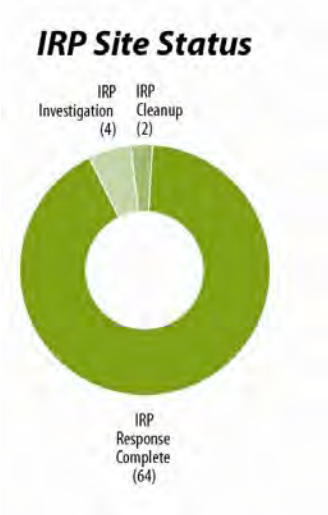
FY10 IRP Progress

Hunter's Point Annex-Treasure Island NS completed a groundwater treatability study for Parcel E; finalized the feasibility study to evaluate cleanup alternatives and associated radiological addendum for Parcels E2 and F; and completed the design for cleanup at Parcel B (Sites 7 and 18). The installation also completed a ROD, which determined that no further cleanup activities were necessary at Parcel D, and completed a radiological data gaps investigation at Parcel F. Hunter's Point Annex-Treasure Island NS also drafted the ROD for Parcel C and continued removal actions at Utility Corridors 1 and 2.

Regulatory issues delayed the completion of the radiological removal actions and design for cleanup at Parcels B and G.

FY10 MMRP Progress

Hunter's Point Annex-Treasure Island NS has identified no MMRP sites.



Plan of Action

Plan of action items for Hunter's Point Annex-Treasure Island Naval Station are grouped below according to program category.

IRP

- Complete the radiological removal actions and cleanup at Parcels B and G in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Indian Head Naval Surface Warfare Center

NPL/BRAC 2005 Realignment

FFID:	MD317002410900	**IAG Status:**	FFA signed in December 2000.	**IRP Sites (Final RIP/RC):**	70 (FY2017)
Location (Size):	Indian Head, Maryland (3,423 acres)	**Contaminants:**	Propellants, explosives, acids, paints, solvents, heavy metals, radioactive material, TCE, wastewater, VOCs, SVOCs	**MMRP Sites (Final RIP/RC):**	32 (FY2020)
Mission:	Provide services in energetics through engineering, operational support, manufacturing technology; conduct research, development, and testing of energetic and ordnance device	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	50.00; placed on NPL in February 1995	**Funding to Date:**	$ 57.6 million	**IRP/MMRP Status Table:**	Refer to page E-6-91
		Est. CTC (Comp Year):	$ 164.0 million (FY2021)		

Introduction

Naval Support Facility, Indian Head (Indian Head) provides services in energetics for all warfare centers, including engineering, fleet and operational support, manufacturing technology, limited production, and industrial base support. The installation produces and handles complex chemicals to accomplish this mission including lead, silver, and mercury. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1995. DoD and EPA signed a federal facility agreement (FFA) in FY01 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Indian Head for realignment. The technical review committee responsible for communicating cleanup progress with the community was formed in FY93, and was converted to a Restoration Advisory Board in FY95. The installation prepared a community relations plan and established an information repository. In FY98, the administrative record became available in an electronic format, which is updated periodically. To ensure continuous monitoring and improvement, Indian Head completed five-year review reports for Sites 12 and 42 in FY07.

To date, Indian Head has signed Records of Decision (RODs), which selected cleanup actions for 10 sites and No Further Action RODs, or equivalent decision documents, which determined no further cleanup activities were necessary at 28 sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

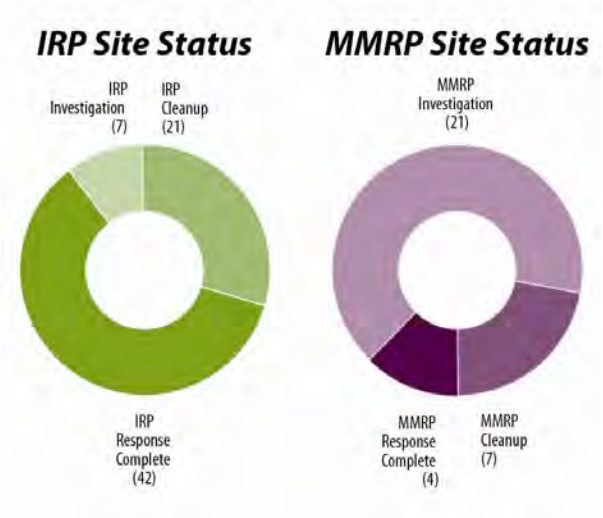
FY10 IRP Progress

Indian Head completed the feasibility study (FS) to evaluate cleanup alternatives at the Lab Area, and the engineering evaluation and cost analysis for Sites 19 and 27. Indian Head also completed RODs for Sites 6 and 17, and completed the proposed plans for Sites 21, 36, and the Lab Area. The cost of completing environmental restoration has changed significantly due to technical issues.

Regulatory issues delayed cleanup actions at Sites 21 and 57. Technical issues delayed cleanup at Sites 11 and 17.

FY10 MMRP Progress

Indian Head completed site inspections at 8 sites and 4 water ranges at the main installation and at 16 sites at Stump Neck Annex. The installation also completed removal actions at Unexploded Ordnance (UXO) 32.



Plan of Action

Plan of action items for Indian Head Naval Surface Warfare Center are grouped below according to program category.

IRP

- Complete FS for Site 38 in FY11.
- Complete cleanup actions at Sites 11, 17, 21, 47, and 57 in FY11-FY12.
- Complete removal actions at Sites 01, 19, and 27 in FY11-FY12.
- Complete RODs for the Lab Area and Sites 21, 28, and 36 in FY11-FY12.

MMRP

- Complete cleanup actions at UXO 32 in FY11-FY12.
- Complete removal action at UXO 19 in FY11-FY12.

Iowa Army Ammunition Plant

NPL

FFID:	IA721382044500	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-80
Location (Size):	Middletown, Iowa (19,011 acres)	**Funding to Date:**	$ 103.7 million		
Mission:	Load, assemble, and pack munitions	**Est. CTC (Comp Year):**	$ 24.9 million (FY2047)		
HRS Score:	29.73; placed on NPL in August 1990	**IRP Sites (Final RIP/RC):**	56 (FY2013)		
IAG Status:	IAG signed in September 1990	**MMRP Sites (Final RIP/RC):**	8 (FY2013)		
Contaminants:	Explosives, low-level radioactive materials, heavy metals, VOCs, SVOCs, propellants	**Five-Year Review Status:**	Completed and underway		

Introduction

In 1941, the Army constructed the Iowa Army Ammunition Plant (AAP) to load, assemble, and pack various conventional ammunition and fuzing systems. The installation has three Operable Units (OUs): soil (OU 1), groundwater (OU 3), and overall (OU 4). During operations, industrial process wastewater and by-products were disposed at the installation. Site types include surface impoundments, production areas, landfills, and a fire-training pit. Soil and groundwater contamination resulted primarily from the disposal of explosives and heavy metal-containing wastes directly onto the soil. The installation also identified small amounts of contamination by volatile organic compounds (VOCs). The potential risk to human health and the environment was significant enough for EPA to place Iowa AAP on the NPL in August 1990. DoD and EPA signed an interagency agreement (IAG) in December 1990 to outline how they were going to proceed with cleanup. Restoration activities through FY00 included closing one cell in the inert landfill, removing aboveground treatment tanks, removing lead-contaminated soil from a production line, and cleaning up an abandoned coal storage yard. The installation formed a Restoration Advisory Board (RAB) in FY97 to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY05.

To date, the installation has completed two interim Records of Decision (RODs) and one final ROD, which selected cleanup actions for sites with soil contamination. In FY02, Congress designated the installation for inclusion into the Formerly Utilized Sites Remedial Action Program to address impacts from former Atomic Energy Commission industrial activities. The installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Iowa AAP completed soil treatment at OU 1 and OU 4, and restructured the OUs to better facilitate project management at the plant. The installation began closure of the inert disposal area, a feasibility study (FS) to evaluate cleanup alternatives for OU 6, and a five-year review report for the Plant. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

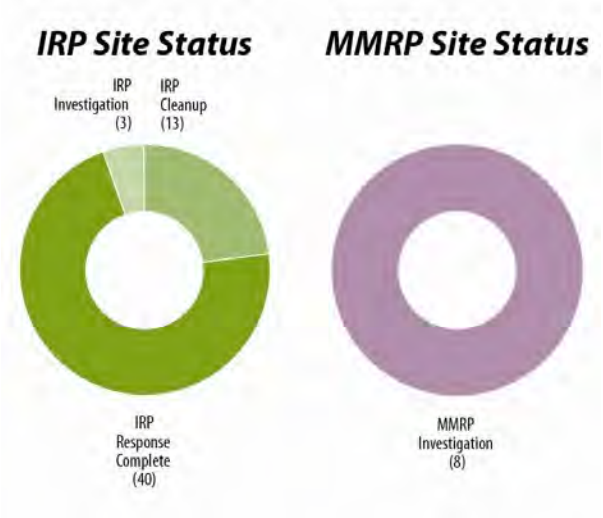
Technical issues delayed closure of the inert disposal area. Regulatory issues delayed completion of the FS and ROD for OU 3, and the Remedial investigation (RI) and FS for OU 4.

Iowa AAP conducted a tour of the facility for new RAB members.

FY10 MMRP Progress

The installation submitted the remedial investigation (RI) report.

Regulatory issues delayed completion of the RI report.



Plan of Action

Plan of action items for Iowa Army Ammunition Plant are grouped below according to program category.

IRP

- Complete closure of the inert disposal area in FY11.
- Complete an FS and ROD for OU 3 in FY11.
- Complete an RI/FS for OU 4 in FY11.
- Complete soil treatments at OU 1 and OU 4 in FY11.
- Complete a proposed plan, FS, and ROD for OU6 and OU 7 in FY11-FY12.

MMRP

- Complete the RI report in FY11.

Jacksonville Naval Air Station

NPL/BRAC 2005 Realignment

FFID:	FL417002441200	**Contaminants:**	Waste solvents, caustics, cyanide, heavy metals, POLs, low-level radioactive wastes, oils, paints, PCBs, pesticides, phenols, radioisotopes, VOCs, SVOCs, explosives, propellants	**IRP Sites (Final RIP/RC):**	80 (FY2014)
Location (Size):	Jacksonville, Florida (3,820 acres)			**MMRP Sites (Final RIP/RC):**	1 (FY2017)
Mission:	Maintain and operate facilities; provide services and materials to support aviation activities and aircraft overhaul operations	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	31.02; placed on NPL in November 1989	**Funding to Date:**	$ 99.1 million	**IRP/MMRP Status Table:**	Refer to page E-6-53
IAG Status:	FFA signed in October 1990	**Est. CTC (Comp Year):**	$ 15.1 million (FY2041)		

Introduction

Jacksonville Naval Air Station (NAS) maintains and operates facilities and provides services and materials to support aviation activities and aircraft overhaul operations. The installation includes the following site types: fire fighting training areas, waste storage and disposal areas, transformer storage areas, radioactive-waste disposal areas, and other miscellaneous support and maintenance areas. Typical operations have generated solvents, sludge (from on-site treatment plants), and low-level radioactive waste, which have migrated into nearby soil and local groundwater supplies. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in October 1990 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Jacksonville NAS for realignment. In FY88, the installation formed technical review committee responsible for communicating cleanup progress with the community, and converted it to a Restoration Advisory Board in FY95. In FY91, the installation completed its community relations plan and established an administrative record and information repository. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01 and FY05.

To date, the installation has completed Records of Decision (RODs), which selected cleanup actions for Operable Units (OUs) 2 and 3, and Point Sources of Contamination (PSCs) 11, 16, 21, 46, 47, 51, and 52. The installation also concluded that no further cleanup action was necessary for Underground Storage Tanks 13 and 17. In FY02, Jacksonville NAS conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Jacksonville NAS continued monitoring cleanup using natural processes and long-term management (LTM) at OU 3. The installation also completed draft five-year review reports and the federal facilities site management plan. The cost of completing environmental restoration has changed significantly due to technical issues.

FY10 MMRP Progress

Jacksonville NAS completed site inspections at Unexploded Ordnance (UXO) 1, and PSCs 22 and 23.

Plan of Action

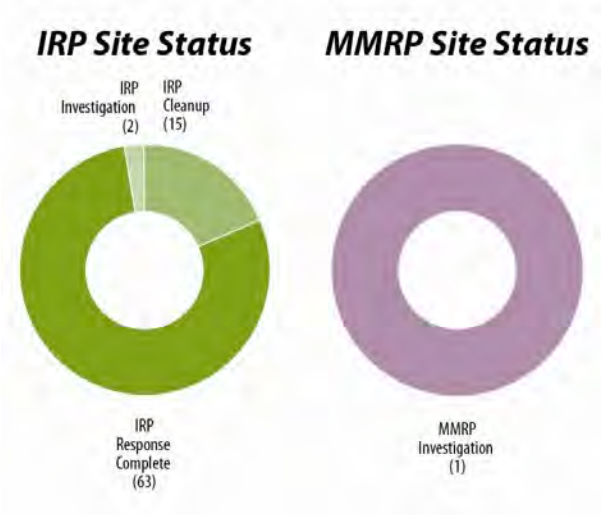
Plan of action items for Jacksonville Naval Air Station are grouped below according to program category.

IRP

- Complete five-year review reports at several sites in FY11.
- Continue monitoring cleanup using natural processes and LTM at OU 3 in FY11.
- Implement explosive safety submission for OU 7 in FY11-FY12.

MMRP

- Divide UXO 1 into 6 sites and complete remedial investigations in FY11-FY12.



Jefferson Proving Ground

BRAC 1988

FFID:	IN521382045400	**Contaminants:**	Solvents, petroleum products, VOCs, PCBs, heavy metals, depleted uranium, UXO	**Five-Year Review Status:**	Completed and planned
Location (Size):	Madison, Indiana (55,270 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-24
Mission:	Performed production acceptance testing of ammunition, weapons, and their components	**Funding to Date:**	$ 29.3 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 1.3 million (FY2034)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	82 (FY2005)		
		MMRP Sites (Final RIP/RC):	15 (FY2003)		

Introduction

Jefferson Proving Ground was built to perform production acceptance testing of ammunition, weapons, and their components. The sites south of the firing line, identified during environmental studies, included landfill and disposal areas, hazardous waste storage areas, fire training areas, underground storage tanks (USTs), and buildings with asbestos-containing materials. Contaminants at Jefferson Proving Ground include depleted uranium, heavy metals, unexploded ordnance (UXO), solvents, polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), and petroleum hydrocarbons. Interim cleanup actions have included a landfill cap, removal of USTs, and excavation of contaminated soil. In December 1988, the BRAC Commission recommended closure of Jefferson Proving Ground and relocation of its mission to Yuma Proving Ground in Arizona. The installation closed on September 30, 1995. The 50,774 acres north of the firing line, included in the 1995 BRAC program, are contaminated with UXO. The installation plans to retain the site indefinitely for use as a wildlife sanctuary and for other government uses. In FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites, and a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community. In FY96, the installation issued an updated community relations plan. In FY99, the installation received technical assistance for public participation funding to support the RAB.

To date, Jefferson Proving Ground has transferred approximately 1,200 acres, including: the Defense Reutilization and Marketing Office Parcel area, the Airfield Parcel, the Western Wooded Parcel, the Northeast Parcel, and the central cantonment area. The installation has signed one Record of Decision, which selected cleanup actions for areas south of the firing range. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Jefferson Proving Ground continued 5-year depleted uranium area site characterization and continued the monitored cleanup using natural processes at the groundwater solvent pits.

FY10 MMRP Progress

Jefferson Proving Ground conducted no MMRP actions.

Plan of Action

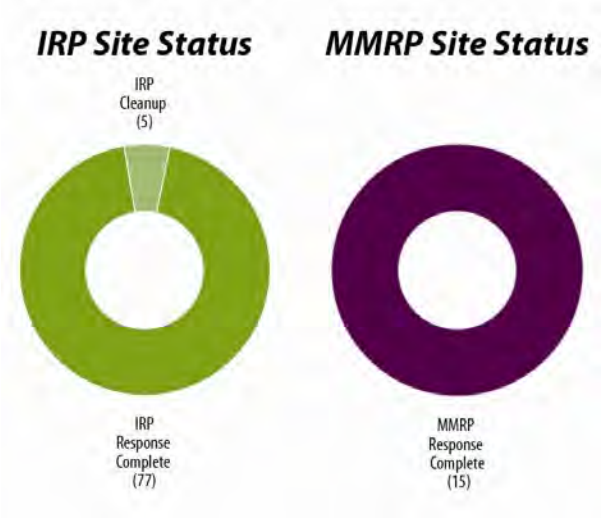
Plan of action items for Jefferson Proving Ground are grouped below according to program category.

IRP

- Complete 5-year depleted uranium area site characterization report in FY11-FY12.
- Continue monitored cleanup using natural processes at the groundwater solvent pits in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Joint Base McGuire-Dix-Lakehurst

NPL

FFID:	NJ257182401800	**IAG Status:**	FFA signed in October 1989, July 1991, and September 2009	**IRP Sites (Final RIP/RC):**	162 (FY2014)
Location (Size):	Burlington County, New Jersey (3,500 acres)	**Contaminants:**	VOCs, SVOCs, PAHs, radioactive materials, pesticides, metals, PCBs, TCE	**MMRP Sites (Final RIP/RC):**	13 (FY2018)
Mission:	Provide quick-response airlift capabilities for placing military forces into combat situations	**Media Affected:**	Groundwater and Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	47.20, 37.40, and 50.53; placed on NPL in July 1987 and October 1999	**Funding to Date:**	$ 162.7 million	**IRP/MMRP Status Table:**	Refer to page E-6-111
		Est. CTC (Comp Year):	$ 138.5 million (FY2049)		

Introduction

In October 2009, McGuire Air Force Base (AFB) became part of Joint Base McGuire-Dix-Lakehurst (JB MDL), when the Air Force assumed property and environmental restoration responsibilities for Fort Dix and Lakehurst Naval Air Engineering Station (NAES) from the Army and the Navy, respectively. JB MDL provides quick-response airlift capabilities for placing military forces into combat situations. The three cleanup programs are managed by JB MDL, and are referred to as the McGuire Program, the Dix Program, and the Lakehurst Program. Cleanup sites include landfills (LFs), waste piles, fire training areas, hazardous waste storage areas, and spill sites, motor pools, abandoned underground storage tanks (USTs), lagoons, and impact areas. The potential risk to human health and the environment was significant enough for EPA to place the Sanitary LF at Fort Dix on the NPL in 1987, Lakehurst NAES on the NPL in 1987, and McGuire AFB on the NPL in 1999. DoD and EPA signed federal facility agreements (FFAs) to outline how they were going to proceed with cleanup at Lakehurst NAES, Fort Dix, and McGuire AFB in FY90, FY91, and FY09 respectively. To discuss cleanup progress with the community, Lakehurst NAES formed a Restoration Advisory Board (RAB) in FY89, Fort Dix formed a RAB in FY96, and McGuire AFB formed a RAB in FY99. To ensure continuous monitoring and improvement, Fort Dix completed five-year review reports for the Sanitary LF in FY99, FY05, and FY10, and Lakehurst NAES completed five-year review reports in FY01 and FY06.

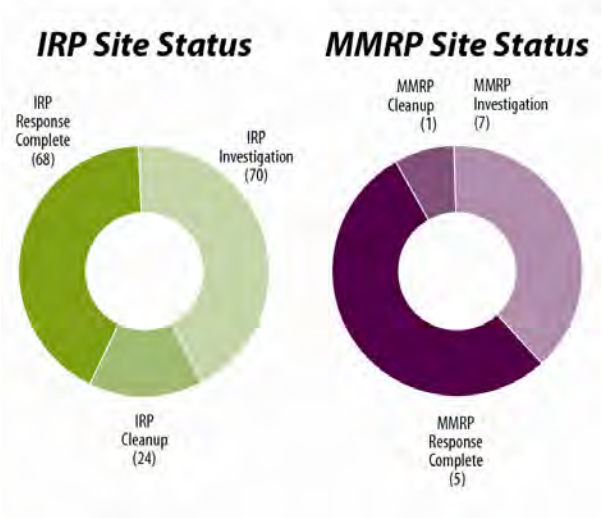
To date, Fort Dix has completed nine Records of Decision (RODs), which selected cleanup actions for environmental restoration sites at the installation. Lakehurst NAES has completed RODs for all environmental restoration sites. After conducting inventories of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP), Fort Dix and Lakehurst NAES have identified MMRP sites; McGuire AFB has identified no MMRP sites.

FY10 IRP Progress

Under the McGuire Program, JB MDL completed a site closure report that determined no further cleanup actions were necessary on the Boeing Michigan Aeronautical Research Center (BOMARC) missile accident site (Radioactive Waste 01), and received concurrence from the New Jersey Department of the Environment. Under the Dix Program, JB MDL completed a five-year review report for the Sanitary LF. Under the Lakehurst Program, JB MDL continued operating a groundwater recovery and treatment system at Areas A and B, and completed a removal action for perchloroethylene.

Regarding the Dix Program, regulatory issues delayed completion of the proposed plan (PP) and ROD for the ANC LF; modification of the remedial investigation (RI) and feasibility study (FS) to evaluate cleanup alternatives at the Range LF and the RI report for the New Egypt Armory. Also regarding the Dix Program, technical issues delayed completion of the planning process for the Property Disposal Office LF, and the construction of groundwater monitoring wells north of Dogwood Lake. Regarding the Lakehurst Program, technical issues delayed the discontinuation of the groundwater recovery and treatment system at Areas A and B.

JB MDL conducted quarterly RAB meetings for the McGuire, Dix, and Lakehurst Programs.



FY10 MMRP Progress

Under the McGuire Program, JB MDL is reviewing its inventory of sites known or suspected of containing munitions for the MMRP. The Dix Program conducted no MMRP actions. Under the Lakehurst Program, JB MDL completed an SI work plan at Unexploded Ordnance (UXO) Sites 1 and 3 through 6, and began sampling at UXO Sites 4 through 6.

Plan of Action

Plan of action items for Joint Base McGuire-Dix-Lakehurst are grouped below according to program category.

IRP

- McGuire: Complete RI and begin FS at 24 sites in Operable Units (OUs) 1 - 5 and BOMARC, complete RI and begin FS at 14 sites in OUs 6 - 8 in FY11.
- McGuire: Conduct Treatability Study and a focused FS for cleanup at Spill Site 36, conduct removal actions at OUs 1 and 5 in FY11-FY12.
- Dix: Complete removal of 33 abandoned USTs, complete RI/FS and begin soil removal at the New Egypt Armory in FY11.
- Dix Program: Complete RI/FS, PP, and ROD for the Range LF and the ANC LF in FY11-FY12.
- Lakehurst: Complete five-year review report for Areas I and J, begin source area investigation for Area I in FY11.
- Lakehurst: Complete vapor intrusion sampling at Areas A and B, complete cleanup completion plans for all sites in FY11.

MMRP

- Lakehurst: Conduct fieldwork and complete SI work plan and proposed cleanup plan for UXO Sites 4 - 6 in FY11.
- Lakehurst: Conduct sampling and complete the SI report for UXO Sites 1 - 3, begin RI at UXO Sites 1 and 2 - 6 in FY11.
- Dix: Begin RI at the Small Arms Range and Practice Mortar Site in FY11-FY12.

Joint Expeditionary Base Little Creek-Fort Story

NPL

FFID:	VA317002248200	**Contaminants:**	Heavy metals, mixed municipal wastes, VOCs, SVOCs, explosives, propellants	**Five-Year Review Status:**	Completed amd planned
Location (Size):	Virginia Beach, Virginia (2,147 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-170
Mission:	Provide logistics facilities and support services to meet the amphibious warfare training requirements of the Armed Forces	**Funding to Date:**	$ 39.0 million		
HRS Score:	50; placed on NPL in May 1999	**Est. CTC (Comp Year):**	$ 271.8 million (FY2051)		
IAG Status:	FFA signed November 2003	**IRP Sites (Final RIP/RC):**	50 (FY2012)		
		MMRP Sites (Final RIP/RC):	3 (FY2020)		

Introduction

In October 2009, the Navy combined the property and restoration responsibilities of Naval Amphibious Base (NAB) Little Creek and the Army's Fort Story to create Joint Expeditionary Base (JEB) Little Creek-Fort Story. JEB Little Creek-Fort Story provides logistics facilities and support services to meet the amphibious warfare requirements of the Armed Forces. Site types at this installation include landfills, a music equipment plating shop, a laundry waste disposal area, a pentachlorophenol dip tank, sandblast yards, battery storage areas, and underground storage tanks. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in May 1999. DoD and EPA signed a federal facility agreement (FFA) in 2003 to outline how they were going to proceed with cleanup. The installation established a Restoration Advisory Board in 1994, which is responsible for communicating cleanup progress with the community. The RAB completed a community relations plan in FY02. The Navy, EPA, and the Commonwealth of Virginia formed a partnership to address environmental cleanup at the facility and meet frequently to track progress. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY09.

To date, JEB Little Creek-Fort Story has signed seven Records of Decision (RODs), which selected cleanup actions for five environmental restoration sites. The installation has also closed over 100 CERCLA and RCRA sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

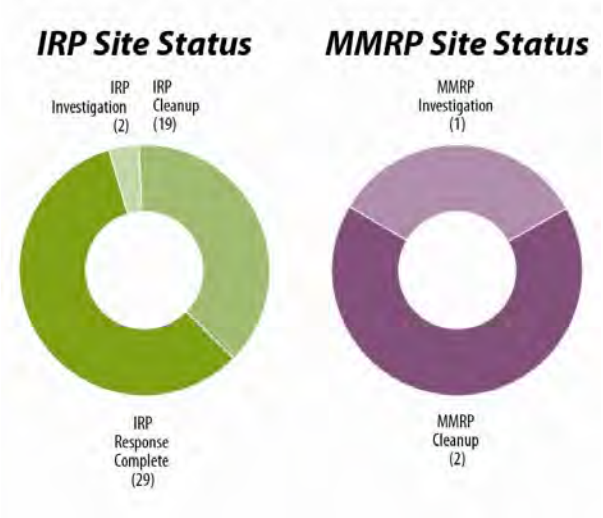
FY10 IRP Progress

JEB Little Creek-Fort Story completed cleanup for Site 13 and assumed environmental restoration responsibilities from Fort Story. The installation also completed the assessment of potential risks to the environment for Solid Waste Management Unit (SWMU) 7b and completed the cleanup report for Site 7. In addition, JEB Little Creek-Fort Story completed the remedial investigation for Site 11a. The cost of completing environmental restoration has changed significantly due to technical issues.

Technical issues delayed the completion of the feasibility study (FS) to evaluate cleanup alternatives at Site 11a.

FY10 MMRP Progress

JEB Little Creek-Fort Story completed preliminary assessments and site inspections for all sites and finalized close out documents for all but one site.



Plan of Action

Plan of action items for Joint Expeditionary Base Little Creek-Fort Story are grouped below according to program category.

IRP

- Complete the FS and finalize the ROD for Site 11a in FY11.
- Perform sampling event and complete an ecological risk assessment for SWMU 7b in FY11.
- Complete design for cleanup at shoreline areas in FY11.
- Complete vapor intrusion analysis at Sites 11 and 13 in FY11.
- Complete an ecological risk assessment for SWMU 3 in FY11.

MMRP

- Finalize closeout document for the Morale, Welfare and Recreation Skeet Range in FY11.

Joliet Army Ammunition Plant
LAP Area and Manufacturing Area

NPL

FFID:	IL521382046000		(Manufacturing Area); placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 17.2 million (FY2014)
Location (Size):	Wilmington, Illinois (1,730 acres)	**IAG Status:**	IAG signed in June 1989	**IRP Sites (Final RIP/RC):**	55 (FY2010)
Mission:	Manufacture, load, assemble, and pack munitions and explosives	**Contaminants:**	Explosives, heavy metals, VOCs, PCBs, SVOCs, propellants	**MMRP Sites (Final RIP/RC):**	5 (FY2014)
HRS Score:	35.23 (Loading, Assembling, and Packing Area); placed on NPL in March 1989; 32.08	**Media Affected:**	Groundwater and Soil	**Five-Year Review Status:**	Completed and planned
		Funding to Date:	$ 126.9 million	**IRP/MMRP Status Table:**	Refer to page E-6-77

Introduction

The Army constructed Joliet Army Ammunition Plant (AAP) in the early 1940s. It was one of the largest munitions and explosives manufacturers in the Midwest. Installation operations included manufacturing explosives and loading, assembling, and packing munitions for shipment. The installation consolidated all environmental restoration sites into two operable units (OUs): one for groundwater contamination and another for soil. The potential risk to human health and the environment was significant enough for EPA to place the 9,159-acre Manufacturing Area and the 14,385-acre Loading Area on the NPL in July 1987 and March 1989, respectively. DoD and EPA signed an interagency agreement (IAG) in June 1989 to outline how they were going to proceed with cleanup. In FY95, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports for the Soil and Groundwater OUs in FY05.

To date, the installation has transferred nearly 22,000 acres, including: 15,000 acres to the U.S. Forest Service; approximately 3,000 acres to the State of Illinois; 2,630 acres to the U.S. Department of Agriculture (USDA); 982 acres to the U.S. Department of Veterans Affairs; and 455 acres to Will County, Illinois. The installation also has completed three Records of Decision (RODs), which selected cleanup actions at environmental restoration sites. Joliet AAP completed an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Joliet AAP continued long-term management (LTM) of groundwater sites and long-term operations (LTO) of closed landfills (LFs). The installation also completed closure of 44 groundwater monitoring wells and transferred 235 acres to the State of Illinois. The cost of completing environmental restoration has changed significantly due to technical issues.

Administrative issues delayed the transfer of acreage to USDA.

FY10 MMRP Progress

Joliet AAP began the remedial investigation for the Extended Buffer Area.

Technical issues delayed regulatory approval and the start of fieldwork on the Extended Buffer Area. Administrative issues delayed completion of the ROD to close three sites.

Plan of Action

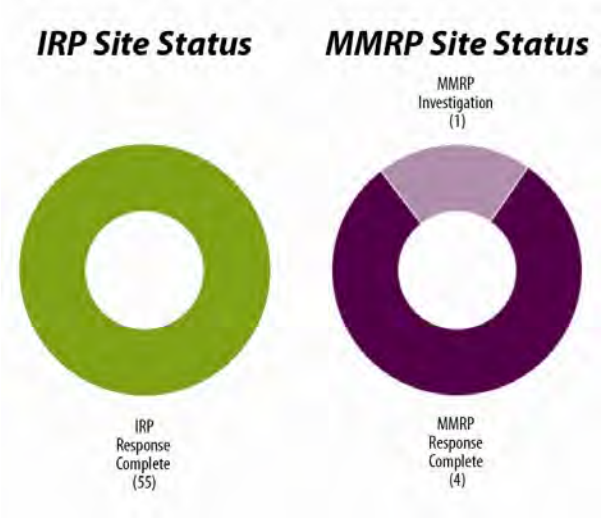
Plan of action items for Joliet Army Ammunition Plant are grouped below according to program category.

IRP

- Tranfer acreage to USDA in FY11.
- Continue LTM and LTO of closed LFs in FY11-FY12.

MMRP

- Complete workplan with regulatory approval in FY11.



K.I. Sawyer Air Force Base

BRAC 1993

FFID:	MI557002476000	**Contaminants:**	POLs, pesticides, heavy metals, solvents, SVOCs, VOCs, PCBs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Gwinn, Michigan (4,953 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-96
Mission:	Conducted long-range bombardment and air refueling operations	**Funding to Date:**	$ 63.3 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 19.9 million (FY2038)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	30 (FY2006)		
		MMRP Sites (Final RIP/RC):	4 (FY1998)		

Introduction

K.I. Sawyer Air Force Base (AFB) formerly conducted long-range bombardment and air refueling operations. Environmental studies have been in progress at the installation since FY84. Sites identified include landfills, fire training areas, underground storage tanks (USTs), aboveground storage tank spill sites, drainage pits, and a drainage pond. The primary contaminants affecting soil and groundwater are petroleum hydrocarbons, trichloroethylene (TCE), tetrachloroethylene (PCE), vinyl chloride, and heavy metals. In July 1993, the BRAC Commission recommended closure of K.I. Sawyer AFB, deactivation of the 410th Wing, and transfer of the base's mission. In September 1995, the installation closed. In 1994, the installation formed a BRAC cleanup team to develop a process for cleanup of sites, and formed a Restoration Advisory Board to discuss cleanup progress with the community. In FY99, the installation received funding for technical assistance for public participation. To ensure continuous monitoring and improvement, the installation completed its first five-year review report in FY06.

Interim cleanup has included removal of USTs, removal and cleanup of contaminated soil, installation of groundwater extraction wells, construction and operation of a groundwater treatment plant, removal of fuel from groundwater at the former petroleum/oil/lubricant (POL) storage area (Storage Tank [ST] 004), and installation of bioventing systems that increase oxygen flow in the soil to stimulate microbial activity. To date, no further cleanup action is required at 21 sites. In FY03, the installation transferred 93 acres to the County of Marquette. The installation transferred all remaining property to the Hannah Indian Community in FY07. In FY04, K.I. Sawyer AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

K.I. Sawyer awarded a five-year performance-based contract, and began the second five-year review report.

FY10 MMRP Progress

K.I. Sawyer AFB evaluated requirements at MMRP sites and confirmed there were no further actions needed.

Plan of Action

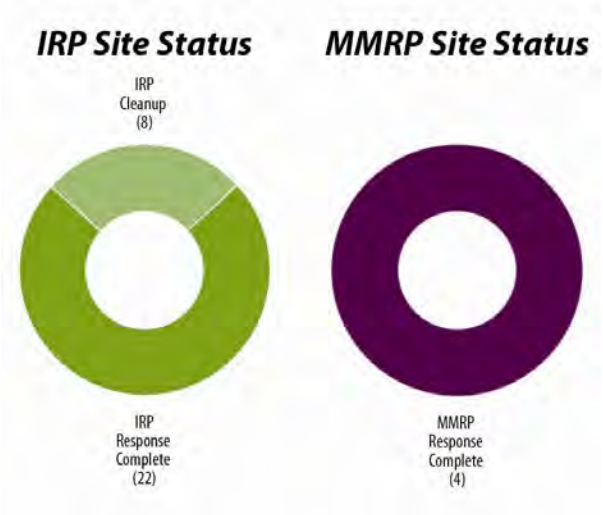
Plan of action items for K.I. Sawyer Air Force Base are grouped below according to program category.

IRP

- Complete a second five-year review report in FY11.
- Operate and maintain interceptor trench system at ST 004 in FY11-FY12.
- Continue groundwater monitoring in FY11-FY12.
- Perform annual land use control and institutional control inspections in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Kansas Army Ammunition Plant

BRAC 2005 Closure

FFID:	KS721382046700	**Contaminants:**	Explosives, metals, dioxins, furans, VOCs, SVOCs, propellants, PCBs	**Five-Year Review Status:**	Underway
Location (Size):	Labette County, Kansas (13,727 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-25
Mission:	Produce munitions and maintain replenishment production capability	**Funding to Date:**	$ 43.1 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 6.0 million (FY2038)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	28 (FY2013)		
		MMRP Sites (Final RIP/RC):	1 (FY2011)		

Introduction

The Army established Kansas Army Ammunition Plant (AAP) in 1941 to produce munitions and maintain replenishment production capability during World War II. The original construction consisted of three load lines, four component areas, an ammonium nitrate area, five explosive storage areas, an inert storage area, and a maintenance and administration area. Areas of environmental concern include production areas, landfills, open burning cages, open burning pads, an open detonation area, and miscellaneous maintenance and support areas. Kansas AAP has detected explosives in groundwater in some production areas and some contamination at all landfill areas. Primary contaminants of concern in the production and open burning areas are explosives and metals. Two closed landfill areas contained volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and metals in surface soils and groundwater. The 2005 BRAC Commission recommended Kansas AAP for closure.

Kansas AAP has removed explosives contamination and metals-contaminated soils at the 900 Area, 1000 Area, 1100 Area, and open burn areas. In FY04, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one site was identified.

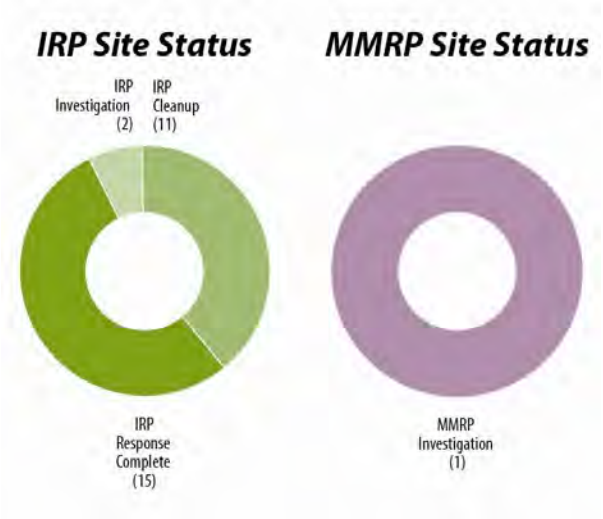
FY10 IRP Progress

Kansas AAP completed the first phase of the 1200 Area soil removal project. The installation closed the active landfill (Solid Waste Management Unit 15). The installation completed corrective measures at the pistol range. The installation also began corrective measures at the skeet range and sewage treatment plant, and continued efforts at Burn Pads 5 and 6, the contaminated waste processor, explosive waste incinerator, and the hazardous waste storage igloos.

Technical issues delayed completion of the 1200 Area soil removal project. Regulatory issues delayed completion of the five-year review report and corrective measures at the skeet range and sewage treatment plant. Regulatory, technical, and administrative issues delayed closure of the hazardous waste storage igloos, Burn Pads 5 and 6, explosive waste incinerator, and the contaminated waste processor.

FY10 MMRP Progress

Regulatory issues delayed completion of the report determining that no further cleanup actions are necessary at the Old Ammunition Storage Area.



Plan of Action

Plan of action items for Kansas Army Ammunition Plant are grouped below according to program category.

IRP

- Complete closure of the hazardous waste storage igloos, Burn Pads 5 and 6, the pistol range and the contaminated waste processor in FY11.
- Complete the second phase of the 1200 Area soil removal project in FY11.
- Complete the five-year review report in FY11.
- Complete corrective measures at the skeet range and sewage treatment plant in FY11.
- Complete removal and/or transfer of permitted aboveground storage tanks and any required corrective measures associated with their removal in FY11.
- Complete soil removals for lead at four water towers in FY11.
- Complete preliminary investigations for two new potential burning grounds and disposal areas in FY11-FY12.

MMRP

- Complete the additional surface sweep and soil sampling at the Old Ammunition Storage Area in FY11.
- Complete report determining that no further clenaup actions are necessary at the Old Ammunition Storage Area in FY11.

Kelly Air Force Base

BRAC 1995

FFID:	TX657172433300	**Media Affected:**	Surface Water, Soil, Groundwater	**IRP/MMRP Status Table:**	Refer to page E-6-157
Location (Size):	San Antonio, Texas (3,997 acres)	**Funding to Date:**	$ 290.6 million		
Mission:	Provided depot-level aircraft and engine repair	**Est. CTC (Comp Year):**	$ 48.6 million (FY2023)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	35 (FY2006)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	2 (FY2008)		
Contaminants:	Metals, VOCs, SVOCs, PCBs	**Five-Year Review Status:**	Completed and planned		

Introduction

Kelly Air Force Base (AFB) formerly provided depot-level aircraft and engine repair. Sites identified at the installation include landfills, spill sites (SSs), former fire training areas, low-level radioactive waste sites, underground storage tanks, aircraft maintenance areas, sludge lagoons, and sludge-spreading beds. In July 1995, the BRAC Commission recommended closure and realignment of Kelly AFB. The airfield and all associated support activities were realigned to Lackland AFB, Texas. In FY96, the installation formed a BRAC cleanup team to develop a process for cleanup of sites at Kelly AFB. That same year, the BRAC cleanup team developed the first BRAC cleanup plan with community input to prioritize sites requiring environmental restoration. The installation formed a Restoration Advisory Board in FY94 to discuss cleanup progress with the community. In FY99, the installation received technical assistance for public participation funding. In FY04, the installation updated the community relations plan. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY06.

To date, the installation has transferred all property to the local redevelopment authority. In FY04, Kelly AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Kelly AFB continued operations and maintenance (O&M) of soil and groundwater treatment systems in compliance with the Texas Commission on Environmental Quality (TCEQ) RCRA permit and compliance plan. Kelly AFB also began an investigation at former Building 329, which resulted in the expansion and optimization of Storage Tank 038. The installation transferred approximately 389 acres to the local redevelopment authority after obtaining a determination of operating properly and successfully from the regulators; the installation has transferred all property. In addition, the installation began the five-year review report, and installed the electrical resistive heating system at SS 003 to enhance current cleanup actions.

FY10 MMRP Progress

The installation conducted no MMRP actions.

Plan of Action

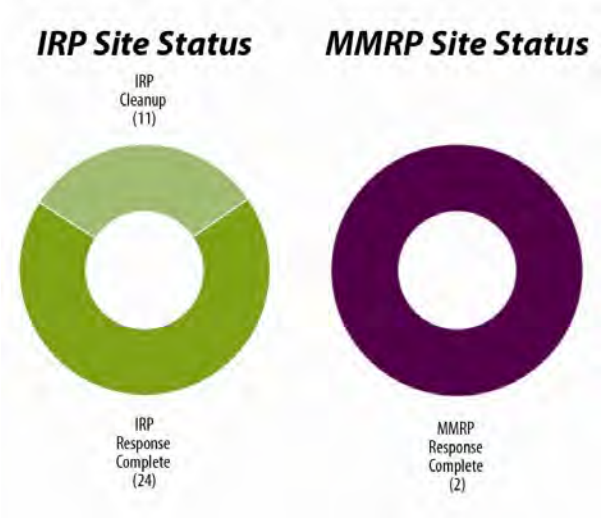
Plan of action items for Kelly Air Force Base are grouped below according to program category.

IRP

- Operate and decommission the electrical resistive heating system at SS 003 in FY11.
- Complete five-year review report in FY11.
- Award performance based contract for the entire base in FY11.
- Begin investigation to determine the nature and extent of Radium-226 contamination at Buildings 361 and 365 in FY11.
- Continue compliance with TCEQ RCRA permit and compliance plan in FY11-FY12.
- Continue O&M of groundwater treatment systems in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Keyport Naval Undersea Warfare Center

NPL

FFID:	WA017002341900		miscellaneous inorganic elements and compounds	**Five-Year Review Status:**	Underway
Location (Size):	Keyport, Washington (340 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-176
Mission:	Test, prove, overhaul, and issue torpedoes	**Funding to Date:**	$ 35.0 million		
HRS Score:	32.61; placed on NPL in October 1989	**Est. CTC (Comp Year):**	$ 18.1 million (FY2042)		
IAG Status:	FFA signed in FY90	**IRP Sites (Final RIP/RC):**	13 (FY2007)		
Contaminants:	VOCs, heavy metals, petroleum hydrocarbons, herbicides, fuel, PCBs, pesticides, SVOCs,	**MMRP Sites (Final RIP/RC):**	None		

Introduction

Operations at the Keyport Naval Undersea Warfare Center (NUWC), including torpedo plating, refurbishing, and disposal, contributed to contamination at the property. Environmental investigations at the installation have identified sites such as underground storage tanks, sumps, spill sites, a landfill, and an underground trench. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in October 1989. DoD and EPA signed a federal facility agreement (FFA) in FY90 to outline how they were going to proceed with cleanup. In September 1995, the BRAC Commission recommended realignment of Keyport NUWC. The center's responsibility for maintaining combat system consoles and its general industrial workload were moved to Puget Sound Naval Shipyard. In FY89 the installation formed a technical review committee, responsible for communicating cleanup with the community, and converted it to a Restoration Advisory Board in FY95. Keyport NUWC completed a community relations plan in FY90 and updated it in FY00. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY00 and FY05.

The installation has completed a Record of Decision, which selected cleanup actions at Operable Units (OUs) 1 and 2. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Keyport NUWC continued to operate the cleanup system at OU 1 and continued long-term management (LTM) at OUs 1 and 2. The cost of completing environmental restoration has changed significantly due to technical issues.

Regulatory issues delayed completion of the five-year review report.

FY10 MMRP Progress

Keyport NUWC has identified no MMRP sites.

Plan of Action

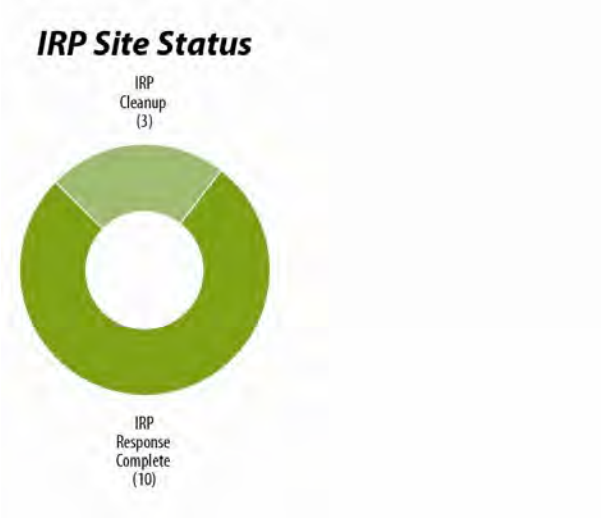
Plan of action items for Keyport Naval Undersea Warfare Center are grouped below according to program category.

IRP

- Complete a five-year review report in FY11.
- Continue to operate the cleanup system at OU 1 in FY11-FY12.
- Continue LTM at OUs 1 and 2 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Lake City Army Ammunition Plant
Northwest Lagoon

NPL

FFID:	MO721382048900	**Contaminants:**	Explosives, heavy metals, solvents, VOCs, POLs, SVOCs, propellants, radiologicals	**Five-Year Review Status:**	Completed and underway
Location (Size):	Independence, Missouri (3,935 acres)	**Media Affected:**	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-102
Mission:	Manufacture, store, and test small-arms munitions	**Funding to Date:**	$ 148.0 million		
HRS Score:	33.62; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 79.3 million (FY2048)		
IAG Status:	IAG signed in September 1989	**IRP Sites (Final RIP/RC):**	37 (FY2009)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Lake City Army Ammunition Plant (AAP) is a government-owned, contractor-operated facility. Its mission is to manufacture, store, and test small arms munitions. Principal site types at the installation include abandoned disposal pits, sumps, firing ranges, old lagoons, old dumps, closed RCRA lagoons, and burning grounds. Groundwater contaminants include volatile organic compounds (VOCs), explosives, and heavy metals. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed an interagency agreement (IAG) in September 1989 to outline how they were going to proceed with cleanup. Lake City AAP formed a Restoration Advisory Board in FY97 to discuss the installation's cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY05.

To date, Lake City AAP has signed 6 Records of Decision (RODs), which selected cleanup actions for 37 sites. In FY04, the installation completed an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Lake City AAP began a five-year review report. The installation completed the ROD for Area 10 and implemented land use controls, which restrict use of and access to the site. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory and technical issues delayed completion of a five-year review report.

FY10 MMRP Progress

Lake City AAP has identified no MMRP sites.

Plan of Action

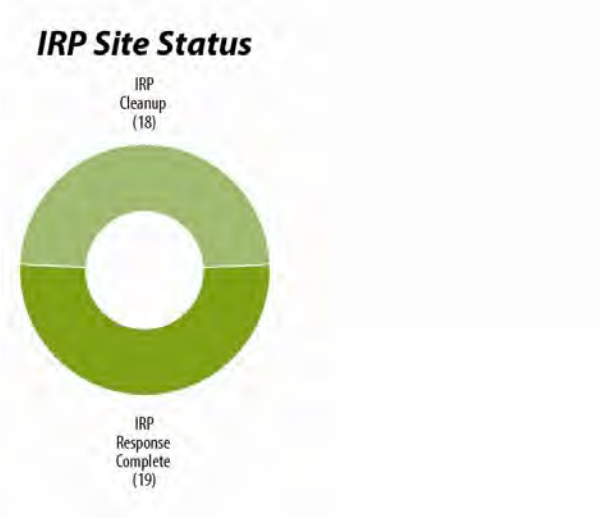
Plan of action items for Lake City Army Ammunition Plant are grouped below according to program category.

IRP

- Complete five-year revew report in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Langley Air Force Base

NPL/BRAC 2005 Realignment

FFID:	VA357212447700	**IAG Status:**	NASA signed a FFA in October 1993; Air Force FFA signed in September 2009	**Est. CTC (Comp Year):**	$ 19.4 million (FY2014)
Location (Size):	Hampton, Virginia (3,152 acres)	**Contaminants:**	Pesticides, PCBs, solvents, heavy metals, petroleum products, SVOCs, radioactive materials, VOCs, PAHs	**IRP Sites (Final RIP/RC):**	66 (FY2012)
Mission:	Hosted many organizations, including Air Combat Command Headquarters and 480th Reconnaissance Wing	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**MMRP Sites (Final RIP/RC):**	12 (FY2014)
HRS Score:	50.00; placed on NPL in May 1994	**Funding to Date:**	$ 85.3 million	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
				IRP/MMRP Status Table:	Refer to page E-6-172

Introduction

Since 1917, Langley Air Force Base (AFB) has been an airfield, an aeronautical research center, and the home base of the 1st Fighter Wing and Headquarters Air Combat Command. Sites at the installation include Landfills (LFs), underground storage tanks, a bulk fuel distribution system, waste pits, fire training areas, other sites, and storm sewers. Investigations determined that contaminants were migrating into Tabbs Creek, Back River, and the Chesapeake Bay. The potential risk to human health and the environment was significant enough for EPA to place the installation and the adjacent NASA Langley Research Center on the NPL in May 1994. In FY09, DoD, EPA, and the State signed a federal facility agreement (FFA) to outline how they would proceed with cleanup at Langley AFB. The 2005 BRAC Commission recommended Langley AFB for realignment. The installation formed a Restoration Advisory Board in FY94 to discuss the installation's cleanup progress with the community.

To date, the installation has signed 16 Records of Decision (RODs), which selected cleanup actions at 20 environmental restoration sites. The installation also completed two decision documents, which determined that no further cleanup actions were necessary at areas of concern Disposal Pit 66 and Drainage Ditches 66 and 68. The installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

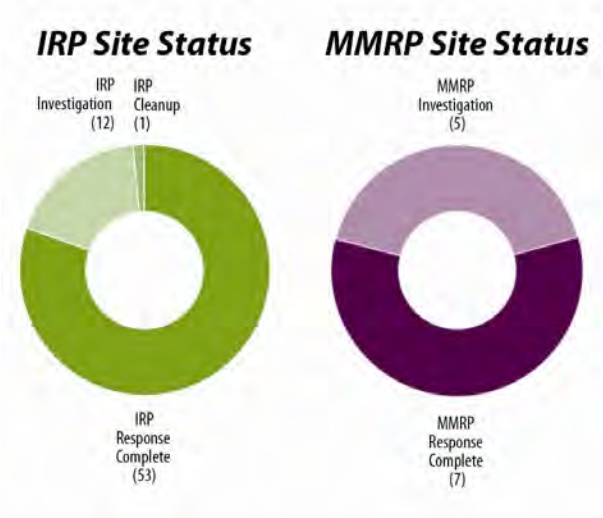
Langley AFB drafted the second five-year review report, and began cleanup at the Southwest Branch portion of Spill Site (SS) 63. The installation signed the ROD for LFs 07, 11, and 12. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Administrative issues delayed the draft cleanup reports for LF 17, Other Site (OT) 25, and the Lighter-Than-Air Cove portion of SS 63. Regulatory issues delayed the ROD for LF 10."

FY10 MMRP Progress

Langley AFB reviewed the draft Phase II site inspection (SI) evaluation report and conducted additional site fieldwork.

Administrative issues delayed submittal of the SI evaluation report and the remedial investigation (RI).



Plan of Action

Plan of action items for Langley Air Force Base are grouped below according to program category.

IRP

- Finalize the five-year review report in FY11.
- Finalize the focused feasibility study to evaluate cleanup alternatives and begin the proposed plan to identify the preferred alternative for OT 64 in FY11.
- Finalize the cleanup report for LF 17, OT 25, and the Lighter-Than-Air Cove portion of SS 63 in FY11.
- Finalize the LF 10 ROD in FY11.
- Complete construction of cleanup systems in the Southwest Branch portion of SS 63 in FY11.

MMRP

- Finalize the SI evaluation report in FY11.
- Complete the RI in FY11-FY12.

Letterkenny Army Depot

NPL/BRAC 1995

FFID:	PA321382050300	**HRS Score:**	34.21 (Southeastern Area); placed on NPL in July 1987; 37.51 (Property Disposal Office); placed on NPL in March 1989	**Funding to Date:**	$ 135.8 million
Location (Size):	Franklin County, Pennsylvania (18,683 acres)			**Est. CTC (Comp Year):**	$ 5.3 million (FY2040)
Mission:	Store, maintain, and decommission ammunition; rebuild and store vehicles; rebuild, store, and maintain missiles	**IAG Status:**	IAG signed in February 1989	**IRP Sites (Final RIP/RC):**	119 (FY2012)
		Contaminants:	VOCs, POLs, PCBs, heavy metals, explosives, asbestos, SVOCs, propellants	**MMRP Sites (Final RIP/RC):**	None
		Media Affected:	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
				IRP/MMRP Status Table:	Refer to page E-7-45

Introduction

The mission of Letterkenny Army Depot (AD) is to store, maintain, and decommission ammunition and to rebuild and store vehicles. Contaminated sites include disposal lagoons and trenches, oil burn pits, an open burning and open detonation area, an explosives washout plant, two scrap yards, landfills (LFs), industrial wastewater treatment plant lagoons, and industrial wastewater sewer lines. The potential risk to human health and the environment was significant enough for EPA to place two areas of the installation on the NPL: the Southeastern Area in July 1987 and the Property Disposal Office in March 1989. DoD and EPA signed an interagency agreement (IAG) in February 1989 to outline how they were going to proceed with cleanup. The 1995 BRAC commission recommended the installation for closure. In FY96, Letterkenny AD established a BRAC cleanup team to develop a process for cleanup of sites. Also in FY96, the community formed a local redevelopment authority, and the installation established a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, Letterkenny AD completed five-year review reports for the Southeastern Area NPL site in FY02 and FY08.

To date, Letterkenny AD has has transferred approximately 833 acres. The installation has also signed 5 BRAC Records of Decision (RODs), which selected cleanup actions for 16 sites. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

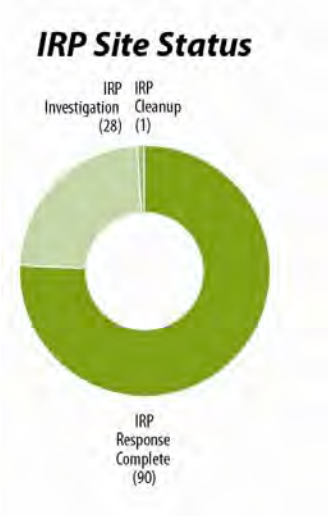
FY10 IRP Progress

Letterkenny AD completed Phase IV parcels property transfer and the Phase V parcels Proposed Plan (PP). The installation resolved the legal issues for Southeastern Operable Unit (OU) 9 LF 2 (Area J).

Regulatory issues delayed completion of the draft ROD for Phase V parcels and the completion of the focused feasibility study (FS) to evaluate cleanup alternatives and a design for cleanup of contaminated groundwater at Southeastern OUs 3A, 6 and 11. Regulatory issues also delayed completion of the ROD for the TNT Washout Plant. Technical issues delayed completion of the ROD for Southeastern OU 12 LF 5 (Area G).

FY10 MMRP Progress

Letterkenny AD has identified no sites suspected to contain munitions contamination for the MMRP.



Plan of Action

Plan of action items for Letterkenny Army Depot are grouped below according to program category.

IRP

- Complete land use control design for cleanup, which restricts use of and access to Phase I and II Parcels in FY11.
- Transfer Phase V Parcels in FY11.
- Complete the focused FS and the design for cleanup of contaminated groundwater at Southeastern Operable Units OUs 3A, 6 and 11 in FY11.
- Sign the ROD for the TNT Washout Plant and Southeastern OU 12 LF 5 (Area G) in FY11.
- Complete the FS, PP and ROD for Southeastern OU 9 in FY11.
- Complete Phase VI FS and draft PP in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Lone Star Army Ammunition Plant

NPL/BRAC 2005 Closure

FFID:	TX621382183100	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-49
Location (Size):	Texarkana, Texas (15,546 acres)	**Funding to Date:**	$ 30.2 million		
Mission:	Load, assemble, and pack ammunition	**Est. CTC (Comp Year):**	$ 6.7 million (FY2037)		
HRS Score:	31.85; placed on NPL in July 1987	**IRP Sites (Final RIP/RC):**	47 (FY2006)		
IAG Status:	IAG signed in September 1990	**MMRP Sites (Final RIP/RC):**	1 (FY2014)		
Contaminants:	VOCs, petroleum, heavy metals, explosives	**Five-Year Review Status:**	Completed and planned		

Introduction

Lone Star Army Ammunition Plant (AAP) loads, assembles, and packs munitions. From 1943 to 1944 the Old Demolition Area was the location for the destruction of faulty or nonstandard explosives. RCRA sites investigated include surface impoundments, landfills, fuel storage areas, and load lines. Investigations revealed soil contamination with solvents, metals, explosives, and contaminated groundwater. Environmental studies revealed explosives and metal contamination in the Old Demolition Area. The potential risk to human health and the environment was significant enough for EPA to place the Old Demolition Area on the NPL in 1987. DoD and EPA signed an interagency agreement (IAG) in 1990 to outline how they were going to proceed with cleanup. In May 2005, the BRAC Commission recommended closure of Lone Star AAP. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY06.

To date, Lone Star AAP has signed one Record of Decision, which selected cleanup actions for the Old Demolition Area. In FY08, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

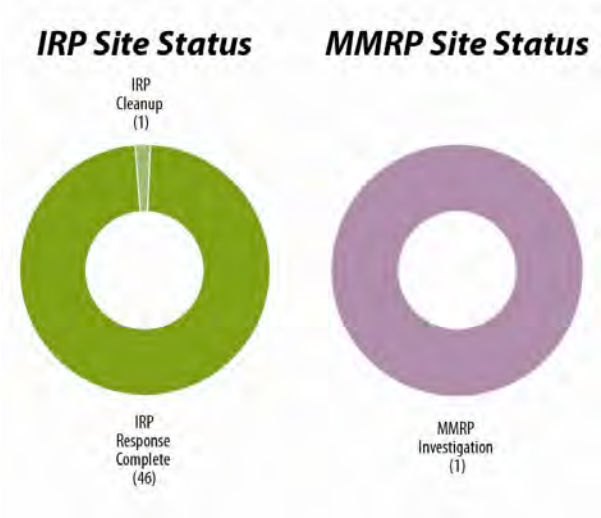
FY10 IRP Progress

Lone Star AAP awarded a performance-based contract to decontaminate buildings and the installation began remedial investigations (RIs) at over 13 sites as part of the Affected Property Assessment Report. The installation obtained approval for and completed a groundwater study at three sites (Units 16 and 55 and O-Ponds). Lone Star AAP began a radiological survey at Site BC 44 for various radiation equipment located at the installation and also began explosive equipment decontamination and removal on several load lines at Site BA 07. In addition, Lone Star AAP met with the Texas Commission on Environmental Quality and EPA to obtain concurrence on the proposed actions at the 13 sites.

Regulatory issues delayed the approval to delist the Old Demolition Area. Additionally, technical issues delayed beginning the fieldwork for the Affected Property Assessment Report for the Red River Redevelopment Authority.

FY10 MMRP Progress

Lone Star AAP completed RI fieldwork and submitted the Affected Property Assessment Report for the Abandoned Pistol Range.



Plan of Action

Plan of action items for Lone Star Army Ammunition Plant are grouped below according to program category.

IRP

- Submit RCRA Permit/Compliance Plan modification to the Texas Commission on Environmental Quality in FY11.
- Begin fieldwork in support of the Ecological Risk Assessment and Affected Property Assessment Report for the Red River Redevelopment Authority property in FY11.
- Complete draft Affected Property Assessment Report for Load Lines A and E in FY11-FY12.

MMRP

- Submit final Affected Property Assessment Report to the Texas Commission on Environmental Quality for the Abandoned Pistol Range in FY11.

Long Beach Naval Complex

BRAC 1991

FFID:	CA917002727200, CA917002755400, CA917002319000, and CA917002726700	**IAG Status:**	N/A	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Long Beach, California (1,563 acres)	**Contaminants:**	Metals, VOCs, Other, SVOCs	**Five-Year Review Status:**	Completed and planned
Mission:	Supported logistics; worked with construction, dry docking, and outfitting of ships; performed manufacturing and test work	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-7
HRS Score:	N/A	**Funding to Date:**	$ 67.4 million		
		Est. CTC (Comp Year):	$ 8.6 million (FY2021)		
		IRP Sites (Final RIP/RC):	26 (FY2021)		

Introduction

The Long Beach Naval Complex (NC) consists of the Long Beach Naval Shipyard (NSY), Naval Station (NS) Long Beach, and the Long Beach Naval Hospital (NAVHOSP). The Long Beach NC provided logistics support, construction, alteration, dry docking, and outfitting of ships and craft. NSY and NS operations that contributed to contamination include ship and vehicle repair and maintenance, utility maintenance and operation, support shops, storage of petroleum products and hazardous materials, laundry and dry cleaning, steam plant operations, and air compressor operations. Portions of housing areas associated with the NSY disposed of ship wastes, drilling mud, and construction debris. The BRAC Commission recommended closure of the NAVHOSP, the NS, and associated housing areas in FY91; closure occurred in FY94. The BRAC Commission recommended closure of the NSY and associated housing areas in FY93; closure occurred in FY97. In FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites, and completed a BRAC cleanup plan to prioritize sites requiring environmental restoration. The joint NS and NSY technical review committee converted to a Restoration Advisory Board (RAB), which is responsible for communicating cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY05 and FY09.

To date, the installation has completed Records of Decision, which selected cleanup actions for Sites 1 through 6A, 7, and 8 through 13. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Long Beach NC obtained determinations that no further cleanup action was necessary for unrestricted use at 15 areas of concern. The installation also conducted an optimization study to identify opportunities for streamlining cleanup of groundwater at Sites 12 and 13.

Regulatory issues delayed concurrence that no further cleanup action is necessary for groundwater at Site 9.

Long Beach NC adjourned the BRAC portion of the RAB.

FY10 MMRP Progress

Long Beach NC has identified no MMRP sites at this installation.

Plan of Action

Plan of action items for Long Beach Naval Complex are grouped below according to program category.

IRP

- Obtain concurrence that no further cleanup action is required for groundwater at Site 9 in FY11.
- Continue groundwater monitoring at Sites 11, 12, and 13 in FY11.
- Finalize supplemental radiological assessment at Sites 1 and 2 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Longhorn Army Ammunition Plant

NPL

FFID:	TX621382052900	**Contaminants:**	Heavy metals, VOCs, perchlorate, explosives, SVOCs, propellants	**Five-Year Review Status:**	Completed and planned
Location (Size):	Karnack, Texas (8,416 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-155
Mission:	Loaded, assembled, and packed pyrotechnic and illuminating signal munitions	**Funding to Date:**	$ 104.5 million		
HRS Score:	39.83; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 15.1 million (FY2040)		
IAG Status:	IAG signed in October 1991	**IRP Sites (Final RIP/RC):**	48 (FY2014)		
		MMRP Sites (Final RIP/RC):	3 (FY2011)		

Introduction

Longhorn Army Ammunition Plant (AAP) manufactured pyrotechnic and illuminating signal munitions and solid-propellant rocket motors. Identified cleanup sites include storage areas, landfills, open burning grounds, industrial areas, burial pits, sumps, and wastewater treatment plants. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed an interagency agreement (IAG) in October 1991 to outline how they were going to proceed with cleanup. Longhorn AAP became inactive in July 1997. The installation updated the community relations plan in FY03. In FY04, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, Longhorn AAP completed five-year review reports for Sites Longhorn AAP 12, 16, 18, and 24 in FY02 and FY08; and a five-year review report for Site Longhorn AAP 17 in FY08.

Longhorn AAP has signed two itermin Records of Decision (RODs), which selected cleanup actions at four sites, and six RODs determining that no further cleanup actions were necessary for ten sites. To date, the installation has transferred approximately 7,400 acres. In FY02, Longhorn AAP conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Longhorn AAP completed a remedial investigation (RI) and feasibility study (FS) to evaluate cleanup alternatives for six sights, and completed RODs and decision documents for ten sites. The cost of completing environmental restoration has changed significantly due to technical issues.

Regulatory issues delayed completion of the RI/FS for two sites, and a ROD for one site. Regulatory issues also delayed installation and operation of cleanup systems at two sites. Administrative issues delayed completion of designs for cleanup at four sites.

FY10 MMRP Progress

Regulatory issues delayed completion of proposed plans (PPs) and RODs for two sites, and finalization of data summary reports for two sites.

Plan of Action

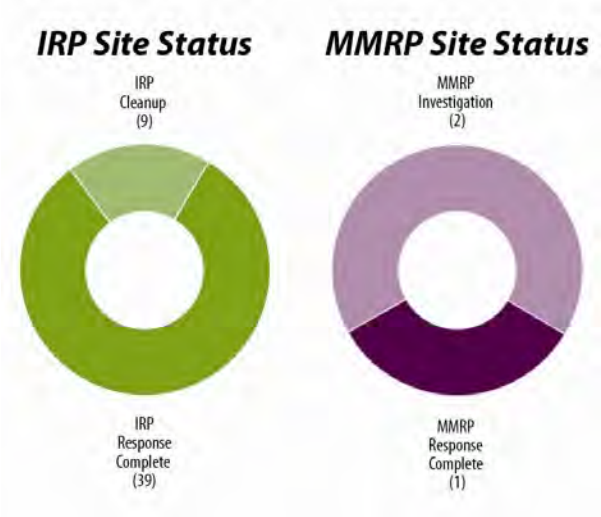
Plan of action items for Longhorn Army Ammunition Plant are grouped below according to program category.

IRP

- Complete RI/FS for four sites in FY11.
- Complete RODs for six sites in FY11.
- Complete designs for and cleanup at seven sites in FY11.
- Complete construction of cleanup systems at two sites in FY11.

MMRP

- Finalize data summary reports for two sites in FY11.
- Complete PPs and RODs for two sites in FY12.



Loring Air Force Base

NPL/BRAC 1991

FFID:	ME157002452200	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-89
Location (Size):	Limestone, Maine (9,472 acres)	**Funding to Date:**	$ 141.2 million		
Mission:	Supported B-52 bombers and KC-135 tankers	**Est. CTC (Comp Year):**	$ 17.4 million (FY2999)		
HRS Score:	34.49; placed on NPL in February 1990	**IRP Sites (Final RIP/RC):**	64 (FY2001)		
IAG Status:	FFA signed in April 1991; revision signed in 1994	**MMRP Sites (Final RIP/RC):**	8 (FY1999)		
Contaminants:	VOCs, POLs, spent solvents, PCBs, pesticides, heavy metals, SVOCs, explosives, propellants	**Five-Year Review Status:**	Completed and planned		

Introduction

Loring Air Force Base (AFB) was established in 1952 to support bomber and tanker aircraft operations. Sites identified include spill areas, landfills, fire training areas, underground storage tanks, aboveground storage tanks, and low-level radioactive waste areas. The flightline and nose dock areas, where industrial shops and maintenance hangars were located, are the primary areas where wastes were released into soil and groundwater. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1990. DoD and EPA signed a federal facility agreement (FFA) in April 1991, which was last revised in 1994, to outline how they were going to proceed with cleanup. In July 1991, the BRAC Commission recommended closure of the installation; Loring AFB closed in September 1994. In FY94, the installation formed a BRAC cleanup team to develop a process for cleaning up sites at Loring AFB. In FY98, the BRAC cleanup team updated and published the BRAC cleanup plan to prioritize sites requiring environmental restoration. In FY94, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY00, FY05, and FY10.

Sites at Loring AFB are grouped into 13 operable units (OUs). To date, 12 Records of Decision, selecting cleanup actions at 9 OUs, have been signed. The Air Force has transferred all property to the Loring Development Authority. In FY04, Loring AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

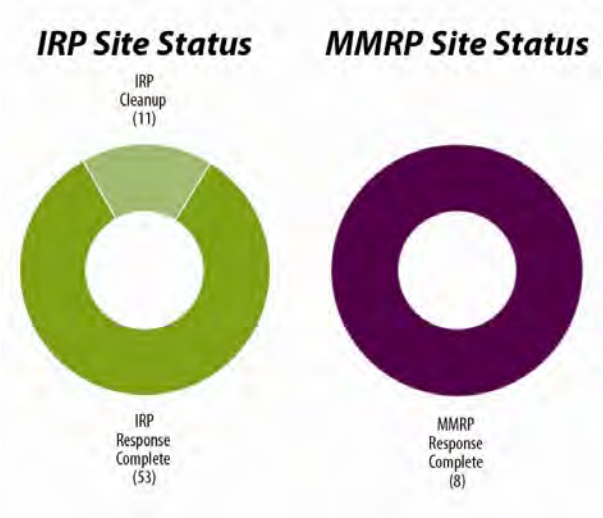
FY10 IRP Progress

Loring AFB completed the third five-year review report. The installation also continued operations and maintenance (O&M) at all remaining sites. Loring AFB began a bioenhancement pilot study at the Fuel Tank Farms. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed the completion of the work plan and cleanup at the Fuel Tank Farms.

FY10 MMRP Progress

The installation conducted no MMRP actions.



Plan of Action

Plan of action items for Loring Air Force Base are grouped below according to program category.

IRP

- Award performance-based contract for cleanup at Fuel Tank Farms in FY11.
- Conduct vapor intrusion investigation in FY11.
- Continue O&M of existing systems in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Louisiana Army Ammunition Plant

NPL

FFID:	LA621382053300	**Contaminants:**	TNT, RDX, HMX, oils, grease, degreasers, phosphates, solvents, metal plating sludges, acids, fly ash	**MMRP Sites (Final RIP/RC):**	3 (FY2010)
Location (Size):	Doyline, Louisiana (14,974 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed
Mission:	Manufacture ammunition metal parts and maintain ammunition production facilities	**Funding to Date:**	$ 60.7 million	**IRP/MMRP Status Table:**	Refer to page E-8-27
HRS Score:	30.26; placed on NPL in March 1989	**Est. CTC (Comp Year):**	$ 1.2 million (FY2010)		
IAG Status:	IAG signed in 1989	**IRP Sites (Final RIP/RC):**	10 (FY2006)		

Introduction

The mission of Louisiana Army Ammunition Plant (AAP) is to manufacture ammunition parts and maintain ammunition production facilities for the Army. Contaminated sites at the installation include lagoons, burning grounds, and landfills contaminated with explosives and plating wastes. Studies identified groundwater contaminated with the explosive compounds TNT, RDX, and HMX. The potential risk to human health and the environmental was significant enough for EPA to place the installation on the NPL in March 1989. Also in 1989, DoD and EPA signed an interagency agreement (IAG) to outline how they were going to proceed with cleanup. In FY05, the Army transferred Louisiana AAP to the Louisiana Army National Guard. To ensure continuous monitoring and improvement, the installation completed five-year review reports for the the Area P lagoons in FY94 and FY00, and another five-year review report in FY06.

Louisiana AAP completed three Records of Decision (ROD) that selected cleanup actions for nine sites, and one ROD that required no further cleanup actions at one site. Between FY89 and FY90, Louisiana AAP incinerated almost 102,000 tons of explosives-contaminated soil and treated more than 53 million gallons of contaminated water. In FY03, Louisiana AAP conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Louisiana AAP completed all IRP cleanup activities and submitted the five-year review report for all sites (Central Proving Ground, Burning Ground 5, and the Small Arms Pistol Range).

FY10 MMRP Progress

Louisiana AAP completed the remedial investigation, proposed plan, and ROD. In addition, the installation transferred environmental responsibilities to the Louisiana Army National Guard.

Plan of Action

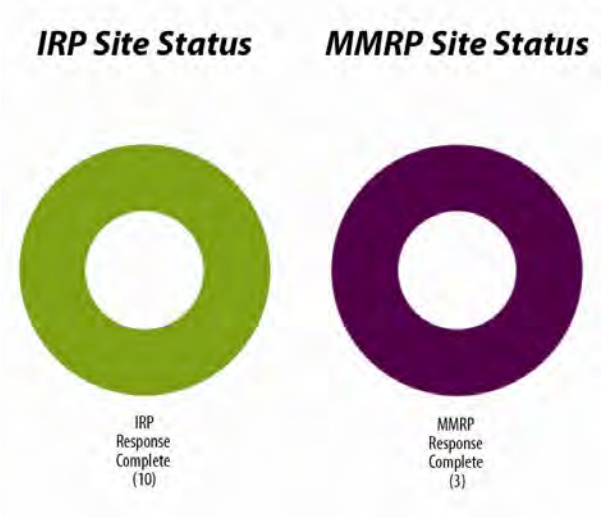
Plan of action items for Louisiana Army Ammunition Plant are grouped below according to program category.

IRP

- Continue long-term management of monitored cleanup using natural processes according to the Decision Document in FY11.
- Complete the five-year review report for all sites in FY11-FY12.

MMRP

- Implement ROD in FY11-FY12.
- Implement engineering controls and impose land use controls in FY11-FY12.



Lowry Air Force Base

BRAC 1991

FFID:	CO857002413000	**Contaminants:**	General refuse, fly ash, coal, metals, fuels, VOCs, solvents, TCE, petroleum hydrocarbons, SVOCs, waste oil	**MMRP Sites (Final RIP/RC):**	5 (FY2007)
Location (Size):	Denver, Colorado (1,866 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Served as Air Force technical training center	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-15
HRS Score:	N/A	**Funding to Date:**	$ 102.2 million		
IAG Status:	IAG under negotiation	**Est. CTC (Comp Year):**	$ 0.0 million (FY2017)		
		IRP Sites (Final RIP/RC):	20 (FY2012)		

Introduction

Lowry Air Force Base (AFB) supported the 3400 Technical Training Wing. Environmental sites at the former base include fire training areas, landfills, a fly ash disposal area, coal storage yards, and underground storage tanks. An interagency agreement (IAG) between DoD and EPA to outline how they are going to proceed with cleanup is currently under negotiation. In 1991, the BRAC Commission recommended closure of all but 108 of the 1,866 acres at Lowry AFB. The base closed in September 1994. The 76-acre Defense Finance and Accounting Service and the Air Force Reserve Personnel Center, also known as Buckley Annex, remained at Lowry until the 2005 BRAC Commission recommended it for closure. The installation's Restoration Advisory Board (RAB), formed to discuss cleanup progress with the community, began receiving funding for technical assistance for public participation in FY99. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY09.

In FY04, Lowry AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Lowry AFB pursued regulatory closure of the existing RCRA compliance order. The installation continued groundwater cleanup at Operable Unit 5. The installation also continued landfill maintenance and monitoring, assessing asbestos contamination in soil and performing cleanup as required.

Regulatory issues delayed closure of the existing RCRA compliance order.

Lowry AFB formally adjourned the RAB.

FY10 MMRP Progress

The installation conducted no MMRP actions.

Plan of Action

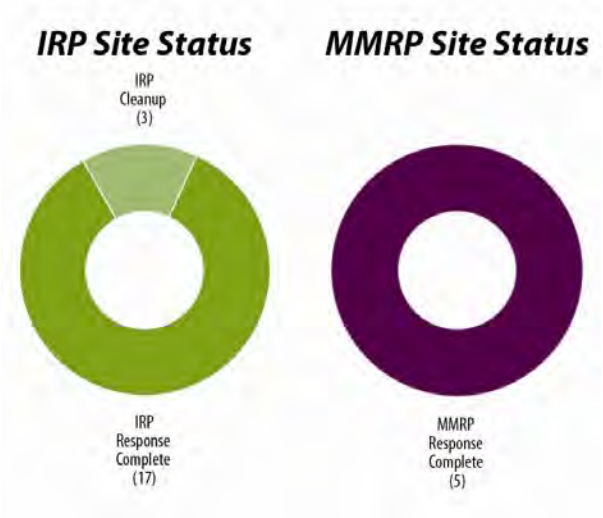
Plan of action items for Lowry Air Force Base are grouped below according to program category.

IRP

- Obtain regulatory closure of existing RCRA compliance order in FY11.
- Continue groundwater cleanup in FY11-FY12.
- Continue landfill maintenance and monitoring in FY11-FY12.
- Continue assessing asbestos contamination in soil and perform cleanup as required in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



March Air Force Base
March Air Reserve Base

NPL/BRAC 1993/BRAC 2005 Realignment

FFID:	CA957212452700	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-32
Location (Size):	Riverside, California (6,606 acres)	**Funding to Date:**	$ 159.7 million		
Mission:	Maintain, repair, and refuel aircraft	**Est. CTC (Comp Year):**	$ 38.2 million (FY2041)		
HRS Score:	31.94; placed on NPL in November 1989	**IRP Sites (Final RIP/RC):**	50 (FY2012)		
IAG Status:	FFA signed in September 1990	**MMRP Sites (Final RIP/RC):**	3 (FY1999)		
Contaminants:	VOCs, POLs, PCBs, SVOCs, metals, explosives, propellants	**Five-Year Review Status:**	Completed and planned		

Introduction

March Air Force Base (AFB) was established as an Army Air Service airfield in 1918 and became an Air Force installation in 1948. Investigations have identified fire training areas (FTAs), inactive landfills, underground storage tanks, an engine test cell, sludge drying beds at a sewage treatment plant, and various spill sites. The potential risk to human health and the environment was significant enough for EPA to place March AFB on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in September 1990 to outline how they were going to proceed with cleanup. The Air Force Reserve Command (AFRC) and the Air Force Real Property Agency signed a memorandum of agreement in FY99 for sharing environmental responsibility. In July 1993, the BRAC Commission recommended realignment of the installation. Following realignment in April 1996, the Air Force retained approximately 2,074 acres as March Air Reserve Base, and the Army and the Navy retained several smaller parcels totaling 95 acres. The installation has transferred the remaining 4,439 acres to the local redevelopment authority, and federal and local government agencies. In 2005, the BRAC Commission recommended the installation for further realignment. In FY94, the installation converted its technical review committe responsible for communicating cleanup progress with the community into a Restoration Advisory Board. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY03 and FY09.

March AFB has grouped Installation Restoration Program (IRP) sites into three Operable Units (OUs): OUs 1, 2, and 4. The installation has signed Records of Decisions (RODs), which selected cleanup actions for 25 AFRC IRP sites and 21 BRAC IRP sites. In FY04, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); three MMRP sites were identified.

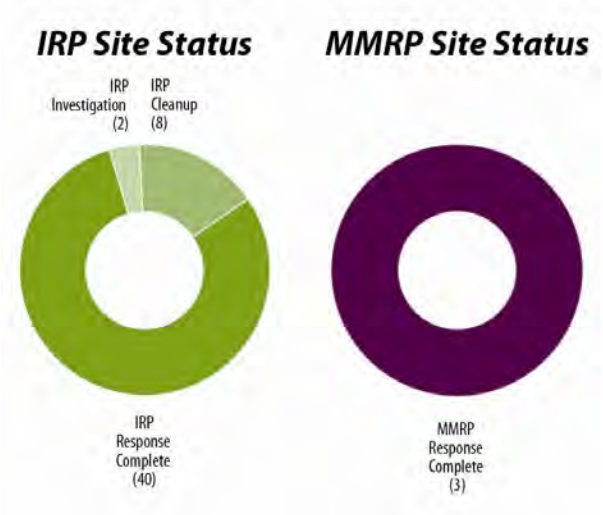
FY10 IRP Progress

March AFB completed the initial fieldwork for the pilot study at Sites 8 and 36. The cost of completing environmental restoration has changed significantly due to regulatory and technical issues, and changes in estimating criteria.

Technical issues delayed the completion of the remedial investigation (RI) and feasibility study (FS) to evaluate cleanup alternatives at Sites 8 and 36. Regulatory issues delayed the soil vapor extraction (SVE) system for trichloroethylene (TCE) at FTA 007.

FY10 MMRP Progress

The installation conducted no MMRP actions.



Plan of Action

Plan of action items for March Air Force Base are grouped below according to program category.

IRP

- Complete a pilot study and revised FS at Sites 8 and 36 in FY11.
- Complete proposed plan and ROD amendment and install SVE system at FTA 007 in FY11.
- Complete FS for contaminated groundwater on entire base in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Mare Island Naval Shipyard

BRAC 1993

FFID:	CA917002477500	**IAG Status:**	FFSRA signed in September 1992; renegotiated in July 2002	**Est. CTC (Comp Year):**	$ 61.8 million (FY2014)
Location (Size):	Vallejo, California (5,293 acres)	**Contaminants:**	Heavy metals, VOCs, PCBs, pesticides, petroleum hydrocarbons, lead oxides, UXO, SVOCs, explosives, propellants	**IRP Sites (Final RIP/RC):**	38 (FY2017)
Mission:	Maintained and repaired ships and provided logistical support for assigned ship and service craft	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**MMRP Sites (Final RIP/RC):**	12 (FY2016)
HRS Score:	N/A	**Funding to Date:**	$ 274.1 million	**Five-Year Review Status:**	Completed and planned
				IRP/MMRP Status Table:	Refer to page E-6-26

Introduction

Mare Island Naval Shipyard (NSY) maintained and repaired ships and provided logistical support for assigned ship and service craft. Ordnance sites include dredge ponds, storage areas, and the production area. DoD and EPA signed a Federal Facility Agreement (FFA) in September 1992, which was last amended in July 2002, to outline how they were going to proceed with cleanup. In July 1993, the BRAC Commission recommended closure of Mare Island NSY and relocation of the Combat Systems Technical School's Command Activity to Dam Neck, Virginia. The installation closed in FY96. The installation converted its technical review committee, responsible for communicating cleanup progress with the community, into a Restoration Advisory Board (RAB) in FY94. An administrative record and information repository were established in FY90. The installation completed its community relations plan in FY92, and updated it in FY94 and FY01. The RAB received funding for technical assistance for public participation in FY99, FY02, and FY03.

To date, the installation has transferred approximately 4,000 acres. The Navy has issued a No Further Action Record of Decision (ROD), which determined no further cleanup activities were necessary for Installation Restoration Program (IRP) Site 22 and Investigation Area (IA) A2, and a ROD selecting cleanup actions for the H1 landfill area. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

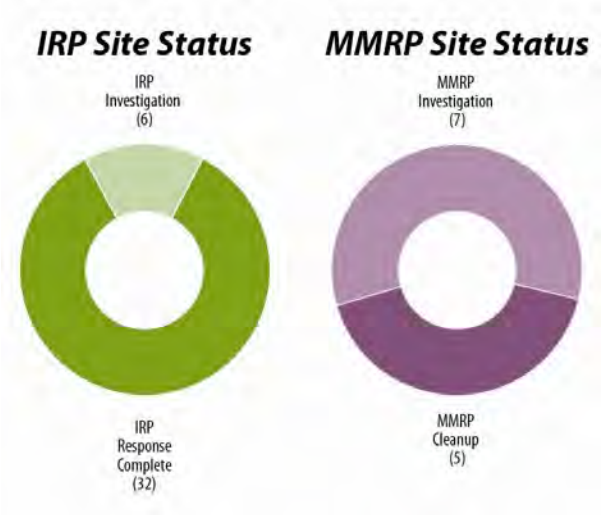
Mare Island NSY completed cleanup at the Defense Reutilization and Marketing Office area (IR Site 28). The installation completed the ROD determining no further cleanup actions were necessary for IA A2. The installation also completed removal actions at Building 742 and Site 17. The cost completing environmental restoration has changed significantly due to technical issues and changes in estimating criteria.

Technical issues delayed the final remedy and closure of the H1 landfill area.

FY10 MMRP Progress

Mare Island NSY completed a removal action at the Paint Waste Area (Unexploded Ordnance [UXO] 13) and drafted the ROD for the Marine Corps Firing Range (UXO 4).

Technical issues delayed the technical memorandum to detect munitions and explosives of concern (MEC).



Plan of Action

Plan of action items for Mare Island Naval Shipyard are grouped below according to program category.

IRP

- Complete Remedial Investigation (RI) for CERCLA contaminants in offshore IA K in FY11.
- Complete final remedy and closure of the H1 landfill area in FY11.
- Finalize the RI and feasibility study to evaluate cleanup alternatives for the Western Magazine Area, IR Site 05, and IR Site 28 in FY11-FY12.
- Begin the site inspection for IR Site 29 and IR Site 30 in FY11-FY12.

MMRP

- Finalize the Engineering Evaluation and Cost Analysis, and action memorandum, for the removal action at Production Manufacturing Area (UXO 5) and South Shore Area (UXO 7) in FY11.
- Finalize the technical memorandum to detect MEC in FY11.
- Finalize the ROD for the Marine Corps Manufacturing Area (UXO 4) in FY11-FY12.
- Start the RI for the Dredge Pond 3E (UXO 3) in FY11-FY12.

Marine Corps Base Quantico

NPL/BRAC 2005 Realignment

FFID:	VA317302472200	**IAG Status:**	FFAs signed in December 1991 and February 1999	**Est. CTC (Comp Year):**	$ 75.5 million (FY2031)
Location (Size):	Quantico, Virginia (60,000 Acres)	**Contaminants:**	PCBs, pesticides, VOCs, SVOCs, phenols, heavy metals, petroleum hydrocarbons, arsenic, explosives, propellants	**IRP Sites (Final RIP/RC):**	102 (FY2017)
Mission:	Provide military training and support research, development, testing, and evaluation of military hardware	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**MMRP Sites (Final RIP/RC):**	29 (FY2021)
HRS Score:	50.00; placed on NPL in June 1994	**Funding to Date:**	$ 71.8 million	**Five-Year Review Status:**	Completed and planned
				IRP/MMRP Status Table:	Refer to page E-6-171

Introduction

Marine Corps Base (MCB) Quantico's mission is to support training for general combat by providing a varied background in tactical operations and performing research and development of Marine Corps equipment. MCB Quantico operated a municipal landfill throughout the 1970s. After the landfill closed, the area was used as a scrap yard. Sites at the installation include surface disposal areas, underground storage tanks, and disposal pits that contain contaminated soil, surface water, and sediment. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in June 1994. DoD and EPA signed federal facility agreements (FFAs) in December 1991 and in February 1999 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended MCB Quantico for realignment. The installation formed a technical review committee in FY89, which is responsible for communicating cleanup progress with the community. In FY92, the installation established three information repositories, each containing a copy of the administrative record. The installation completed a community relations plan in FY95, which was updated in FY03. To ensure continuous monitoring and improvement, the installation completed five-year review reports for Site 4 in FY02 and FY08.

EPA has identified 303 areas of concern at the installation. MCB Quantico currently recognizes Installation Restoration Program (IRP) sites and RCRA solid waste management units at the installation. The installation signed Records of Decision (RODs), which determined that no further cleanup actions were necessary for Sites 1 and 5 in FY00, and Site 17 in FY01. The installation also signed three RODs for Site 9 and Multi-Site (M13). In FY02, MCB Quantico conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

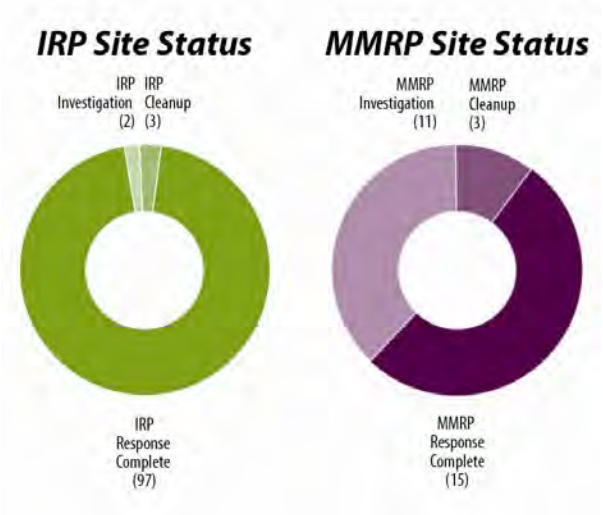
FY10 IRP Progress

MCB Quantico finalized two proposed plans (PPs), two long-term management plans, and one treatability study work plan. The cost of completing environmental restoration has changed significantly due to technical issues.

Technical issues delayed the PP and also indefinitely delayed the ROD for Site 102 (Abraham's Creek). Administrative issues delayed the design for cleanup at Sites 99/96 (Quantico Embayment).

FY10 MMRP Progress

MCB Quantico completed quality assurance plans for the site inspection (SI) work plan and SI report. In addition, the installation completed SIs at all sites.



Plan of Action

Plan of action items for Marine Corps Base Quantico are grouped below according to program category.

IRP

- Sign RODs for Sites 100 (Chopawamsic Creek), 99/96 (Quantico Embayment), and Multi-site (M13) in FY11.
- Complete the PP for Site 22 in FY11.
- Complete the design for cleanup at Sites 99/96 (Quantico Embayment) in FY11.
- Sign ROD for SWMU M13 in FY12.
- Complete cleanup at Site 99/96 (Quantico Embayment) in FY12.

MMRP

- Complete removal action at Unexploded Ordnance Site 021 in FY11.

Massachusetts Military Reservation
Otis ANGB and Camp Edwards

NPL

FFID:	MA157282448700	**IAG Status:**	FFA signed in July 1991; last amended in June 2002	**Est. CTC (Comp Year):**	$ 159.5 million (FY2055)
Location (Size):	Falmouth, Massachusetts (22,000 acres)	**Contaminants:**	Waste solvents, VOCs, pesticides, metals, SVOCs, explosives, propellants, petroleum-related compounds, PAHs, phenols	**IRP Sites (Final RIP/RC):**	85 (FY2009)
Mission:	Provide Army and Air National Guard training and support the East Coast Air Defense and Coast Guard Air and Sea Rescue Units	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**MMRP Sites (Final RIP/RC):**	None
HRS Score:	45.93; placed on NPL in November 1989	**Funding to Date:**	$ 740.7 million	**Five-Year Review Status:**	Completed and planned
				IRP/MMRP Status Table:	Refer to page E-6-94

Introduction

Massachusetts Military Reservation (MR) provides Army and Air National Guard training, and supports the East Coast Air Defense and Coast Guard Air and Sea Rescue Units. Sites at Massachusetts MR include chemical spill (CS) sites, fuel spill (FS) sites, storm drains, landfills (LFs), and former firefighter training areas. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in July 1991, which was last amended in June 2002, to outline how they were going to proceed with cleanup. Massachusetts MR formed a Restoration Advisory Board in January 1993 to discuss the installation's cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY97, FY03, and FY08.

To date, the installation signed Records of Decision (RODs), interim RODs, and decision documents, which selected cleanup actions for 85 sites; 66 sites have closed. In FY05, Massachusetts MR conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Massachusetts MR completed construction of the the first wind turbine and connected it to the grid. The installation evaluated potential for additional wind turbines, conducted an environmental assessment, and awarded a construction contract for two additional wind turbines. Massachusetts MR completed private well verifications for the LF 1 and CS Site 23 contaminated areas. The installation established a collaborative and repeatable approach for system optimizations with regulatory agencies, and operated an effective groundwater remediation program which protects human health and the environment. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.

Plan of Action

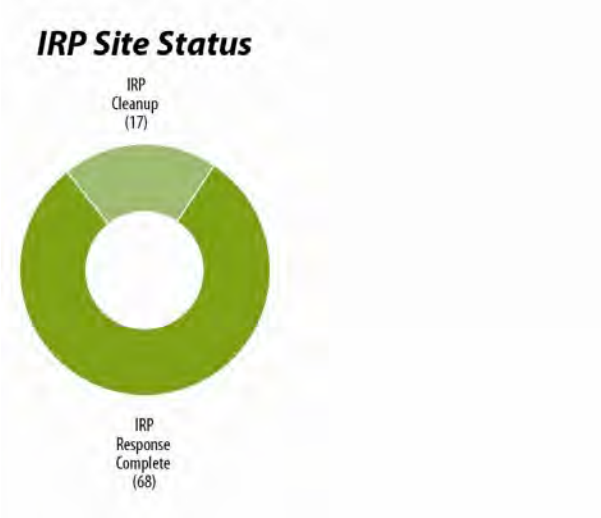
Plan of action items for Massachusetts Military Reservation are grouped below according to program category.

IRP

- Complete private well verification program for contaminated areas at CS Sites 4, 20, and 21, and FS Sites 28 and 29 in FY11.
- Continue to efficiently operate and optimize groundwater treatment systems in FY11-FY12.
- Complete private well verification program for Ashumet Valley and CS Site 10 contaminated areas in FY11-FY12.
- Construct and begin operations for two new wind turbines in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Mather Air Force Base

NPL/BRAC 1988

FFID:	CA957002474300	**Contaminants:**	VOCs, SVOCs, metals, solvents, jet fuel, petroleum hydrocarbons, lead, PCBs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Sacramento, California (5,718 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-32
Mission:	Provided navigation and electronic warfare officer training; housed SAC Bombing and Refueling Squadron	**Funding to Date:**	$ 214.8 million		
HRS Score:	28.90; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 47.1 million (FY2067)		
IAG Status:	IAG signed in 1989	**IRP Sites (Final RIP/RC):**	89 (FY2006)		
		MMRP Sites (Final RIP/RC):	5 (FY2011)		

Introduction

Before becoming inactive in FY93, Mather Air Force Base (AFB) housed the 323rd Flying Training Wing, a Strategic Air Command Wing, a Reserve air refueling group, and an Army National Guard aviation unit. Site types include landfills (LFs), underground storage tanks, fire training areas, a trichloroethylene (TCE) disposal site, a weapons storage area, wash rack areas, spill areas, and waste pits. The potential risk to human health and the environment was significant enough for EPA to place Mather AFB on the NPL in July 1987. In 1989, DoD and EPA signed an interagency agreement (IAG) to outline how they were going to proceed with cleanup. The BRAC Commission recommended closure of Mather AFB in December 1988. In FY94, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community. In the same year, the installation formed a BRAC cleanup team to develop a process for cleanup of sites at Mather AFB. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY00 and FY05.

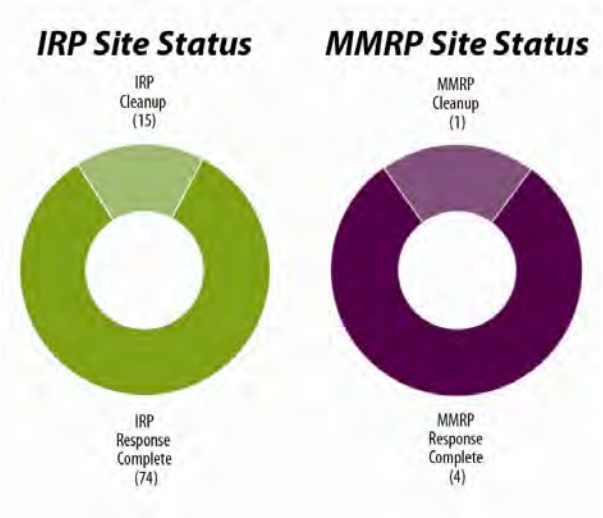
Mather AFB grouped sites into six operable units (OUs): OU 1, Aircraft Control and Warning Site; OU 2, Groundwater; OU 3, Soil; OU 4, LF; OU 5, Basewide; and OU 6, Supplemental Basewide. Mather AFB has signed Records of Decision selecting cleanup actions for OUs 1 through 6. In FY04, Mather AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Mather AFB solicited and awarded a performance-based contract, and completed the third five-year review report with EPA concurrence. The installation also achieved operating properly and successfully concurrence for LF 004. Mather AFB received regulatory review comments on demonstrations that the three Groundwater OU remedies are at operating properly and successfully. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

Mather AFB completed the site inspection and closure documentation for sites XU 400 and 403. The installation also opened a new site, XE 404, to the former installation restoration prgram (IRP) site outside training area 069.



Plan of Action

Plan of action items for Mather Air Force Base are grouped below according to program category.

IRP

- Complete operating properly and successfully reports for three groundwater OU remedies in FY11.
- Complete three closure reports for fire training (FT) sites 10C/6, LF 18, and ST 20 in FY11.
- Install two monitoring wells to satisfy data gaps identified during regulatory review of draft operating properly and successfully reports in FY11.
- Close AST site 10402/10403 in FY11.

MMRP

- Complete fieldwork at site XE 404 in FY11-FY12.

McChord Air Force Base

NPL/BRAC 2005 Realignment

FFID:	WA057182420000		July 1987 and delisted from NPL in September 1996	**Est. CTC (Comp Year):**	$ 2.4 million (FY2044)
Location (Size):	Tacoma, Washington (4,616 acres)	**IAG Status:**	FFA signed in August 1989; consent decree with State of Washington signed in February 1992	**IRP Sites (Final RIP/RC):**	65 (FY2004)
Mission:	Provide airlift services for troops, cargo, and equipment	**Contaminants:**	VOCs, SVOCs, TCE, radioactive waste, metals	**MMRP Sites (Final RIP/RC):**	8 (FY2015)
HRS Score:	31.94 (Area D/American Lake Garden Tract); placed on NPL in September 1984; 42.24 (Washrack/Treatment Area); placed on NPL in	**Media Affected:**	Groundwater and Soil	**Five-Year Review Status:**	Completed and planned
		Funding to Date:	$ 28.9 million	**IRP/MMRP Status Table:**	Refer to page E-7-55

Introduction

McChord Air Force Base (AFB) provides airlift services for troops, cargo, equipment, and mail. Sites at the installation include fire training areas, spill sites (SSs), landfills, and waste pits. The potential risk to human health and the environment was significant enough for EPA to place two sites on the NPL: the Area D/American Lake Garden Tract in September 1984, and the Washrack Treatment Area in July 1987. Air Force and EPA signed a federal facility agreement (FFA) in August 1989 to outline how they were going to proceed with cleanup. In 1992, Air Mobility Command signed a consent decree with the State of Washington. The consent decree was created for non-NPL sites. EPA delisted the Washrack Treatment Area from the NPL in September 1996. In 2005, the BRAC Commission recommended McChord AFB for realignment. To ensure continuous monitoring and improvement, the installation completed five-year review reports for the Washrack Treatment Area in FY99 and FY04, and for Area D/American Lake Garden Tract in FY00, FY05, and FY10.

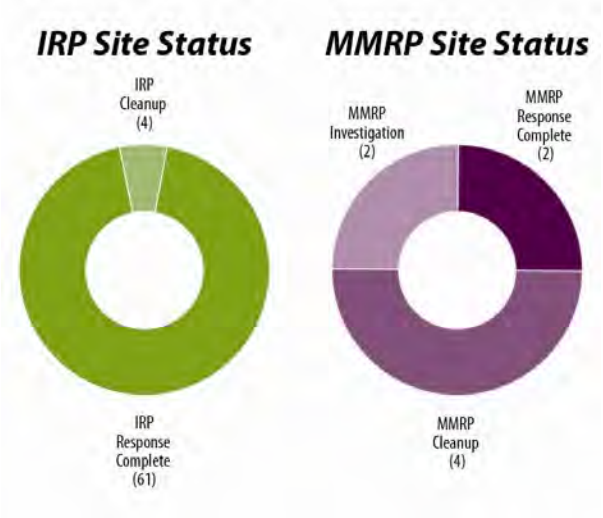
The installation evaluated 64 sites and installed several cleanup systems. Three sites are currently listed on the State's hazardous sites list and are managed through long-term monitoring and natural cleanup processes. To date, the installation has treated 600 million gallons of groundwater and recovered 52 pounds of trichloroethylene (TCE) at Area D/American Lake Garden Tract. The installation signed Records of Decision for the Washrack Treatment Area and Area D/American Lake Garden Tract, which selected cleanup actions for these sites. The installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

McChord AFB revised long-term monitoring plans and monitored SS 34N optimization progress. McChord AFB completed the five-year review report for Area D/American Lake Garden Tract. The installation continued pump-and-treat operations and began the bioenhancement pilot study at Area D/American Lake Garden Tract. The State of Washington delisted three of six McChord AFB hazardous sites.

FY10 MMRP Progress

McChord AFB finished lead cleanup at two ranges, cleared munitions from three sites, and drafted cleanup action reports. No known actionable MMRP sites remain at McChord AFB.



Plan of Action

Plan of action items for McChord Air Force Base are grouped below according to program category.

IRP

- Transfer environmental restoration responsibilities to U.S. Army, Joint Base Lewis-McChord (JBLM) in FY11.
- Continue monitoring optimization, planning, and treating of groundwater at SS 34N in FY11.
- Integrate optimized long-term monitoring program into JBLM monitoring program in FY11-FY12.
- Continue operations and maintenance at Area D/American Lake Garden Tract, apply recommendations from the bioenhancement study to the groundwater treatment in FY11-FY12.

MMRP

- Complete final MMRP cleanup action report in FY11.

McClellan Air Force Base

NPL/BRAC 1995

FFID:	CA957172433700	**Contaminants:**	Metals, cleaners and degreasers, paints, lubricants, photochemicals, phenols, SVOCs, solvents, PCBs, VOCs, radioactive material, explosives, propellants	**IRP Sites (Final RIP/RC):**	324 (FY2017)
Location (Size):	Sacramento, California (3,452 acres)			**MMRP Sites (Final RIP/RC):**	2 (FY2011)
Mission:	Provided logistics support for aircraft, missile, space, and electronics programs	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	57.93; placed on NPL in July 1987	**Funding to Date:**	$ 642.5 million	**IRP/MMRP Status Table:**	Refer to page E-6-32
IAG Status:	FFA signed in May 1990	**Est. CTC (Comp Year):**	$ 577.0 million (FY2066)		

Introduction

The mission of the former McClellan Air Force Base (AFB) was to provide support for aircraft, missile, space, and electronics programs. Environmental contamination at McClellan AFB has resulted from sumps associated with industrial operations, landfills (LFs), leaks from industrial waste lines, surface spills, and underground storage tanks. The contaminated areas total over 660 acres and consist primarily of trichloroethylene (TCE)-contaminated groundwater. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed a federal facility agreement (FFA) in May 1990 to outline how they were going to proceed with cleanup. In 1995, the BRAC Commission recommended the closure of McClellan AFB. The installation has formed a BRAC cleanup team to develop a process for cleanup of sites. In FY93, the installation converted its technical review committee, responsible for communicating cleanup progress with the community, into a Restoration Advisory Board. To ensure continuous monitoring and improvement, McClellan AFB completed two five-year review reports in FY04.

Sites at the installation are grouped into 11 Operable Units (OUs), including an OU for groundwater at the base. McClellan AFB has signed six Records of Decision (RODs), which selected cleanup actions at four OUs. The installation has transferred 530 acres, and found another 600 suitable for transfer in FY09. In FY04, McClellan AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

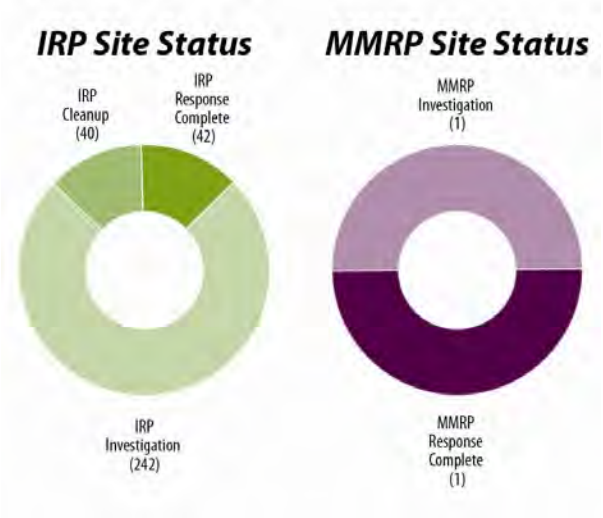
FY10 IRP Progress

McClellan AFB continued the remedial investigation (RI) and feasibility study (FS) to evaluate cleanup alternatives at focused strategic sites. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory and technical issues delayed the ROD for the follow-on strategic sites. Regulatory issues also delayed the proposed plan (PP) and RODs for Building 252, small volume sites, and ecological sites.

FY10 MMRP Progress

McClellan AFB closed the LF site formerly suspected of containing discarded military munitions contamination. The installation also completed the PP and draft ROD for the former Skeet Range.



Plan of Action

Plan of action items for McClellan Air Force Base are grouped below according to program category.

IRP

- Complete the RI/FS, ROD and design for cleanup at the follow-on strategic sites in FY11.
- Complete the PP and ROD for Building 252 in FY11.
- Resolve dispute and complete the PP and ROD for the small volume sites in FY11-FY12.
- Complete the ROD and prepare cleanup work plans for the ecological sites in FY12.
- Implement remedies for focused strategic sites beginning in FY12.

MMRP

- Complete the cleanup action at the former Skeet Range by in FY11-FY12.

Mechanicsburg Naval Inventory Control Point
Formerly Mechanicsburg Ships' Parts Control Center

NPL

FFID:	PA317002210400	**Contaminants:**	PCBs, heavy metals, pesticides, VOCs, SVOCs, dioxin	**Five-Year Review Status:**	Completed and planned
Location (Size):	Mechanicsburg, Pennsylvania (824 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-45
Mission:	Provide inventory management and supply support for weapons systems	**Funding to Date:**	$ 40.7 million		
HRS Score:	50.00; placed on NPL in May 1994	**Est. CTC (Comp Year):**	$ 2.0 million (FY2025)		
IAG Status:	FFA signed in November 2004	**IRP Sites (Final RIP/RC):**	15 (FY2011)		
		MMRP Sites (Final RIP/RC):	1 (FY2001)		

Introduction

Mechanicsburg Naval Inventory Control Point, currently Naval Support Activity (NSA) Mechanicsburg, provides inventory management and supply support for weapons systems. Historical defense industrial and inventory disposal operations have caused contamination at this installation. The potential risk to human health and the environment was significant enough for EPA to place NSA Mechanicsburg on the NPL in May 1994. DoD and EPA signed a federal facility agreement (FFA) in 2004 to outline how they were going to proceed with cleanup. Formed in FY88, a technical review committee responsible for communicating cleanup progress with the community converted to a Restoration Advisory Board in FY95. The installation created an electronic administrative record and completed a community relations plan in FY99. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY04 and FY09.

Environmental investigations conducted at NSA Mechanicsburg identified 15 Installation Restoration Program (IRP) sites. To date, the installation completed Records of Decision (RODs), which selected cleanup actions, for Sites 1, 3 (soil and groundwater), and 9. Another ROD determined that no further cleanup activities were necessary at Site 11. In addition, the installation completed Decision Documents determining no further action for Sites 2, 4, 7, 8 (groundwater), 11 through 15, and 49 lower priority areas of concern (AOCs). In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

NSA Mechanicsburg continued annual groundwater sampling at Site 3. The installation signed the final ROD and awarded a cleanup contract for Site 9. NSA Mechanicsburg also awarded a contract for soil removal and site cleanup at Site 8. NSA Mechanicsburg completed Phase I cleanup for Site 9 (segment 1), and completed the design for cleanup at Site 8.

FY10 MMRP Progress

NSA Mechanicsburg has identified no MMRP sites.

Plan of Action

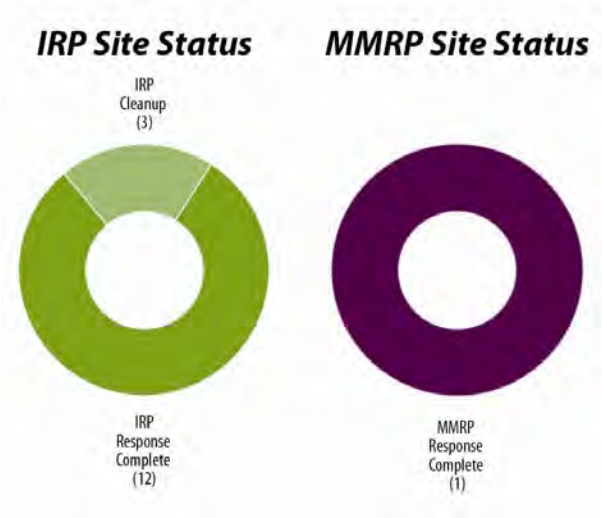
Plan of action items for Mechanicsburg Naval Inventory Control Point are grouped below according to program category.

IRP

- Complete the annual site management plan in FY11.
- Complete construction of cleanup systems and cleanup at Site 8 in FY11.
- Determine the groundwater cleanup objectives at Site 3 in FY11-FY12.
- Continue monitoring land use controls, which restrict the use of or access to Site 8 in FY11-FY12.
- Complete Phase II cleanup at Site 9 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Milan Army Ammunition Plant

NPL

FFID:	TN421382058200	**Contaminants:**	Munitions-related wastes, SVOCs, metals, explosives, propellants	**Five-Year Review Status:**	Completed and underway
Location (Size):	Milan, Tennessee (22,357 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-152
Mission:	Load, assemble, pack, ship, and demilitarize explosive ordnance	**Funding to Date:**	$ 171.8 million		
HRS Score:	58.15; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 50.0 million (FY2044)		
IAG Status:	IAG signed in 1989	**IRP Sites (Final RIP/RC):**	41 (FY2014)		
		MMRP Sites (Final RIP/RC):	3 (FY2011)		

Introduction

The Milan Army Ammunition Plant (AAP) handles explosive ordnance. In FY91, Milan AAP discovered the explosive compound RDX in the City of Milan's municipal water supply wells. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed an interagency agreement (IAG) in 1989 to outline how they were going to proceed with cleanup. In FY94, the installation formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, Milan AAP completed five-year review reports in FY01 and FY05.

To date, the installation has signed six Records of Decision (RODs), selecting cleanup actions for 15 sites. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Milan AAP submitted the draft five-year review report to EPA. EPA approved the installation of a pipeline to route contaminated groundwater formerly treated at Operable Unit (OU) 1 to OU 3 and to shut down OU 1. The installation completed the first year of long-term monitoring in accordance with the Long-term Monitoring Plan and the Dispute Resolution Agreement. In addition, Milan AAP continued work at OU 5 to characterize soils in support of the feasibility study (FS) to evaluate cleanup alternatives and received approval for a final FS addendum. The installation submitted a proposed plan (PP) and draft ROD for OU 5 to EPA; EPA approved the FS and the PP for OU 5. The cost of completing environmental restoration has changed significantly due to technical issues.

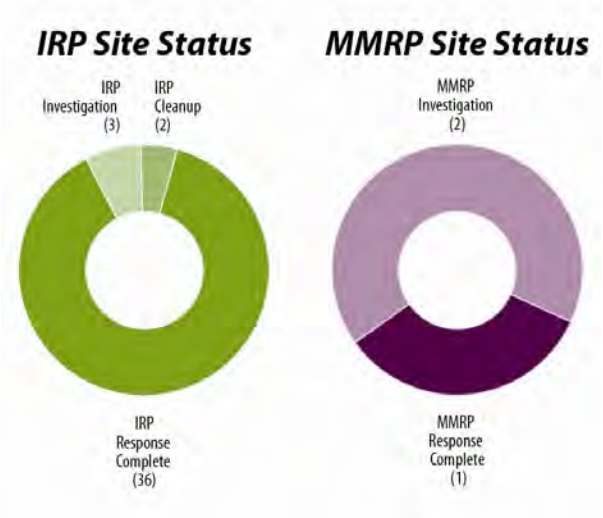
Technical issues delayed completion of the five-year review report and the ROD for groundwater at OUs 1 and 3.

The RAB met quarterly to discuss cleanup activities.

FY10 MMRP Progress

Milan AAP completed the Final Explosives Site Plan as part of the remedial investigation (RI) and FS at the Burning Ground and Sunny Slope, as approved by the Department of Defense Explosives Safety Board and the U.S. Army Technical Center for Explosive Safety. After receiving stakeholder approval, the installation completed the RI/FS work plan and began fieldwork at sites at the Burning Ground and Sunny Slope.

Technical issues delayed completion of the RI/FS reports.



Plan of Action

Plan of action items for Milan Army Ammunition Plant are grouped below according to program category.

IRP

- Complete a five-year review report in FY11.
- Continue well monitoring for all contaminated groundwater and long-term monitoring of soil at OUs 3 and 4 in FY11.
- Finalize the ROD for soil and implement cleanup actions at OU 5 in FY11.
- Submit a Final Remedial Action Completion Report for OU 4 in FY11.
- Complete the Supplemental Site Characterization Plan for site-wide groundwater in FY11-FY12.
- Complete ROD for groundwater at OUs 1 and 3 in FY11-FY12.

MMRP

- Complete RODs for sites at the Burning Ground and Sunny Slope in FY11.
- Complete RI/FS reports in FY11-FY12.

Military Ocean Terminal Concord

NPL

FFID:	CA921350696A00	**Contaminants:**	Heavy metals, petroleum hydrocarbons, VOCs, SVOCs, BTEX, explosives, and propellants.	**Five-Year Review Status:**	Completed and planned
Location (Size):	Concord, CA (4,324 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-22
Mission:	Ships, receives, inspects, and classifies munitions (Tidal Area).	**Funding to Date:**	$ 12.5 million		
HRS Score:	30.00; placed on NPL in December 1994	**Est. CTC (Comp Year):**	$ 69.6 million (FY2018)		
IAG Status:	FFA signed in November 2009	**IRP Sites (Final RIP/RC):**	49 (FY2013)		
		MMRP Sites (Final RIP/RC):	4 (FY2018)		

Introduction

Military Ocean Terminal Concord (MOTCO) ships, receives, inspects, and classifies munitions. These activities resulted in the contamination of surface water and sediment at the Tidal Area, which includes tidal and litigation area sites. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in December 1994 when it was part of Naval Weapons Station Concord. DoD and EPA signed a federal facility agreement (FFA) in November 2009 to outline how they would proceed with cleanup. The BRAC Commission recommended realignment of the Tidal Area, and in 2008, the final BRAC determination transferred the Tidal Area from Naval Weapons Station Concord to the Army. Under Naval Weapons Station Concord, the installation received funding for technical assistance for public participation and updated the community relations plan in FY03. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY03 and FY10.

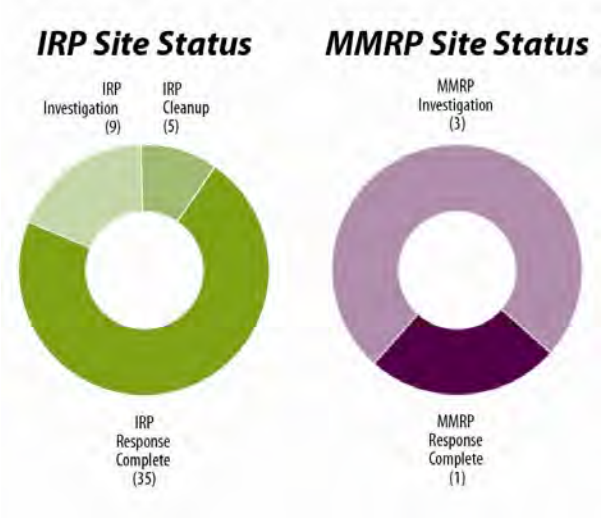
To date, the installation determined no further cleanup action was necessary for Site 28. In 2009, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); four MMRP sites were identified.

FY10 IRP Progress

MOTCO prepared a work plan for a geotechnical survey of the Site 1 Landfill (LF) to complete the LF cap. In addition, the installation prepared a remedial investigation (RI) work plan addendum to install three new monitoring wells and collect groundwater data at Site 1. MOTCO continued long-term management (LTM) and completed the five-year review report for Litigation Area Sites 3 through 6, 25, 26, and 28. The installation continued work on the cleanup closure documentation for Site 30. The cost of completing environmental restoration has changed significantly due to technical issues.

FY10 MMRP Progress

MOTCO conducted a site inspection (SI) and submitted a draft historical records review report to stakeholders. The installation recommended an RI and feasibility study (FS) to evaluate cleanup alternatives at the four sites.



Plan of Action

Plan of action items for Military Ocean Terminal Concord are grouped below according to program category.

IRP

- Complete geotechnical investigation and redesign of the LF cap at Site 1 in FY11.
- Complete work plan addendum, conduct the field investigation, and initiate the RI at Site 1 in FY11.
- Continue LTM at Litigation Area Sites 3 through 6, 25, 26, and 28 in FY11.
- Finalize the closure documents for Site 30 in FY11.
- Prepare the SI and conduct SI field investigations at Sites 38, 39, and 40 in FY11.
- Develop alternative for the cleanup plan and Record of Decision (ROD) at Sites 32 and 33 in FY11.
- Finalize the proposed plan (PP), prepare the ROD, and cleanup Sites 2, 9, and 11 in FY11-FY12.
- Finalize the FS and prepare the PP and ROD for Site 31 in FY11-FY12.

MMRP

- Initiate the RI/FS at Sites 7, 8, and 9 in FY11-FY12.

Mississippi Army Ammunition Plant

BRAC 2005 Closure

FFID:	MS421382296600	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-32
Location (Size):	Hancock County, Mississippi (4,214 acres)	**Funding to Date:**	$ 1.1 million		
Mission:	Managed, developed, tested, and manufactured the improved conventional munitions artillery	**Est. CTC (Comp Year):**	$ 0.0 million (FY2012)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	45 (FY1990)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	2 (FY2012)		
Contaminants:	Metals and solvents	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.		

Introduction

Mississippi Army Ammunition Plant (AAP), the only ammunition plant the Army built after the Korean Conflict, served the War Department in the 1940s as a bombing and gunnery range. From 1969 to 1980, Edgewood Arsenal conducted pyrotechnic testing at the Mississippi AAP Kellar Test Range. In 1978, the Army obtained an irrevocable 50-year permit and leased 7,148 acres from NASA to expand construction and operations of Mississippi AAP on the John C. Stennis Space Center. In 1980, the U.S. Army Munitions Production Base Modernization Agency moved the range activities to a more remote location to allow Edgewood Arsenal to continue its operations. In 1990, DoD placed Mississippi AAP on inactive status, and the equipment and facilities were placed in layaway. Ammunition production ceased in FY92, and DoD made the plant available to the private sector to provide or produce commercial services and products through facility-use contracts. In 2005, the BRAC Commission recommended closure of Mississippi AAP.

To date, Mississippi AAP has completed 4 amendments to the 50-year permit with NASA, returning 2,934 acres to NASA. In FY03, the installation completed an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); two MMRP sites were identified.

FY10 IRP Progress

Mississippi AAP completed work plans for the remedial investigation (RI) / feasibility study (FS) to evaluate cleanup alternatives at Site 014.

FY10 MMRP Progress

Mississippi AAP completed the RI at the Spin Launch Test Site.

Plan of Action

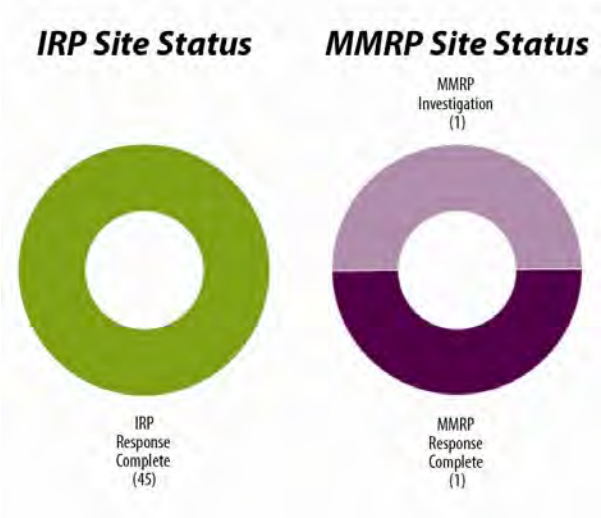
Plan of action items for Mississippi Army Ammunition Plant are grouped below according to program category.

IRP

- Complete RI/FS and conduct vapor intrusion and groundwater monitoring studies in FY11-FY12.
- Complete Record of Decision to select cleanup actions in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Moffett Field Naval Air Station

NPL/BRAC 1991

FFID:	CA917002323800	**IAG Status:**	FFA signed in September 1990	**IRP Sites (Final RIP/RC):**	35 (FY2021)
Location (Size):	Sunnyvale, California (3,097 acres)	**Contaminants:**	Pesticides, SVOCs, explosives, propellants, VOCs, petroleum hydrocarbons, heavy metals, solvents	**MMRP Sites (Final RIP/RC):**	None
Mission:	Served as host to 7th Infantry Division (Light); supports the Defense Language Institute Foreign Language Center, currently at the Presidio of Monterey, California	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	42.24; placed on NPL in February 1987	**Funding to Date:**	$ 185.9 million	**IRP/MMRP Status Table:**	Refer to page E-6-27
		Est. CTC (Comp Year):	$ 61.4 million (FY2042)		

Introduction

Moffett Field Naval Air Station (NAS) was headquarters of the Commander, Patrol Wings U.S. Pacific Fleet. At that time, Moffett Field NAS was the largest P-3 base in the world and was responsible for submarine patrol operations across the Pacific. Sites at the installation include landfills, underground storage tanks, a burn pit, ditches, holding ponds, wetland sediments, French drains, maintenance areas, and fuel spill sites. Contaminants include polychlorinated biphenyls (PCBs), petroleum products, DDT, chlorinated solvents, and heavy metals. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed a federal facility agreement (FFA) in FY90, amended in FY94 and FY01, which outlined how they were going to proceed with cleanup. In July 1991, the BRAC Commission recommended closure of the installation. The installation closed on July 1, 1994 and transferred to NASA. The Naval Air Manor property transferred to a neighboring city. The associated Moffett Community Housing was transferred to the Army. In FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. The BRAC cleanup team completed a BRAC cleanup plan to prioritize sites requiring environmental restoration, which was updated in FY97. The installation completed a community relations plan and established an information repository in FY89; the community relations plan was updated in FY02. The installation formed a technical review committee, which was responsible for communicating cleanup progress with the community, and converted it to a Restoration Advisory Board in FY95. To ensure continuous monitoring and improvement, the installation completed a five-year review report for two groundwater sites in FY03, another report for Site 1 in FY07, and a report for the base in FY10.

The installation divided sites into seven operable units (OUs). To date, the installation has completed Records of Decision (RODs), which determined that no further cleanup activities were necessary at environmental restoration sites. The installation has also completed RODs selecting cleanup actions for OU 1 and Sites 22 and 26 through 28. The installation has closed 35 petroleum sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

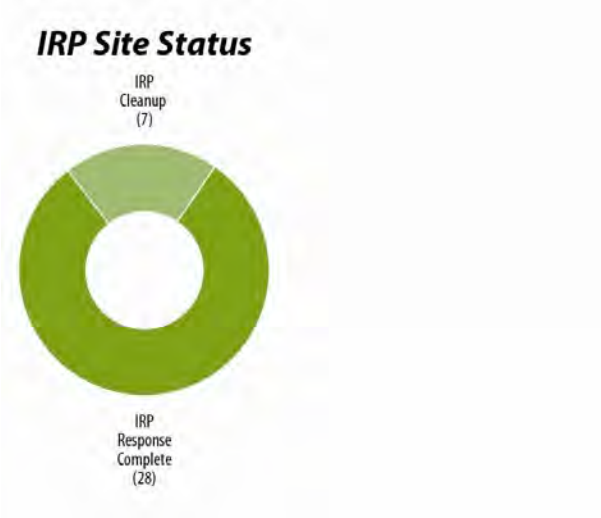
FY10 IRP Progress

Moffett Field NAS completed the design for the removal action at Site 29 (Hangar 1) and began the design for cleanup at Site 25. The installation also completed the five-year review report for the base. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed closeout concurrence at Site 27.

FY10 MMRP Progress

Moffett Field NAS has identified no MMRP sites.



Plan of Action

Plan of action items for Moffett Field Naval Air Station are grouped below according to program category.

IRP

- Obtain closeout concurrence at Site 27 in FY11.
- Complete design for cleanup at Site 25 in FY11-FY12.
- Complete an optimization study to identify opportunities for streamlining cleanup at Sites 26 and 28 in FY11-FY12.
- Continue with removal action at Site 29 (Hangar 1) in FY11-FY12.
- Begin feasibility study to evaluate cleanup alternatives for the ROD at Site 26 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Moses Lake Wellfield Contamination Site
Formerly Larson Air Force Base

NPL

FFID:	WA09799F331700	**Contaminants:**	VOCs (specifically TCE)	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Location (Size):	Moses Lake, Washington (9,607 acres)	**Media Affected:**	Groundwater	**IRP/MMRP Status Table:**	Refer to page E-7-55
Mission:	Served as tactical air command, air transport, and strategic air command base; provided pilot training	**Funding to Date:**	$ 19.6 million		
		Est. CTC (Comp Year):	$ 0.4 million (FY2013)		
HRS Score:	50.00; placed on NPL in October 1992	**IRP Sites (Final RIP/RC):**	3 (FY2013)		
IAG Status:	IAG signed in March 1999	**MMRP Sites (Final RIP/RC):**	None		

Introduction

Larson Air Force Base (AFB) first served as a Tactical Air Command base, then as a military air transport facility, and later as a Strategic Air Command base. DoD sold the Port of Moses Lake property in 1966; the property is now operated by the Grant County Airport. The former Larson AFB property primarily served as a regional aviation, industrial, and educational facility. The U.S. Army Corps of Engineers (USACE) conducted environmental assessments, which began in FY87, and identified 4 sites that required further investigation: 11 underground storage tanks and the associated potentially contaminated soil, groundwater contaminated with trichloroethylene (TCE), an area potentially containing low-level radioactive waste, and 2 disposal areas potentially containing tetraethyl lead. The potential risk to human health and the environment was significant enough for EPA to place the property (Moses Lake) on the NPL in October 1992. DoD and EPA signed an interagency agreement (IAG) in March 1999 to outline how they were going to proceed with cleanup. In 1999, USACE established a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community. The RAB dissolved in September 2003.

FY10 IRP Progress

Larson AFB coordinated with EPA and the Department of Justice regarding settlement actions, and continued sampling and long-term management (LTM) of residential wells and whole house filters in FY10.

FY10 MMRP Progress

USACE has identified no sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP).

Plan of Action

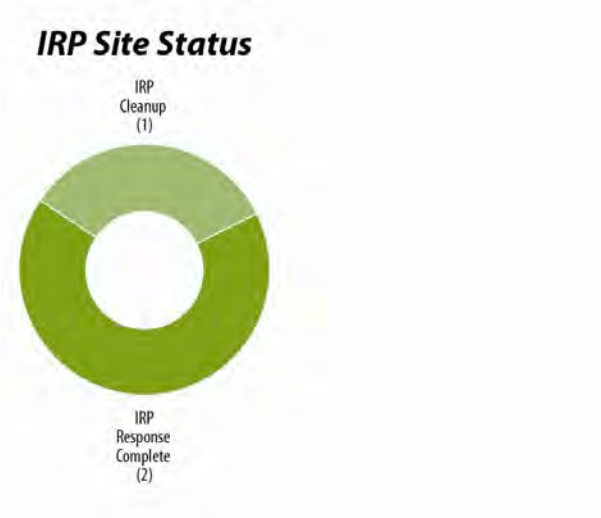
Plan of action items for Moses Lake Wellfield Contamination Site are grouped below according to program category.

IRP

- Continue coordination with EPA and the Department of Justice to complete settlement actions in FY11.
- Continue sampling and LTM of residential wells and whole house filters in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Mountain Home Air Force Base

NPL/BRAC 2005 Realignment

FFID:	ID057212455700	**Media Affected:**	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-22
Location (Size):	Mountain Home, Idaho (6,000 acres)	**Funding to Date:**	$ 19.7 million		
Mission:	Provide composite combat air power worldwide	**Est. CTC (Comp Year):**	$ 3.2 million (FY2011)		
HRS Score:	NA; placed on NPL in August 1990	**IRP Sites (Final RIP/RC):**	38 (FY2011)		
IAG Status:	FFA signed in January 1992	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	VOCs, POLs, heavy metals	**Five-Year Review Status:**	Completed and planned		

Introduction

The mission of Mountain Home Air Force Base (AFB) is to provide composite combat air power worldwide. Sites identified at the installation include landfills (LFs), fire training (FT) areas, a fuel hydrant system spill area, disposal pits, surface runoff areas, wash racks, ditches, underground storage tanks, petroleum/oil/lubricant (POL) lines, and a low-level radioactive material disposal site. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed a federal facility agreement (FFA) in January 1992 to outline how they were going to proceed with cleanup. The 2005 BRAC Commission recommended Mountain Home AFB for realignment. In FY94, the installation converted its technical review committee, responsible for communicating cleanup progress with the community, into a Restoration Advisory Board (RAB). In FY00, the installation updated the community relations plan. To ensure continuous monitoring and improvement, Mountain Home AFB completed five-year review reports in FY01 and FY06.

To improve and accelerate site characterization, the installation grouped sites into operable units (OUs). The installation has signed one Record of Decision (ROD), which selected cleanup actions for OUs 1, 3, 5, and 6; the lagoon LF; and FT Area 8. The installation also signed RODs determining that no further cleanup actions were necessary at OUs 2 and 4. In FY05, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Mountain Home AFB completed field activities and pilot tests, and submitted a draft final report of vapor cleanup and monitoring for Storm Drain (SD)-24. The installation completed the ROD Amendment for groundwater at OU-3. Mountain Home AFB also completed construction of a soil vapor extraction system at ERP Site Storage Tank (ST)-11 (Fuel System Hydrant Line Leak). In addition, the installation completed sampling and determined a removal action at LF-23 (Coal Ash Landfill) was not necessary, and that land use controls, to restict access to and use of the site, would adequately protect human health.

The installation held a RAB meeting to discuss cleanup at ST-11.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.

Plan of Action

Plan of action items for Mountain Home Air Force Base are grouped below according to program category.

IRP

- Obtain signature and finalize the ROD Amendment for OU-3 in FY11.
- Prepare explanation of significant differences document with the ROD in FY11.
- Operate the soil vapor extraction system at ST-11 and FT-08 in FY11.
- Obtain regulatory concurrence on and complete vapor cleanup at SD-24 in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Myrtle Beach Air Force Base

BRAC 1991

FFID:	SC457002482100	**Contaminants:**	Paints, POLs, thinners, waste oils, SVOCs, explosives, propellants, spent solvents, fuels, VOCs, metals, asbestos	**MMRP Sites (Final RIP/RC):**	1 (FY2003)
Location (Size):	Myrtle Beach, South Carolina (3,937 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Served as host to a tactical fighter wing	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-47
HRS Score:	N/A	**Funding to Date:**	$ 68.9 million		
IAG Status:	N/A	**Est. CTC (Comp Year):**	$ 2.1 million (FY2034)		
		IRP Sites (Final RIP/RC):	192 (FY2011)		

Introduction

Myrtle Beach Air Force Base (AFB) formerly housed a tactical fighter wing. Sites identified at the installation include landfills, weathering pits, fire training areas, drainage ditches, hazardous waste storage areas, maintenance areas, underground storage tanks, explosive ordnance areas, fuel storage areas, a small arms firing range, and a lead-contaminated skeet range. Contaminants include petroleum/oil/lubricants (POLs), heavy metals, and volatile organic compounds (VOCs). The 1991 BRAC Commission recommended closure of Myrtle Beach AFB and the installation closed in 1993. In FY93, a joint management team assumed the role of the BRAC cleanup team to develop a process for cleanup of sites at Myrtle Beach AFB. In FY96 and FY04, the BRAC cleanup team updated the BRAC cleanup plan, which incorporates community input to prioritize sites requiring environmental restoration. In FY94, the installation formed a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community; the RAB adjourned in FY10.

To date, Myrtle Beach AFB has transferred all property. In FY04, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified. In FY08, Myrtle Beach AFB completed closure documentation for its only MMRP site, the former explosive ordnance disposal.

FY10 IRP Progress

Myrtle AFB completed one decision document (DD), which selected cleanup actions at FT016, and one operating properly and successfully document. The installation also completed one interim cleanup measure, resulting in regulatory approval of the operating properly and successfully operating properly and successfully determination. Cleanup optimization was implemented at two sites in FY10 including enhanced bioremediation using site specific amendments. In addition, the installation transferred the final three acres of property.

Administrative issues delayed one DD.

The installation formally adjourned the RAB.

FY10 MMRP Progress

The installation conducted no MMRP actions.

Plan of Action

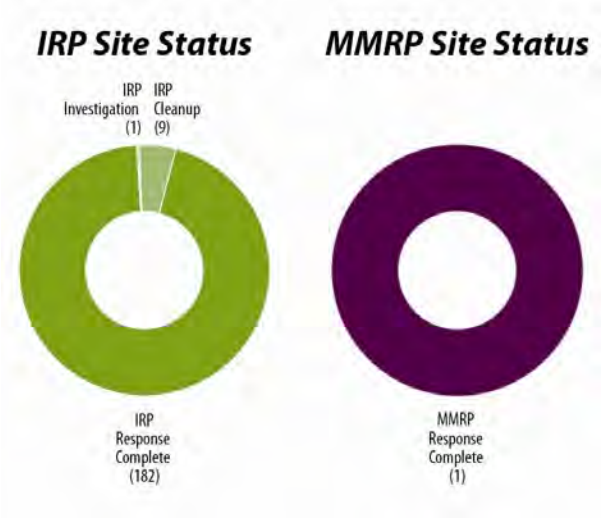
Plan of action items for Myrtle Beach Air Force Base are grouped below according to program category.

IRP

- Complete one DD in FY11.
- Complete follow-on injections for chemical oxidation and enhanced bioremediation to satisfy cleanup optimization findings at two sites in FY11.
- Finalize land use controls, which restrict the use of or access to sites, and management plans for two sites in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



FFID:	GU917309951900	**Contaminants:**	Metals, pesticides, PAHs, PCBs, VOCs, SVOCs, radioactive materials, phenols, BTEX	**Five-Year Review Status:**	Completed and planned
Location (Size):	Yigo, Guam (15,000 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-63
Mission:	Provide troops, equipment, and facilities in the Pacific	**Funding to Date:**	$ 129.7 million		
HRS Score:	50.00; placed on NPL in October 1992	**Est. CTC (Comp Year):**	$ 88.8 million (FY2024)		
IAG Status:	FFA signed in March 1993	**IRP Sites (Final RIP/RC):**	90 (FY2015)		
		MMRP Sites (Final RIP/RC):	16 (FY2020)		

Introduction

The mission of Andersen Air Force Base (AFB) is to provide troops, equipment, and facilities in the Pacific. Preliminary assessments have identified landfills (LFs), waste pits (WPs), fire training areas (FTAs), hazardous waste storage areas (HWSAs), and spill sites. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in October 1992. DoD and EPA signed a federal facility agreement (FFA) in March 1993 to outline how they were going to proceed with cleanup. The 2005 BRAC Commission recommended Andersen AFB for realignment. In 1995, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. To ensure continuous monitoring and improvement, Andersen AFB completed a five-year review report in FY04.

Sites identified at Andersen AFB are grouped into six operable units (OUs). To date, the installation has signed Records of Decision (RODs) for the Marianas Bonins OU, the Urunao OU, and LFs 8 and 13; the RODs selected cleanup actions for these sites. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

NSA Andersen Guam began remedial investigation (RI) and feasibility study to evaluate cleanup alternatives for Area of Concern 81, FTA 3, Building 18006, and LF 19. The installation also conducted long-term management at LF 2, 8, 10, and 17; WPs 1 and 7; and FTA 2. NSA Andersen Guam completed cleanup completion reports for Urunao Dump Sites 1 and 2 and conducted groundwater sampling rounds 28 and 29. The installation also completed the second five-year review report for Marianas Bonins OU and transferred environmental restoration responsibilities to Navy Base Guam.

Administrative issues delayed the ROD for LFs 14 and 18; WP3: FTA 2; HWSA 1; Building 18006; and operation support buildings Sites 1, 2, and 3.

FY10 MMRP Progress

Regulatory issues delayed the start of the site inspection (SI) field work.

Plan of Action

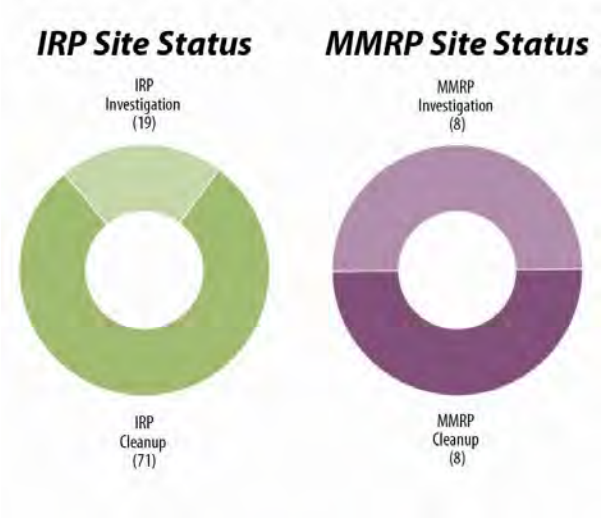
Plan of action items for NSA Andersen Guam are grouped below according to program category.

IRP

- Begin removal actions Site 41, 42, 43; Sites 47, 51, and 53; Site 50 in FY11-FY12.
- Begin remedial design for LF 14 in FY11-FY12.
- Conduct long-term management at LF 2, 8, 10 and 17; WPs 1 and 7 in FY11-YF12.
- Continue groundwater monitoring at LF 8 and 20 in FY11-FY12.
- Finalize ROD for LFs 14 and 18; WP3; FTA 2; HWSA 1; Building 18006; and operations support buildings Site 1, 2, and 3 in FY11-FY12.

MMRP

- Finalize SI report in FY11-FY12.
- Begin RI for UXO site 00004A in FY11-FY12.



Naval Activity Puerto Rico
Former Naval Station, Roosevelt Roads, Puerto Rico

BRAC

FFID:	PR217004000300, PR217002758200	**Contaminants:**	Petroleum hydrocarbons, VOCs, SVOCs, PCBs, metals	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Location (Size):	Ceiba, Puerto Rico (8,432 acres)	**Media Affected:**	Surface Water, Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-140 and E-7-45
Mission:	Provided training and support to Atlantic Fleet operations in the Caribbean	**Funding to Date:**	$ 65.2 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 58.1 million (FY2041)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	121 (FY2017)		
		MMRP Sites (Final RIP/RC):	3 (FY2017)		

Introduction

Naval Station (NS) Roosevelt Roads began operations in 1943 as a Naval Operations Base to provide training and support to Atlantic Fleet operations in the Caribbean. Since the early 1960s, NS Roosevelt Roads' major mission had been to support the Atlantic Fleet Weapons Training Facility's training missions on Vieques Island, located approximately 7.5 miles east of NS Roosevelt Roads. The Naval Training Range on Vieques transferred to the Department of the Interior in May 2003, and all of the training activities have since ceased. In response to this action, NS Roosevelt Roads closed in March 2004. The real estate disposal/transfer was carried out in accordance with procedures outlined in BRAC 1990. In FY04, the Navy established Naval Activity (NA) Puerto Rico to serve as the caretaker of the real property associated with the former NS Roosevelt Roads and to assist in the transfer of the property. The installation established a Restoration Advisory Board in FY07 to communicate cleanup progress with the community.

To date, NA Puerto Rico has transferred 4,856 acres: 4,634 acres transferred to the Commonwealth of Puerto Rico, 28 acres to the Episcopal Services Hospital, 141 acres to the Town of Ceiba, and 53 acres to the Army. The installation conducted an inventory of sites suspected to contain munitions contamination under the Military Munitions Response Program (MMRP); one MMRP site was identified.

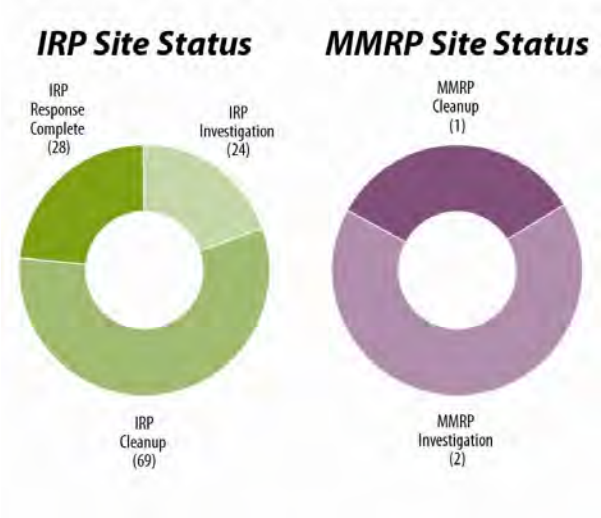
FY10 IRP Progress

NA Puerto Rico began investigations at Solid Waste Management Units (SWMUs) 27 through 29, 61, 62, 70, 71, 73, 78 through 80, and Area of Concern (AOC) E. In addition, the installation completed Phase I investigative fieldwork for SWMU 57. The installation also completed an investigation for SWMUs 7 and 8, and a report requesting no further action at SWMUs 13, 46, 53, and AOC C.

Technical issues delayed completion of the interim corrective measures at SWMU 1 and 2, and the start of cleanup at SWMU 69. Regulatory issues delayed completion of corrective measures at SWMU 68, and the start of cleanup at SWMUs 14 and 56.

FY10 MMRP Progress

NA Puerto Rico completed Phase I investigative fieldwork at Piñeros Island and Unexploded Ordnance (UXO) 1.



Plan of Action

Plan of action items for Naval Activity Puerto Rico are grouped below according to program category.

IRP

- Complete interim corrective measures at SWMUs 1, 2, and 68 in FY11.
- Begin cleanup at SWMU 14, 56, 68, and 69 in FY11.
- Complete corrective measure at SWMUs 45 and 68 in FY11.
- Close SWMUs 27, 28, and 29 in FY12.

MMRP

- Conduct full investigation at UXO 1 in FY11.
- Conduct Phase I investigation at underwater areas of Piñeros Island and UXO 2 in FY11.

Naval Air Station Brunswick

NPL/BRAC 2005 Closure

FFID:	ME117002201800	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-88
Location (Size):	Brunswick, Maine (7,259 acres)	**Funding to Date:**	$ 91.9 million		
Mission:	Provides facilities, services, materials, and aircraft for submarine warfare	**Est. CTC (Comp Year):**	$ 45.4 million (FY2041)		
HRS Score:	43.38; placed on NPL in July 1987	**IRP Sites (Final RIP/RC):**	25 (FY2011)		
IAG Status:	FFA signed in 1989; revised in 1990	**MMRP Sites (Final RIP/RC):**	3 (FY2017)		
Contaminants:	DDT, PCBs, PAHs, VOCs, SVOCs, metals	**Five-Year Review Status:**	Completed and planned		

Introduction

Naval Air Station (NAS) Brunswick supports activities for submarine warfare. Activities that contributed to contamination include intermediate aircraft maintenance, material support for maintenance, aircraft fueling services, storage and disposal of ordnance, and all-weather air station operations. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed a federal facility agreement (FFA) in 1989, revised in 1990 to include the State of Maine, to outline how they were going to proceed with cleanup. The installation established an administrative record and information repository in FY87; the administrative record was updated in FY07 and FY09. The community relations plan was completed in FY88, and updated in FY08. A technical review committee was formed in FY88, responsible for communicating cleanup progress with the community, and converted to a Restoration Advisory Board in FY95. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01, FY05, and FY10.

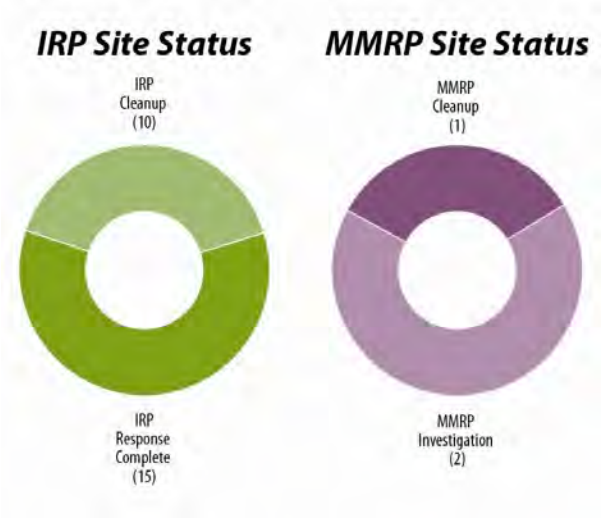
To date, the installation has completed a Record of Decision (ROD), which selected cleanup actions for the eastern groundwater contaminated area, three underground storage tanks, and a waste pit. The installation also has signed a ROD for Sites 2, 4, 7, 9, 11, 13, and the eastern groundwater contaminated area treatment plants. The installation also completed documentation that declared no further cleanup action was necessary for Sites 14 through 16, and 18. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

NAS Brunswick completed a five-year review report, fieldwork on a background study work plan, and replaced two extraction wells. The installation completed a remedial investigation (RI) report and began operating the 1,4-dioxane treatment system at the eastern contaminated area. In addition, the installation began cleanup of petroleum and completed soil cleanup at the Naval Exchange. NAS Brunswick also completed background fieldwork sampling and removed and disposed of at least 100 tons of lead-contaminated soils. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

NAS Brunswick completed the removal action memorandum, and munitions surface removal at Site 12B.



Plan of Action

Plan of action items for Naval Air Station Brunswick are grouped below according to program category.

IRP

- Complete removal action of pesticide-contaminated soils, RI and feasibility study, proposed cleanup plan, and ROD for Site 17 in FY11.
- Monitored natural attenuation of petroleum in groundwater at Naval Exchange in FY11-FY12.
- Complete historical radiological assessment in FY11-FY12.
- Complete the explanation of significant differences with the ROD for Sites 1/3, 2, 7, 9, and 11/Eastern Plume in FY11-FY12.

MMRP

- Complete cleanup at the Topsham Skeet Range in FY11-FY12.
- Complete RI at Site 12B in FY11-FY12.
- Accomplish groundwater assessment at Unexploded Ordnance site 1 in FY11-FY12.

Naval Auxiliary Landing Field Crows Landing

BRAC 1991

FFID:	CA917002757500	**IAG Status:**	N/A	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Crows Landing, California (1,527 acres)	**Contaminants:**	Petroleum products, solvents, refuse, ordnance, incinerator wastes, VOCs, SVOCs, metals	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Mission:	Served as auxiliary airfield for Moffett Field operations; used for practice operations by other Components during the 1970s and 1980s and as a research and development site by NASA	**Media Affected:**	Soil and Groundwater	**IRP/MMRP Status Table:**	Refer to page E-7-7
		Funding to Date:	$ 30.3 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 7.0 million (FY2021)		
		IRP Sites (Final RIP/RC):	9 (FY2013)		

Introduction

The Naval Auxiliary Landing Field (NALF) Crows Landing was commissioned in May 1943, and served primarily as an auxiliary airfield for Moffett Field operations. In July 1991, the BRAC Commission recommended closure of NALF Crows Landing. In FY94, the installation closed and transferred to NASA. Congress authorized NASA to transfer the facility to Stanislaus County in FY99. In FY94, the installation formed a BRAC cleanup team to develop a process for the cleanup of sites. The team completed a BRAC cleanup plan with community input, which was updated in FY97, to prioritize sites requiring environmental cleanup. The installation established an information repository in FY89. In addition, the installation developed an environmental business plan and a community relations plan, both of which were updated in FY01. The installation updated the community relations plan again in FY02.

To date, NALF Crows Landing has transferred approximately 85 percent of the original acreage to the county. Regulatory oversight agencies have concurred on no further cleanup action for eight Installation Restoration Program (IRP) sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

NALF Crows Landing completed a bioremediation pilot study and drafted a feasibility study (FS) to evaluate cleanup alternatives for Site 17. In addition, the installation continued groundwater monitoring at Site 17 and the adjacent off-site area.

FY10 MMRP Progress

NALF Crows Landing has identified no MMRP sites.

Plan of Action

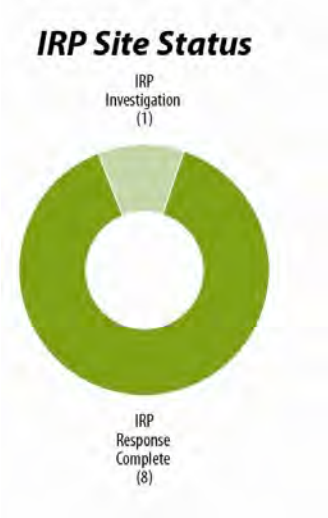
Plan of action items for Naval Auxiliary Landing Field Crows Landing are grouped below according to program category.

IRP

- Complete FS, proposed plan, and draft Record of Decision, which will select cleanup actions for Site 17 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Naval Computer and Telecommunications Area Master Station, Pacific

NPL

FFID:	HI917002438800	**Contaminants:**	PCBs, metals, petroleum hydrocarbons, VOCs, SVOCs	**Five-Year Review Status:**	Planned
Location (Size):	Wahiawa and Lualualei, Hawaii (2,400 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-69
Mission:	Operate and maintain communications facilities and equipment for naval shore installations and fleet units in the eastern Pacific	**Funding to Date:**	$ 31.0 million		
HRS Score:	50.00; placed on NPL in May 1994	**Est. CTC (Comp Year):**	$ 22.2 million (FY2017)		
IAG Status:	FFA signed March 2009	**IRP Sites (Final RIP/RC):**	30 (FY2016)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

The Naval Computer and Telecommunications Area Master Station (NCTAMS), Pacific operates and maintains two communications facilities on the island of Oahu, but conducts industrial operations primarily at the main station and receiver site in Wahiawa and the Naval Radio Transmitting Facility in Lualualei. The restoration program has focused on the Wahiawa and Lualualei facilities, where operation and maintenance of electrical transformers and switches have been the primary sources of contamination. Primary contaminants include metals and petroleum hydrocarbons. The potential risk to human health and the environment from detected polychlorinated biphenyl (PCB)-contaminated soil in work and residential areas was significant enough for EPA to place the installation on the NPL in May 1994. DoD and EPA signed a federal facility agreement (FFA) in FY09 to outline how they were going to proceed with cleanup. Since the installation consisted of two primary facilities, it established two Restoration Advisory Boards to discuss cleanup progress with the community. The installation completed the final community relations plan in FY95.

To date, the installation has signed 4 Records of Decision (RODs) which selected cleanup actions for Sites 1, 2, 15, 19, and 22. The installation determined that no further cleanup action was necessary for Site 14 and underground storage tank Sites 6 and 22. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

NCTAMS, Pacific completed the remedial investigation (RI) work plans for Sites 4, 10, and 18, and completed the site inspection work plan for Site 3. The installation completed RODs for Sites 1 and 2.

Administrative issues delayed completion of the RI and feasibility study (FS) to evaluate cleanup alternatives for Sites 6 and 24; an FS is no longer expected for these sites. Administrative issues also delayed RODs for Sites 5, 6, and 24.

FY10 MMRP Progress

NCTAMS, Pacific has identified no MMRP sites

Plan of Action

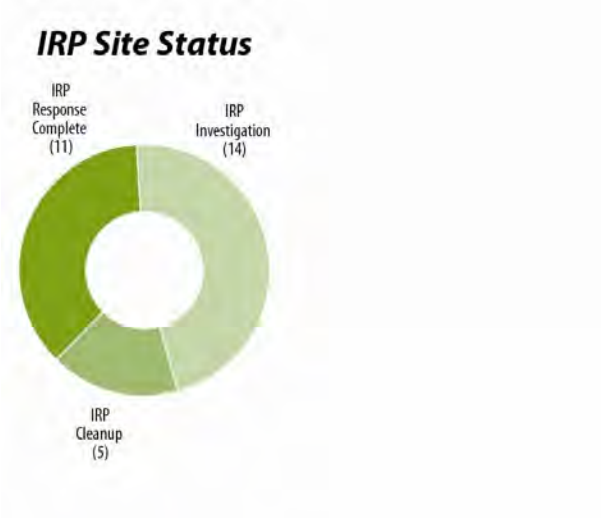
Plan of action items for Naval Computer and Telecommunications Area Master Station, Pacific are grouped below according to program category.

IRP

- Complete ROD for Sites 5, 6, and 24 in FY11.
- Complete RI report for Sites 6, 10, 11, and 24 in FY11-FY12.
- Complete RI work plan for Sites 3, 7, 11, 13, 21, and 23 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Naval Facilities on Vieques
Formerly Vieques Naval Training Range and Naval Ammunition Support

NPL

FFID:	PR217300007400, PR217003172000, PR217006932100	**HRS Score:**	NA; placed on NPL in February 2005	**IRP Sites (Final RIP/RC):**	28 (FY2016)
Location (Size):	Vieques, PR (22,687 acres)	**IAG Status:**	FAA signed in September 2007	**MMRP Sites (Final RIP/RC):**	18 (FY2022)
Mission:	Provided ground warfare and amphibious training for marines, naval gunfire support training, and air to ground training. Provided munitions storage for Atlantic Fleet training	**Contaminants:**	Pesticides, PCBs, gasoline, explosives, land waste oil, metals, VOCs, SVOCs, propellants	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
		Media Affected:	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-140 and E-6-141
		Funding to Date:	$ 142.4 million		
		Est. CTC (Comp Year):	$ 380.6 million (FY2022)		

Introduction

Naval Facilities on Vieques consists of the former Naval Ammunition Support Detachment (NASD) on the western half of the island and the former Vieques Naval Training Range (VNTR) on the eastern half. The installation provides training, and munitions storage for the Atlantic Fleet. Contaminated site types include underground storage tanks, open burning/open detonation areas, and munitions areas. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 2005. In FY07, DoD and EPA signed a federal facility agreement (FFA) to outline how they are going to proceed with cleanup. In FY04, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board (RAB).

To date, the Navy has transferred 8,114 acres of the former NASD to the Department of the Interior (DOI), the Municipality of Vieques, and the Conservation Trust of Puerto Rico. The U.S. Fish and Wildlife Service manages 4,000 of these acres as a National Wildlife Refuge, and DOI manages 14,573 acres transferred from the former VNTR as a National Wildlife Refuge and Wilderness Area. In FY08, the installation completed a Record of Decision (ROD) determining that no further cleanup actions were necessary at the former NASD Area of Concern (AOC) H. The installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Naval Facilities on Vieques completed a draft remedial investigation (RI) report for AOC R and continued the pilot study at former NASD AOCs E and I. The installation also completed site inspection (SI) reports for 26 former RCRA and potential AOC sites, and Decision Documents (DDs) requiring no further cleanup action for 11 former RCRA and AOC sites. The installation began environmental assessments at AOC J and Solid Waste Management Units (SWMUs) 6 and 7. Naval Facilities on Vieques also began an RI and feasibility study (FS) to evaluate cleanup alternatives at SWMU 1; completed additional SI fieldwork at potential AOCs Q and R; and began an ecological risk assessment for SWMU 6. The cost of completing environmental restoration has changed significantly due to technical issues.

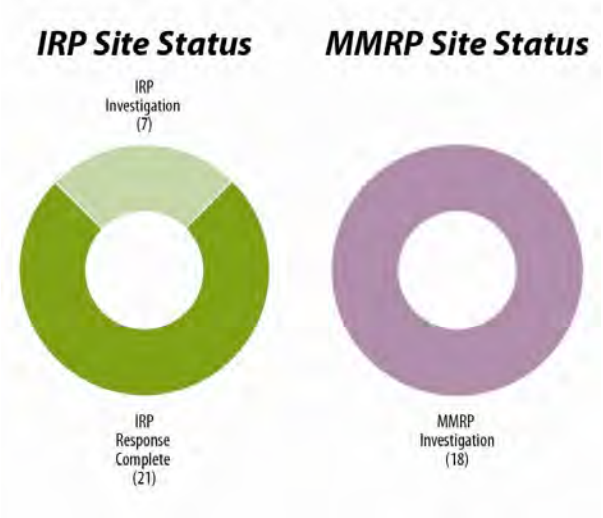
Technical issues delayed DDs for no further action at potential AOCs Q and R.

The installation also held four RAB meetings.

FY10 MMRP Progress

Naval Facilities on Vieques completed the Phase II SI Report and pilot study for the Live Impact Area. The installation also continued the subsurface removal of munitions and explosives of concern in the Surface Impact Area by clearing 523 acres. In addition, Naval Facilites on Vieques completed an interim removal action at SWMU 4; prepared the RI work plan for Unexploded Ordnance (UXO) 1 and 15; completed archaeological and biological assessments; and began a DD for no further cleanup action at UXO 17.

Technical issues delayed completion of the RI/FS report for SWMU 4.



Plan of Action

Plan of action items for Naval Facilities on Vieques are grouped below according to program category.

IRP

- Complete assessments of potential risks to human health and the environment at former NASD AOC J and SWMU 7 in FY11.
- Complete RI/FS and begin a proposed plan and ROD at SWMU 1 in FY11.
- Complete expanded SI and begin DD for no further cleanup action at potential AOCs Q and R in FY11.
- Continue pilot study at former NASD AOCs E and I in FY12.

MMRP

- Complete expanded SI at UXO 17 in FY11.
- Complete RI fieldwork at UXO 1 and 15 in FY11.
- Complete surface clearance work at UXO 13 in FY11.
- Complete archaeological and biological assessment at UXO 13 and 15 in FY11.
- Complete DD for no further cleanup action at potential AOC EE and UXO 17 in FY11.
- Complete RI/FS report for SWMU 4 in FY11.

Naval Fuel Depot, Point Molate

BRAC 1995

FFID:	CA917002756300	**Contaminants:**	Petroleum products, VOCs, SVOCs, heavy metals, miscellaneous inorganic elements and compounds	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Richmond, California (416 acres)			**Five-Year Review Status:**	Underway
Mission:	Supply and provide bulk storage of various grades of petroleum fuel product for fleet	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-8
HRS Score:	N/A	**Funding to Date:**	$ 60.9 million		
IAG Status:	N/A	**Est. CTC (Comp Year):**	$ 0.0 million (FY2043)		
		IRP Sites (Final RIP/RC):	4 (FY2009)		

Introduction

The Naval Fuel Depot (NFD), Point Molate supplies and provides bulk storage of fuel for fleets. Operations at the installation included bulk storage and supply of fuel products, including JP5, JP7, diesel, and Bunker C. Contaminants of concern include petroleum hydrocarbons, polycyclic aromatic hydrocarbons, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) in the soil and groundwater. In July 1995, the BRAC Commission recommended closure of NFD, Point Molate. The installation formed a BRAC cleanup team in 1996 to develop a process for cleaning up sites at NFD, Point Molate. The installation also formed a Restoration Advisory Board in 1996 to discuss the installation's cleanup progress with the community.

There are 13 disposal areas at NFD, Point Molate. The installation has transferred all property. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

NFD, Point Molate transferred its remaining property, continued underground storage tank (UST) inspections and minor repairs, and monitoring at the Site 1 Landfill. The installation also transferred the remaining environmental cleanup responsibility, including completion of feasibility studies to evaluate cleanup alternatives, proposed plans, Records of Decision, and cleanup for IR Sites 3 and 4, to the City of Richmond per the 2008 Early Transfer Cooperative Agreement. The installation also transferred responsibility for long-term monitoring of the IR Site 1 Landfill, basewide groundwater, and closed USTs.

FY10 MMRP Progress

NFD, Point Molate has identified no MMRP sites.

Plan of Action

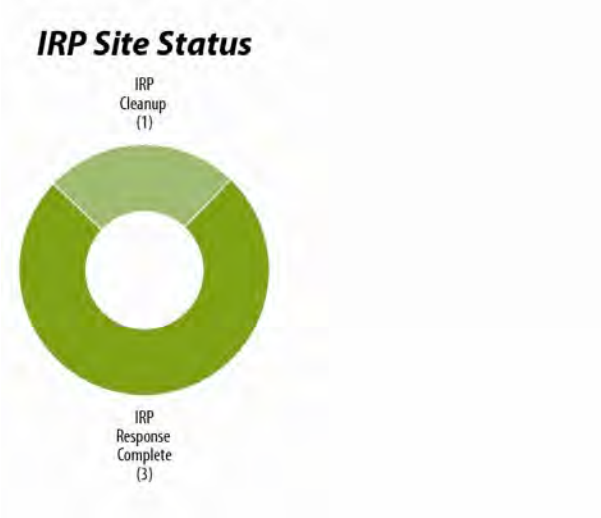
Plan of action items for Naval Fuel Depot, Point Molate are grouped below according to program category.

IRP

- Review reports by the City of Richmond and developers per the Early Transfer Cooperative Agreement in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Naval Station Newport
Formerly Newport Naval Education and Training Center

NPL

FFID:	RI117002424300	**Media Affected:**	Surface Water, Sediment, Soil, Groundwater	**IRP/MMRP Status Table:**	Refer to page E-6-143
Location (Size):	Newport, Rhode Island (1,400 acres)	**Funding to Date:**	$ 108.5 million		
Mission:	Provide logistical support and serve as a training center	**Est. CTC (Comp Year):**	$ 39.2 million (FY2041)		
HRS Score:	32.25; placed on NPL in November 1989	**IRP Sites (Final RIP/RC):**	31 (FY2017)		
IAG Status:	FFA signed in March 1992	**MMRP Sites (Final RIP/RC):**	2 (FY2015)		
Contaminants:	PCBs, POLs, VOCs, SVOCs, metals	**Five-Year Review Status:**	Completed		

Introduction

Naval Station Newport (formerly known as the Newport Naval Education and Training Center) served as a refueling depot from the early 1900s until after World War II, when it restructured to support research and development, and to provide specialized training. Currently, the installation provides logistical support and serves as a training center. Contaminants at the installation include petroleum/oil/lubricant (POL) sludge associated with tank farm sites, waste acids, solvents, and polychlorinated biphenyls (PCBs) in landfills used to dispose of general refuse and shop wastes. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in March 1992 to outline how they were going to proceed with cleanup. Formed in FY88, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY95. In FY90, the installation completed a community relations plan, and established an ecological advisory board. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY99 and FY04.

Naval Station Newport completed a Record of Decision (ROD), which selected cleanup action at Site 9. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Naval Station Newport continued annual long-term operation activities at Site 1. The installation completed Phase II remedial investigation (RI) fieldwork at Site 17 and RI fieldwork at Site 8. The installation also completed an interim removal action and a ROD, which selected cleanup actions at Site 9.

FY10 MMRP Progress

Naval Station Newport completed the site inspection report for MMRP Site 1.

Plan of Action

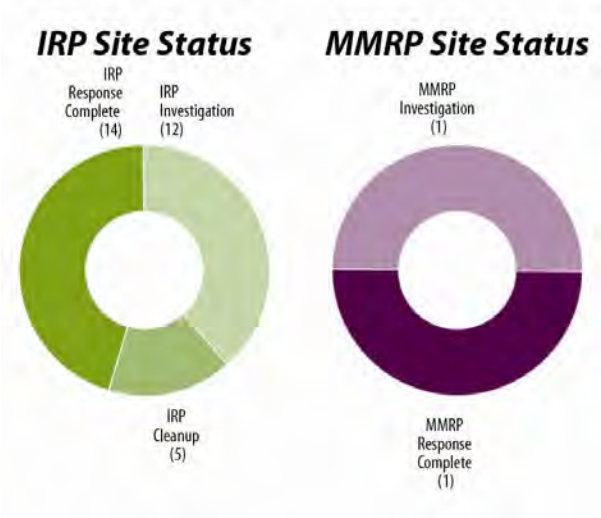
Plan of action items for Naval Station Newport are grouped below according to program category.

IRP

- Continue annual long-term operation activities at Site 1 in FY11.
- Complete investigative fieldwork at Site 4 in FY11.
- Complete feasibility study to evaluate cleanup alternatives at Site 8 in FY11.
- Begin RIs at Sites 7 and 10 through 13 in FY11.

MMRP

- Begin RI or interim removal action at MMRP Site 1 in FY11.



Naval Station Todd-Tacoma
Formerly Commencement Bay

NPL

FFID:	WA09799F345500	**Contaminants:**	Mercury, VOCs, PNAs, PCBs, heavy metals, arsenic, lead	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Location (Size):	Tacoma, Washington (191 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-55
Mission:	Served as shipbuilding facility and reserve shipyard	**Funding to Date:**	$ 0.3 million		
HRS Score:	Unknown	**Est. CTC (Comp Year):**	$ 0.1 million (FY2012)		
IAG Status:	None	**IRP Sites (Final RIP/RC):**	1 (FY2012)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

The Naval Station Todd-Tacoma shipyard is located on Commencement Bay between Hylebos and Blair Waterways in Tacoma, Washington. The Navy acquired the 191-acre facility between 1942 and 1948. Beginning in 1940, Seattle-Tacoma Shipbuilding Corporation (later renamed Todd Pacific Shipyards, Inc., Tacoma Division) rapidly developed 74.2 acres to support the war efforts; this land later became the western portion of the Naval Station Todd-Tacoma. The Navy and the Maritime Commission acquired land adjacent to the private property to expand the plant. By October 1942, the Maritime Commission had transferred all of its contractual and facility interests to the Navy. The Navy continued land acquisitions until the end of the war when the installation had grown to 191 acres. After the war, DoD designated the property a Naval Industrial Reserve Shipyard, and shipbuilding ceased. In September 1948, the Navy acquired the Todd-owned property. In October 1958, DoD declared the property excess. The Navy and Marine Reserve Training Center retained eight acres, and transferred the remaining property to the Port of Tacoma in January 1960.

FY10 IRP Progress

The United States Army Corps of Engineers (USACE) continued to monitor cleanup actions by potentially responsible parties (PRPs).

FY10 MMRP Progress

USACE has identified no sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP).

Plan of Action

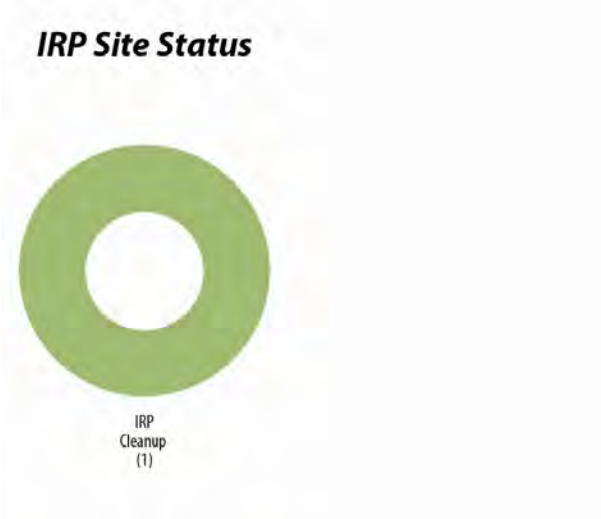
Plan of action items for Naval Station Todd-Tacoma are grouped below according to program category.

IRP

- Continue to monitor cleanup actions by PRPs in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Naval Support Facility, Dahlgren
Formerly Dahlgren Naval Surface Warfare Center

NPL/BRAC 2005 Realignment

FFID:	VA317002468500		PCBs, pesticides, VOCs, SVOCs, explosives, propellants	**Five-Year Review Status:**	Underway and planned
Location (Size):	Dahlgren, Virginia (2,677 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-169
Mission:	Proof and test ordnance	**Funding to Date:**	$ 70.9 million		
HRS Score:	50.26; placed on NPL in October 1992	**Est. CTC (Comp Year):**	$ 12.9 million (FY2019)		
IAG Status:	FFA signed in September 1994	**IRP Sites (Final RIP/RC):**	70 (FY2017)		
Contaminants:	Heavy metals, explosives residues, low-level radioactive materials, mercury, cleaning solvents,	**MMRP Sites (Final RIP/RC):**	None		

Introduction

The Dahlgren Naval Surface Warfare Center changed its name in FY05 to the Naval Support Facility, Dahlgren (Dahlgren) to reflect integration into the Naval District Washington Region. Dahlgren conducts ordnance testing for the Navy. Ordnance testing operations contributed to the contamination. Contaminated site types include former landfills, former ordnance burning and disposal areas, underground storage tanks, former ordnance ranges, and former ordnance research and development areas. Migration of these releases could affect the Potomac River, Gambo Creek, associated wetlands, and local groundwater aquifers used for drinking water. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in October 1992. DoD and EPA signed a federal facility agreement (FFA) in September 1994 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Dahlgren for realignment. The installation established an information repository and an administrative record in FY91. In FY92, the installation completed a community relations plan, and formed a technical review committee. In FY95, the installation converted its technical review committee responsible for communicating cleanup progress with the community, into a Restoration Advisory Board. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY03, FY04, FY05, and FY10.

To date, Dahlgren has completed Records of Decision which selected cleanup actions for 20 sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

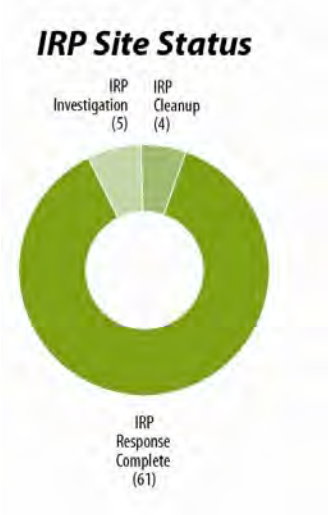
FY10 IRP Progress

Dahlgren completed an interim cleanup action at Site 4 and continued an interim cleanup action at Site 15. The installation also prepared a draft explosive safety submission for Site 61a. In addition, Dahlgren completed five-year review reports for various sites and prepared a draft chemical waste work plan for Site 12. The installation continued groundwater monitoring at Sites 20 and 23, and completed wetland monitoring reports for Sites 6, 9, 17, 25, 46, and 58.

Regulatory issues delayed the pilot-scale work plan for Site 61a. Technical issues delayed the interim cleanup action at Site 63.

FY10 MMRP Progress

Dahlgren has identified no MMRP sites.



Plan of Action

Plan of action items for Naval Support Facility, Dahlgren are grouped below according to program category.

IRP

- Complete work plan for pilot study at Site 61a in FY11.
- Complete interim cleanup action at Site 15 and 63 in FY11.
- Prepare and finalize chemical safety submission for Site 12 in FY11.
- Complete wetland technical memorandums for Sites 6, 9, 17, 25, 46, and 58 in FY11-FY12.
- Begin pilot study for Site 61a in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Naval Weapons Station Seal Beach, Detachment Concord
Formerly Concord Naval Weapons Station

NPL/BRAC 2005 Closure

FFID:	CA917002452800	**IAG Status:**	FFA signed in June 2001	**MMRP Sites (Final RIP/RC):**	8 (FY2015)
Location (Size):	Concord, California (13,023 acres)	**Contaminants:**	Heavy metals, petroleum hydrocarbons, VOCs, SVOCs, explosives, propellants	**Five-Year Review Status:**	Underway and planned
Mission:	Shipped, received, inspected, and classified munitions (tidal area); served as munitions storage and weapons maintenance, inspection, and testing facility (inland area)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-24
		Funding to Date:	$ 94.8 million		
HRS Score:	50.00; placed on NPL in December 1994	**Est. CTC (Comp Year):**	$ 23.8 million (FY2020)		
		IRP Sites (Final RIP/RC):	19 (FY2018)		

Introduction

Naval Weapons Station (NWS) Seal Beach, Detachment Concord (Concord) ships, receives, inspects, and classifies munitions. It also serves as a munitions storage and weapons maintenance, inspection, and testing facility. These activities have resulted in the contamination of surface water and sediment at tidal and litigation-area sites.The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in December 1994. DoD and EPA signed a federal facility agreement (FFA) in June 2001 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended closure of the inland area, and realignment of the tidal area. Formed in FY90, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY95. Concord also received funding for technical assistance for public participation, updated the community relations plan, and completed the five-year review report in FY03.

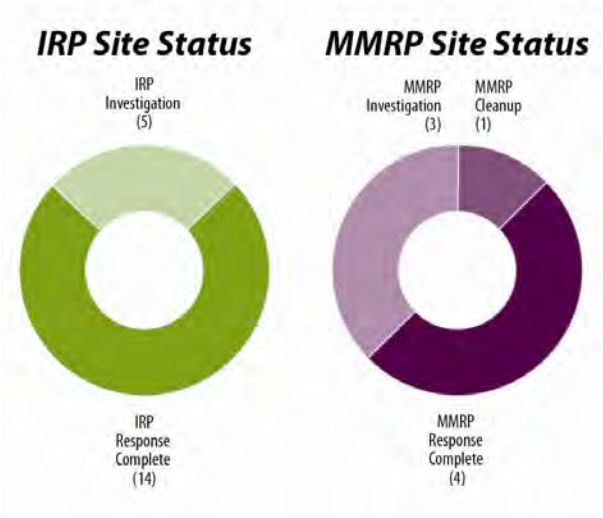
Concord has completed Records of Decision (RODs), which selected cleanup actions for 15 environmental restoration sites, including no further cleanup activities for 20 sites. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Concord completed a ROD and began a design for cleanup for Solid Waste Management Units (SWMUs) 2, 5, 7, and 18. Concord also completed a removal action for Site 27. The installation began radiological scoping surveys to determine the presence of radioactivity throughout the base. In addition, the installation began a feasibility study (FS) to evaluate cleanup alternatives and prepared a proposed plan (PP) for Site 22A. The installation also drafted a PP and ROD for Site 22.

FY10 MMRP Progress

Concord completed the site inspection fieldwork for Site 24A and a remedial investigation work plan and fieldwork for the former Inland Burn Area and Eagles Nest Explosive Ordnance Disposal.



Plan of Action

Plan of action items for Naval Weapons Station Seal Beach, Detachment Concord are grouped below according to program category.

IRP

- Complete radiological scoping surveys to determine the presence of radioactivity throughout the base in FY11.
- Complete removal actions and finalize the PP and ROD determining no further cleanup actions are required at Site 27 in FY11.
- Finalize FS at Site 29 in FY11.
- Complete cleanup actions and finalize cleanup completion report for SWMU 5 in FY11-FY12.
- Complete FS and PP for Site 22A in FY11-FY12.

MMRP

- Complete removal action at Site 24A (Pistol Range) in F11-FY12.
- Conduct fieldwork at the Area of Potential Interest sites in FY11-FY12.

Nebraska Ordnance Plant

NPL

FFID:	NE79799F041800	**Contaminants:**	Explosives, VOCs, TCE, PCBs, SVOCs, metals, propellants	**Five-Year Review Status:**	Completed
Location (Size):	Mead, Nebraska (17,214 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-106
Mission:	Performed ordnance storage and manufacturing activities	**Funding to Date:**	$ 121.2 million		
HRS Score:	31.94; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 272.2 million (FY2075)		
IAG Status:	IAG signed in September 1991	**IRP Sites (Final RIP/RC):**	9 (FY2012)		
		MMRP Sites (Final RIP/RC):	1 (FY2001)		

Introduction

From 1942 to 1956, Nebraska Ordnance Plant produced munitions at four bomb-loading lines, stored munitions, and produced ammonium nitrates. The property also contained burn areas, an Atlas missile facility, and a sewage treatment plant. The University of Nebraska now owns the majority of the property. The Nebraska National Guard, U.S. Army Reserves, and private entities own the remainder of the property. The U.S. Army Corps of Engineers (USACE) identified soil contaminated with polychlorinated biphenyls (PCBs) and munitions, and groundwater contaminated with explosives and volatile organic compounds (VOCs) on and off the site. The potential risk to human health and the environment was significant enough for EPA to place the property on the NPL in August 1990. DoD and EPA signed an interagency agreement (IAG) in September 1991 to outline how they were going to proceed with cleanup. USACE converted the technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY97. In FY99, USACE completed a memorandum of understanding with the Lower Platte National Resource District in which they agreed on treating groundwater for reuse. USACE completed a community relations plan in FY08. To ensure continuous monitoring and improvement, USACE completed a five-year report in FY04 and FY09.

To date, USACE has signed Records of Decision for Operable Units (OUs) 1 and 2, which selected cleanup actions for these sites. USACE has incinerated over 16,000 tons of contaminated soil at Nebraska Ordnance Plant.

FY10 IRP Progress

USACE began a pilot study for explosives contamination in Load Line 2, and began the remedial investigation (RI) addendum for OU 3. In addition, USACE completed the cleanup for underground storage tanks and construction of the Load Line 4 Treatment Plant. USACE investigated possible alternative energy options. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

USACE completed an Ordnance and Explosive Recurring Review.

Plan of Action

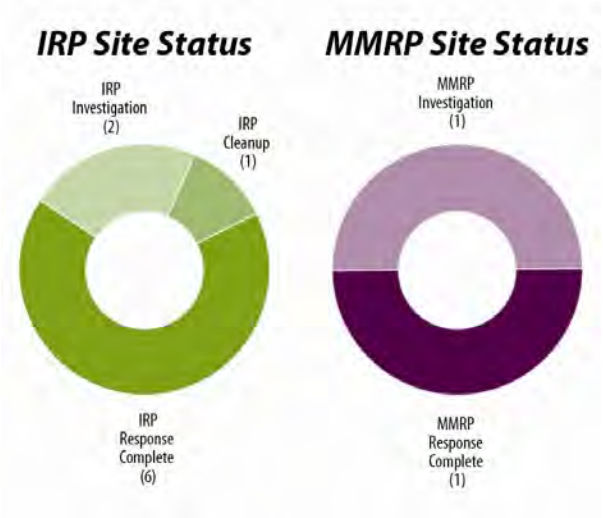
Plan of action items for Nebraska Ordnance Plant are grouped below according to program category.

IRP

- Complete RI addendum and feasability study to evaluate cleanup alternatives for OU 3 in FY11.
- Complete the work plan for the Load Line 2 pilot study in FY11.

MMRP

- Complete Technical Project Planning Memo in FY11.
- Complete site specific work plan and begin field work in FY11.



New London Naval Submarine Base

NPL/BRAC 2005 Realignment

FFID:	CT117002202000	**Contaminants:**	Dredge spoils, incinerator ash, POLs, PCBs, spent acids, pesticides, solvents, construction debris, metals, VOCs, SVOCs	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Groton, Connecticut (547 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Maintain and repair submarines; conduct submarine training and submarine research; provide a home port for submarines	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-51
		Funding to Date:	$ 69.4 million		
HRS Score:	36.53; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 41.6 million (FY2041)		
IAG Status:	FFA signed in January 1995	**IRP Sites (Final RIP/RC):**	30 (FY2013)		

Introduction

New London Naval Submarine Base maintains and repairs submarines. Contaminated sites at the installation include the Area A Landfill (Site 2), smaller disposal areas, underground storage tanks, and fuel and chemical storage areas. The potential risk to human health and the environment from polychlorinated biphenyl (PCB) contamination at Site 2 was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed a federal facility agreement (FFA) in January 1995 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended New London Submarine Base for realignment. Formed in FY89, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY94. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01 and FY07.

To date, the installation has completed Records of Decision (RODs) that selected cleanup actions for Sites 2, 3, 6 through 8, 20, and Area A Wetlands, and an interim ROD for the base groundwater operable unit (OU). In addition, New London Naval Submarine Base signed no further action RODs, which determined that no further cleanup actions were necessary at Sites 4, 14 through 16, and 18. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP) sites; no MMRP sites were identified.

FY10 IRP Progress

New London Naval Submarine Base completed sediment removal at the Outer Pier 1; a remedial investigation, feasibility study (FS) to evaluate cleanup alternatives, proposed plan (PP), and ROD for Area A Wetlands (Site 2B); and a cleanup completion report for OU 9 groundwater. In addition, New London Naval Submarine Base completed a design for land use controls at OU 9 groundwater, which restricts use of or access to the site. The installation also continued long-term monitoring at multiple sites. The cost of completing environmental restoration has changed significantly due to technical issues.

Technical issues delayed completion of sediment removal at the Inner Pier 1.

FY10 MMRP Progress

New London Naval Submarine Base has identified no MMRP sites.

Plan of Action

Plan of action items for New London Naval Submarine Base are grouped below according to program category.

IRP

- Complete sediment removal at the Inner Pier 1 in FY11.
- Design cleanup plan and complete work plan for Area A Wetlands in FY11.
- Complete lower base FS and PP in FY11.
- Continue long-term monitoring at multiple sites in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Newark Air Force Base

BRAC 1993

FFID:	OH557002465000	**Contaminants:**	VOCs, SVOCs, BCEE, TCE	**Five-Year Review Status:**	Completed and planned
Location (Size):	Heath, Ohio (70 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-43
Mission:	Provided depot-level maintenance for Air Force and DoD missile, navigation, and guidance systems.	**Funding to Date:**	$ 6.5 million		
		Est. CTC (Comp Year):	$ 1.8 million (FY2012)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	14 (FY2002)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	None		

Introduction

Newark Air Force Base (AFB) has provided depot-level maintenance for missile guidance and the navigational systems used by most aircraft and missiles since 1992. Past waste management activities related to solvents, such as freon 113 and trichloroethylene (TCE), have affected groundwater at the installation. In 1993, the BRAC Commission recommended Newark AFB for closure. In FY94, the installation formed a BRAC cleanup team to determine a process for cleanup of sites at Newark AFB, and a Restoration Advisory Board (RAB) to discuss cleanup progress with the community. The RAB adjourned in FY05. To ensure continuous monitoring and improvement, Newark AFB completed a five-year review report in FY05.

Newark AFB has prepared Decision Documents, which determined that no further cleanup activities were necessary for five sites. The installation transferred 56 of the 70 acres comprising Newark AFB to the Heath-Newark-Licking County Port Authority, and 13 acres to the Licking County Regional Airport. In FY04, Newark AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Newark AFB continued cleanup operations at Former Facility 87. The installation also began the second five-year review report and began to update the land use control (LUC) management plan, which lays out the procedure to manage restricted access to sites. Newark AFB also updated the administrative record.

The BRAC cleanup team met twice.

FY10 MMRP Progress

Newark AFB has identified no MMRP sites.

Plan of Action

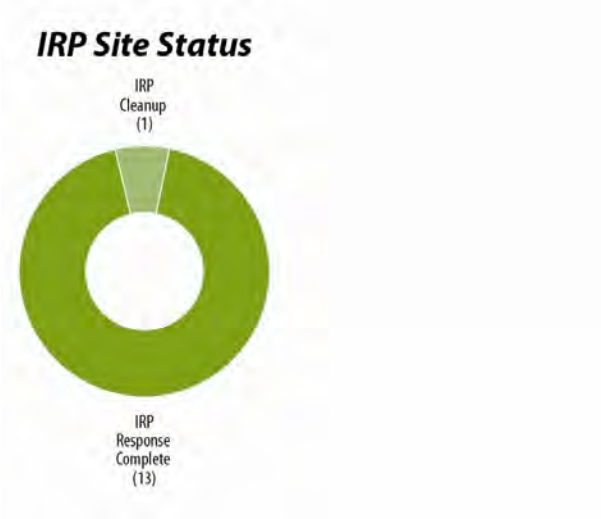
Plan of action items for Newark Air Force Base are grouped below according to program category.

IRP

- Continue cleanup operations at Former Facility 87 in FY11.
- Transfer the final parcel in FY11.
- Update the LUC management plan in FY11.
- Complete the second five-year review report in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Newport Chemical Depot

BRAC 2005 Closure

FFID:	IN521382227200	**Contaminants:**	Explosives, heavy metals, VOCs, SVOCs, breakdown products	**Five-Year Review Status:**	Planned
Location (Size):	Newport, Indiana (6,996 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-24
Mission:	Store and eliminate VX stockpile and related materials, while protecting the workforce, public, and environment	**Funding to Date:**	$ 21.7 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 1.8 million (FY2011)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	17 (FY2011)		
		MMRP Sites (Final RIP/RC):	2 (FY2011)		

Introduction

Newport Chemical Depot (CD) stores and eliminates the VX nerve agent and other related materials. The Wabash River Ordnance Works originally manufactured the explosive RDX during World War II and the Korean conflict. In addition, Newport CD produced heavy water, which is used in nuclear reactors, in support of the Manhattan Project and Atomic Energy Commission. The installation also buried building debris, including asbestos-contaminated and decontaminated debris, constructed a TNT production plant, and composted and backfilled RDX-contaminated soils. In May 2005, the BRAC Commission recommended closure of the Newport CD after completion of the chemical demilitarization mission, including neutralizing the VX agent. Newport CD formed a Restoration Advisory Board in 2000 to discuss the installation's cleanup progress with the community.

In FY02 the installation conducted an inventory of sites suspected to contain munitions contamination under the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Newport CD continued fieldwork at Site 016 and conducted a treatability study for a well injection project to cleanup the trichloroethylene (TCE) plume. The installation continued to cleanup additional areas identified in the site inspection. In addition, the installation identified approximately 6,500 uncontaminated acres suitable to transfer and investigated an installation firing range.

FY10 MMRP Progress

Newport CD conducted no MMRP actions.

Plan of Action

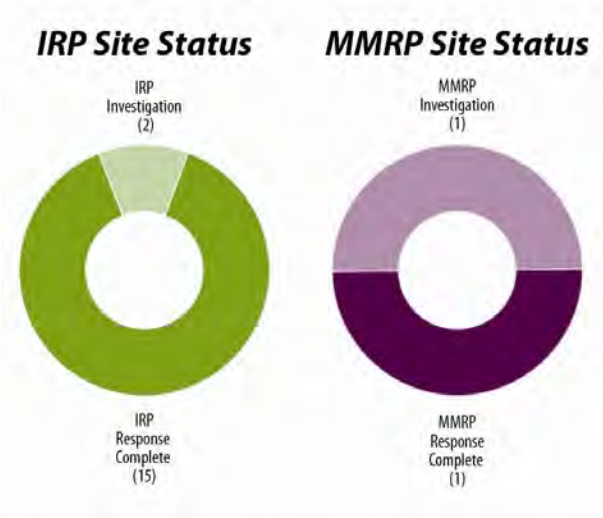
Plan of action items for Newport Chemical Depot are grouped below according to program category.

IRP

- Complete all restoration activities in FY11.
- Complete transfer of installation in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Norfolk Naval Base
Sewells Point Naval Complex

NPL

FFID:	VA317002741400	**Contaminants:**	Petroleum products, PCBs, solvents, heavy metals, acids, paints, asbestos, pesticides, VOCs, SVOCs	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Norfolk, Virginia (4,631 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Provide services and materials to support the aviation activities and operating forces of the Navy	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-170
		Funding to Date:	$ 107.5 million		
HRS Score:	50.00; placed on NPL in April 1997	**Est. CTC (Comp Year):**	$ 25.6 million (FY2040)		
IAG Status:	FFA signed in February 1999	**IRP Sites (Final RIP/RC):**	63 (FY2009)		

Introduction

Norfolk Naval Base provides services and materials to support the aviation activities and operating forces of the Navy. Contamination originates from maintenance of aircraft, equipment, and vehicles, and from operation of support facilities. Contaminated site types at the installation include landfills, ordnance storage areas, waste disposal areas, fire training areas, fuel spill areas, and underground storage tanks. The potential risk to human health and the environment from the migration of contaminated surface water was significant enough for EPA to place the installation on the NPL in April 1997. DoD and EPA signed a federal facility agreement (FFA) in February 1999 to outline how they were going to proceed with cleanup. Formed in FY89, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY94. Norfolk Naval Base completed a community relations plan in FY93 which was updated in FY03. To ensure continuous monitoring and improvement, the installation completed five-year review reports for Sites 1, 2, 3, 6, and 20 in FY03 and FY09.

To date, the installation has completed Records of Decision (RODs) which selected cleanup actions for all sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Norfolk Naval Base completed RODS for land use controls at Solid Waste Management Unit 14 and Site 18, which restrict use of or access to those sites. The installation also completed RODs for all remaining sites.

FY10 MMRP Progress

Norfolk Naval Base has identified no MMRP sites.

Plan of Action

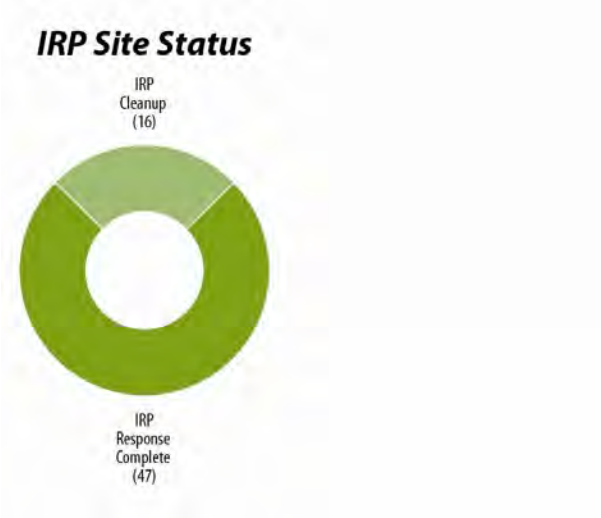
Plan of action items for Norfolk Naval Base are grouped below according to program category.

IRP

- Conduct optimization study to identify options for streamlining cleanup at Sites 1 and 3 in FY11-FY12.
- Continued monitoring of optimized cleanup at Site 20 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Norfolk Naval Shipyard

NPL

FFID:	VA317002481300		and test work; provide services to other activities and units	**Funding to Date:**	$ 39.8 million
Location (Size):	Portsmouth, Virginia (795 acres)	**HRS Score:**	50.0; placed on NPL in July 1999	**Est. CTC (Comp Year):**	$ 1.7 million (FY2020)
Mission:	Provide logistical support for assigned ships and service craft; perform work in connection with conversion, overhaul, repair, alteration, dry-docking, and outfitting of naval vessels; perform manufacturing, research, development,	**IAG Status:**	FFA signed in September 2004	**IRP Sites (Final RIP/RC):**	32 (FY2012)
		Contaminants:	Heavy metals, PCBs, VOCs, SVOCs, POLs, land solvents	**MMRP Sites (Final RIP/RC):**	None
		Media Affected:	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Planned
				IRP/MMRP Status Table:	Refer to page E-7-54

Introduction

Norfolk Naval Shipyard (NSY) is located on the western bank of the southern branch of the Elizabeth River. The installation provides logistical support, conversion, overhaul, repair, alteration, dry-docking, and outfitting of naval vessels. The installation also performs manufacturing, research, development, and test work. Site contamination resulted from past landfilling, disposal operations, and a plating shop. The potential risk to human health and the environment from surface water runoff into Paradise Creek was significant enough for EPA to place the installation on the NPL in July 1999. DoD and EPA signed a federal facility agreement (FFA) in September 2004 to outline how they were going to proceed with cleanup. An administrative record was established in FY92, and a community relations plan was completed in FY94; the community relations plan was updated in June 2003. Formed in FY94, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY96.

To date, RCRA facility investigations performed at the installation identified 31 solid waste management units (SWMUs). A supplemental RCRA facility investigation identified an additional 121 SWMUs and areas of concern (AOCs). An additional 47 AOCs were later identified, bringing the total number of potentially contaminated areas at Norfolk NSY to 218. During the development of the FFA, inconsistent numbering and naming of potentially contaminated areas in previous documentation resulted in the reduction of identified sites. Norfolk NSY has completed Records of Decision (RODs) for Sites 10 and 17, and Operable Unit (OU) 1, which selected cleanup actions for these sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

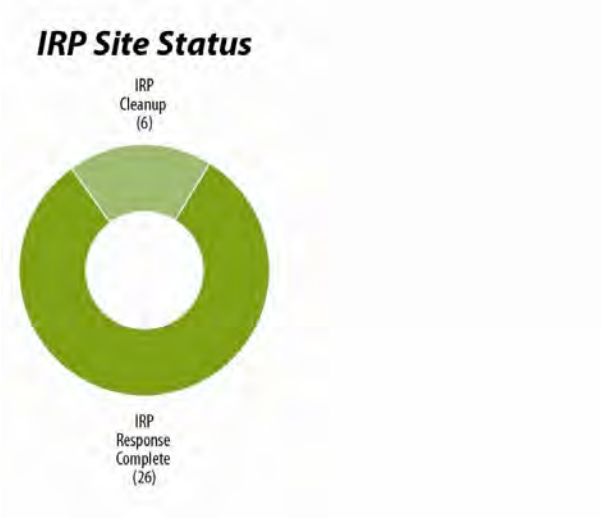
FY10 IRP Progress

Norfolk NSY completed soil cover construction activities, and finalized the ROD for soils at OU 2.

Technical and regulatory issues delayed development of the long-term management (LTM) plan for OU 2. Technical and regulatory issues also delayed the finalization of the feasibility study (FS) to evaluate cleanup alternatives and the proposed plan (PP) for groundwater at OU 2.

FY10 MMRP Progress

Norfolk NSY has identified no MMRP sites.



Plan of Action

Plan of action items for Norfolk Naval Shipyard are grouped below according to program category.

IRP

- Develop LTM plan and finalize FS, PP, and ROD for OU 2 in FY11.
- Complete five-year review report in FY11.
- Finalize PP and ROD for the enitre base in FY11.
- Update the community relations plan in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Norton Air Force Base

NPL/BRAC 1988

FFID:	CA957002434500	**Contaminants:**	Paints, refrigerants, heavy metals, spent solvents, TCE, VOCs, SVOCs, waste oils, fuel, PCBs	**MMRP Sites (Final RIP/RC):**	5 (FY2010)
Location (Size):	San Bernardino, California (2,221 acres)	**Media Affected:**	Groundwater and Soil	**Five-Year Review Status:**	Completed and planned
Mission:	Supported C-141 airlift operations	**Funding to Date:**	$ 124.3 million	**IRP/MMRP Status Table:**	Refer to page E-7-8
HRS Score:	39.65; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 2.4 million (FY2024)		
IAG Status:	IAG signed in 1989	**IRP Sites (Final RIP/RC):**	33 (FY2005)		

Introduction

Norton Air Force Base (AFB) formerly supported C-141 airlift operations. Sites include underground storage tanks, landfills, fire training areas, spill areas, and waste disposal pits. The most significant sources of contamination at the base were a trichloroethylene (TCE)-contaminated groundwater area and contaminated soil areas. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed an interagency agreement (IAG) in 1989 to outline how they were going to proceed with cleanup. In December 1988, the BRAC Commission recommended closure of Norton AFB. The base closed in March 1994. In FY94, Norton AFB formed a BRAC cleanup team to develop a process for cleanup of sites, and a Restoration Advisory Board (RAB) to communicate the installation's cleanup progress with the community. The RAB adjourned in FY98. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY00, FY05 and FY10.

Between FY94 and FY95, Norton AFB signed four Records of Decision, which selected cleanup actions at soil sites, for Central Base Area Operable Unit, and for all sites on the base. The installation transferred all base property in FY07. In FY04, the installation conducted an inventory of sites suspected to contain munitions for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Norton AFB completed a five-year review report and received EPA concurrence. The installation also discovered new contamination, which required additional funding.

Administrative issues delayed the approval for termination of RCRA corrective action authority on non-permitted sites, the closure of two RCRA sites, and obtaining post-closure permit for the industrial waste line.

FY10 MMRP Progress

Norton AFB closed one of the remaining two sites.

Administrative issues delayed closure of the last remaining site.

Plan of Action

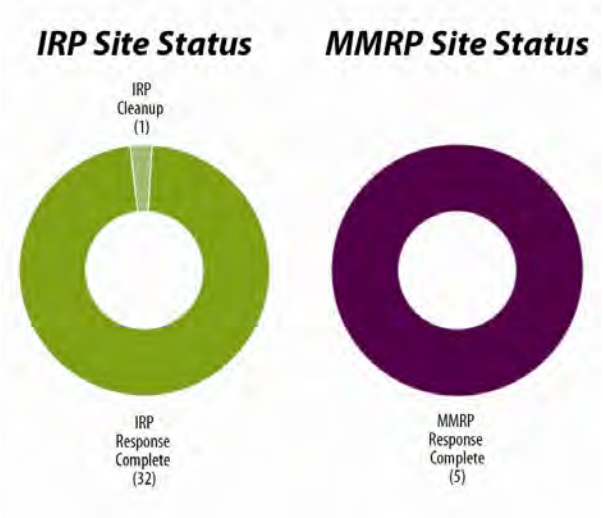
Plan of action items for Norton Air Force Base are grouped below according to program category.

IRP

- Obtain regulatory approval for termination of RCRA corrective action authority on non-permitted sites in FY11.
- Complete closure of two RCRA Sites in FY11.
- Obtain RCRA post-closure permit for the industrial waste line, if necessary, in FY12.

MMRP

- Close remaining site in FY11.



Oakland Army Base

BRAC 1995

FFID:	CA921352066100	**Contaminants:**	POLs, TCE, solvents, lead, PCBs, VOCs, SVOCs, metals, pesticides, PAHs, BTEX	**Five-Year Review Status:**	Underway
Location (Size):	Oakland, California (425 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-7
Mission:	Served as host to Military Traffic Management Command, Western Area	**Funding to Date:**	$ 41.0 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 8.9 million (FY2017)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	15 (FY2017)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Oakland Army Base formerly hosted Military Traffic Management Command, Western Area. Contaminated sites have included underground storage tanks; Berths 6 and 6 ½, where oil and fuel products contaminated storm drain bedding materials; Building 991, where pesticides and oil contaminated soil and groundwater; the West Grand Avenue overpass roadsides, where lead contaminated soil; Building 807, where chlorinated solvents contaminated soil and groundwater; and Building 648, where polychlorinated biphenyls (PCBs) contaminated soil. The 1995 BRAC Commission recommended closure of Oakland Army Base. The installation closed as scheduled on September 30, 1999. In FY96, the installation formed a BRAC cleanup team to develop a process for cleanup of sites, and a Restoration Advisory Board to discuss the installation's cleanup progress with the community. In FY98, the installation completed an initial BRAC cleanup plan to prioritize sites requiring environmental restoration.

Oakland Army Base has signed one Record of Decision (ROD) to select cleanup actions on Installation Restoration Program (IRP) sites. The installation has transferred approximately 387 acres. Parcel 1 and Operable Unit (OU) 2 are the only remaining sites. In FY02, Oakland Army Base completed an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

The city of Oakland continues to work toward closure on the remaining sites under the environmental services cooperative agreement.

Regulatory issues delayed the implementation of cleanup actions, the completion of the Decision Document (DD), and the review of the feasibility study (FS) to evaluate cleanup alternatives at Parcel 1. Regulatory issues also delayed the completion of the FS and ROD for OU 2 and marine sediments.

FY10 MMRP Progress

Oakland Army Base has identified no MMRP sites.

Plan of Action

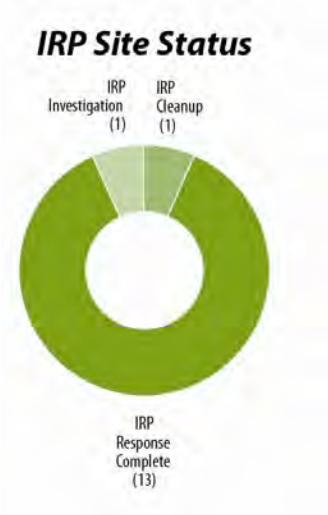
Plan of action items for Oakland Army Base are grouped below according to program category.

IRP

- Complete the DD and implement cleanup actions at Parcel 1 in FY11.
- Begin soil remediation at Building 991 in FY11-FY12.
- Begin drafting FS and ROD for OU 2 in FY11-FY12.
- Begin DD and cleanup of marine sediments at Area of Concern M1 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Old Navy Dump/Manchester Annex

NPL

FFID:	WA09799F832600	**IAG Status:**	IAG signed in July 1997	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Kitsap County, Washington (350 acres)	**Contaminants:**	Asbestos, PCBs, heavy metals, petroleum hydrocarbons, dioxins, furans	**Five-Year Review Status:**	Completed and planned
Mission:	Provided harbor defense for Puget Sound; tested torpedoes and stored fuel during World War I; served as a fire training school for the Navy and housed an antiaircraft artillery battery	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-8-65
		Funding to Date:	$ 12.8 million		
HRS Score:	50.00; placed on NPL in May 1994	**Est. CTC (Comp Year):**	$ 3.3 million (FY2004)		
		IRP Sites (Final RIP/RC):	2 (FY2004)		

Introduction

The Navy owned the Old Navy Dump/Manchester Annex from 1919 to 1960. During that time the Navy established three areas at the property (a net depot, a fire training area, and a landfill (LF)). Activities included maintenance, painting, sandblasting, and storage of steel cable net. The Navy disposed of domestic waste, wood, and metal waste originating from the Annex and the Puget Sound Naval Shipyard in a LF. Contaminants have been detected in soil at the LF, at the fire training area, and in surface water and sediment at the property. Contaminants of concern include heavy metals, polychlorinated biphenyls (PCBs), petroleum hydrocarbons, dioxins, furans, and asbestos. Currently, the National Oceanic and Atmospheric Administration, the National Marine Fisheries Service, an EPA Laboratory, and a portion of Manchester State Park occupy the property. The potential risk to human health and the environment was significant enough for EPA to place the property on the NPL in May 1994. DoD and EPA signed an interagency agreement (IAG) in July 1997 to outline how they were going to proceed with cleanup. To ensure continuous monitoring and improvement, the U.S. Army Corps of Engineers (USACE) completed five-year review reports in FY04 and FY09.

To date, USACE has completed one Record of Decision, which selected cleanup actions for the property. In FY06, USACE conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

USACE awarded a contract for continued long-term management (LTM) of the LF cap and shoreline protection. USACE also coordinated a draft institutional controls (IC) plan, which are tools that minimize the potential for human exposure, with stakeholders, and continued LTM of the LF cap and shoreline protection. USACE completed the 2009 compliance monitoring report. This is the last narrative for this property, as cleanup is complete at all sites.

Administrative issues delayed addendum to the second five-year review report.

FY10 MMRP Progress

USACE has identified no MMRP sites.

Plan of Action

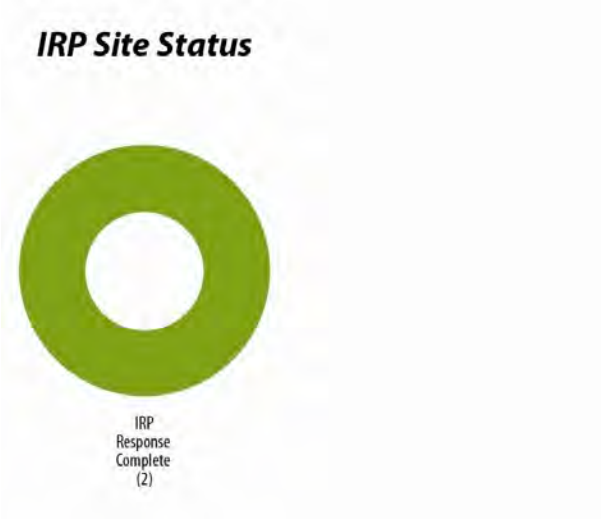
Plan of action items for Old Navy Dump/Manchester Annex are grouped below according to program category.

IRP

- Begin LTM or an operations, maintenance, and monitoring plan to replace the compliance monitoring plan in FY11.
- Complete addendum to the second five-year review report in FY11.
- Complete a draft final version of the IC plan in FY11.
- Prepare contract for repairs to shoreline due to erosion, including repairs to the LF cap in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Orlando Naval Training Center

BRAC 1993

FFID:	FL417002473600	**Contaminants:**	Asbestos, paints, POLs, photographic chemicals, solvents, low-level radioactive wastes, VOCs, SVOCs, metals	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Orlando, Florida (2,050 acres)			**Five-Year Review Status:**	Completed
Mission:	Serve as naval training center; formerly used as Army Air Force and Air Force bases	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-17
HRS Score:	N/A	**Funding to Date:**	$ 40.7 million		
IAG Status:	N/A	**Est. CTC (Comp Year):**	$ 8.6 million (FY2021)		
		IRP Sites (Final RIP/RC):	14 (FY2008)		

Introduction

From 1941 to 1968, Orlando Naval Training Center (NTC) served as an Army air base and an Air Force base. In 1968, the installation became a naval training center. The installation has four areas: the main base, Area C, Herndon Annex, and McCoy Annex. In July 1993, the BRAC Commission recommended closure of the installation and relocation of its activities. The installation closed on April 30, 1999. In FY94, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community, and a BRAC cleanup team to develop a process for the cleanup of sites. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY01.

The BRAC cleanup team completed a Record of Decision (ROD), selecting cleanup actions for 55 sites, and assessed and removed 55 tanks. To date, the installation has transferred 1,425 acres to the City of Orlando, and approximately 83 acres to the Federal Aviation Administration. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Orlando NTC identified the source of groundwater contamination at Study Area (SA) 36 Northwest, and continued long-term management (LTM) at Operable Units (OUs) 1 through 4 and SAs 2 and 17. The installation also began the development of a uniform federal policy quality assurance proposed plan for all sites. Additionally, the installation continued preparing the ROD for OUs 2, 3, and 4. The installation also signed contracts to inject additional emulsified oil substrate (EOS), which sustainably treats groundwater contamination, at OU 2 and SA 17.

FY10 MMRP Progress

Orlando NTC has identified no MMRP sites.

Plan of Action

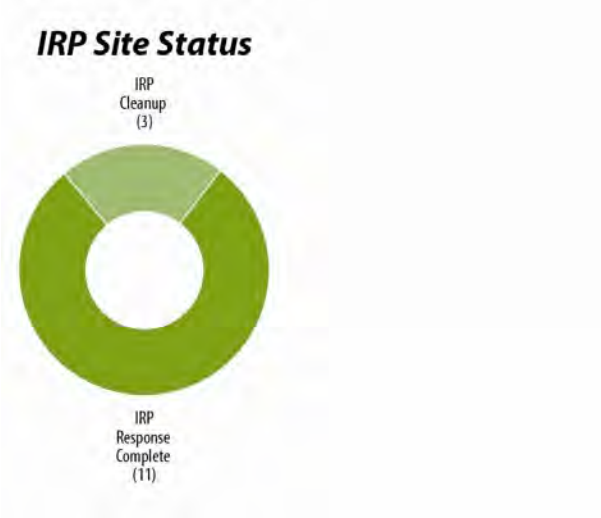
Plan of action items for Orlando Naval Training Center are grouped below according to program category.

IRP

- Continue LTM at OUs 1 through 4 and SAs 2 and 17, and the development of a uniform federal policy quality assurance proposed plan in FY11.
- Complete ROD for OUs 2, 3,and 4 in FY11.
- Complete injection of EOS and conduct monitoring at OU 2 and SA 17 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Pantex Plant
Formerly Pantex Ordnance Plant

NPL

FFID:	TX69799F676300,TX69799F655100	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-162 and E-8-60
Location (Size):	Pantex Village, Texas (16,000 acres)	**Funding to Date:**	$ 12.7 million		
Mission:	Produce and store military weapons	**Est. CTC (Comp Year):**	$ 10.0 million (FY2075)		
HRS Score:	51.22; placed on NPL in May 1994	**IRP Sites (Final RIP/RC):**	4 (FY2017)		
IAG Status:	None	**MMRP Sites (Final RIP/RC):**	2 (FY2075)		
Contaminants:	VOCs, SVOCs, heavy metals, UXO, explosives	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.		

Introduction

The former Pantex Ordnance Plant began operations in 1942 as an Army Ordnance Corps facility. DoD declared the property excess in 1947. The property is now owned by the Department of Energy (DOE) and Texas Tech University. Operations conducted on the active DOE site include the fabrication, assembly, testing, and disassembly of nuclear ammunition and weapons. Sources of contamination included burning chemical waste in unlined pits, burying waste in unlined landfills, and the discharge of plant wastewater into surface water. The potential risk to human health and the environment was significant enough for EPA to place the property on the NPL in May 1994. DOE is solely responsible for investigating sites on their property. The U.S. Army Corps of Engineers (USACE) established an electronic administrative record for the Texas Tech University FUDS property in FY03. In FY06, USACE completed a public involvement plan to address concerns over contamination with the community for Pantex Ordnance Plant.

In FY06, USACE completed an investigation of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

USACE continued supplemental remedial investigation (RI) and feasibility study activities to evaluate cleanup alternatives, and completed the removal of contaminated soil at three Areas of Concern in FY10. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

USACE revised the RI report in preparation for transition to the potentially responsible party (PRP).

Plan of Action

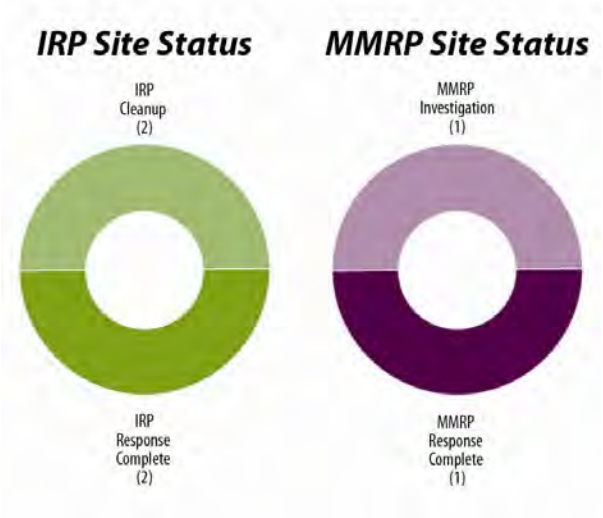
Plan of action items for Pantex Plant are grouped below according to program category.

IRP

There are no IRP actions scheduled for FY11 or FY12.

MMRP

- Complete RI report and transition to the PRP in FY11.



Parris Island Marine Corps Recruit Depot

NPL

FFID:	SC417302276300	**Contaminants:**	Pesticides, paints, POLs, solvents, industrial wastes, metals, acids, electrolytes, ordnance compounds, VOCs, SVOCs	**MMRP Sites (Final RIP/RC):**	8 (FY2019)
Location (Size):	Parris Island, South Carolina (8,043 acres)			**Five-Year Review Status:**	Underway
Mission:	Receive, recruit, and combat-train enlisted personnel upon their enlistment in the Marine Corps	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-145
		Funding to Date:	$ 26.5 million		
HRS Score:	50.00; placed on NPL in December 1994	**Est. CTC (Comp Year):**	$ 12.6 million (FY2040)		
IAG Status:	FFA signed in 2005	**IRP Sites (Final RIP/RC):**	26 (FY2014)		

Introduction

The Parris Island Marine Corps Recruit Depot receives, recruits, and combat-trains personnel upon their enlistment in the Marine Corps. Contaminated Sites at the installation include landfills or spill areas where groundwater and sediment are contaminated with solvents and petroleum/oil/lubricants (POLs). The potential risk to human health and the environment from contamination at two landfill sites was significant enough for EPA to place the installation on the NPL in December 1994. DoD and EPA signed a federal facility agreement (FFA) in 2005 to discuss how they were going to proceed with cleanup. The installation began to compile an administrative record in FY96 and completed a community relations plan in FY98. There has been no community interest to form a Restoration Advisory Board to discuss the installation's cleanup progress. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY05.

To date, the installation has signed an interim Record of Decision (ROD) which selected cleanup actions for the Site 1 corrective action plan, and Sites 2, 3, and 12. In FY02, Parris Island conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites have been identified.

FY10 IRP Progress

Parris Island Marine Corps Recruit Depot completed the remedial investigation (RI) addendum and treatability study for Site 45 and submitted it for regulatory review. The installation also continued long-term management at Sites 1, 3, 12, and the aviation gasline pipeline. Additionally, the installation submitted a proposed plan for Site 3.

FY10 MMRP Progress

Parris Island Marine Corps Recruit Depot completed Site Inspections (SIs) for eight sites and submitted them for regulatory review.

Plan of Action

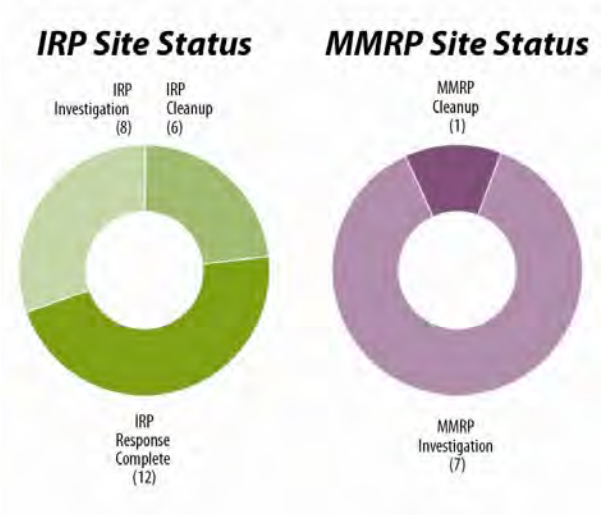
Plan of action items for Parris Island Marine Corps Recruit Depot are grouped below according to program category.

IRP

- Complete the SI and work plan for Site 14 in FY11.
- Complete ROD for Site 3 in FY11.
- Complete and submit RI for Site 27 in FY11.
- Complete feasibility study to evaluate cleanup alternatives for Site 45 in FY11.
- Complete removal action at Site 27 in FY11.

MMRP

- Complete RI work plan in FY11-FY12.



Patuxent River Naval Air Station

NPL/BRAC 2005 Realignment

FFID:	MD317002453600	**Contaminants:**	Heavy metals, pesticides, organics, POLs, solvents, UXO, VOCs, SVOCs, explosives, propellants	**MMRP Sites (Final RIP/RC):**	1 (FY2020)
Location (Size):	Lexington Park, Maryland (6,800 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
Mission:	Test and evaluate naval aircraft systems	**Funding to Date:**	$ 65.8 million	**IRP/MMRP Status Table:**	Refer to page E-6-91
HRS Score:	36.87; placed on NPL in May 1994	**Est. CTC (Comp Year):**	$ 36.4 million (FY2022)		
IAG Status:	FFA signed in December 2000	**IRP Sites (Final RIP/RC):**	64 (FY2017)		

Introduction

Patuxent River Naval Air Station (NAS) tests and evaluates naval aircraft systems. Three environmental restoration sites at the installation require the most cleanup: a Fishing Point Landfill (LF) site (Site 1), the former sanitary LF (Site 11), and the pest control shop (Site 17). Wastes managed at these sites included mixed solid wastes, petroleum/oil/lubricants (POLs), paints, thinners, solvents, pesticides, and photographic laboratory wastes. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in May 1994. In 2005, the BRAC Commission recommended Patuxent River NAS for realignment. The installation formed a technical review committee in FY90 and completed a community relations plan in FY91, which is updated every three years. Patuxent NAS established a Restoration Advisory Board in FY94 that meets quarterly to discuss the installation's cleanup progress with the community. The installation regularly updates an administrative record and two information repositories. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01, FY04, and FY09.

To date, the installation has completed Records of Decision (ROD) for Sites 1, 3, 11, 12, and 34, which selected cleanup actions for these sites. In addition, a ROD amendment was completed for Site 17. Patuxent River NAS determined that no further cleanup actions were necessary for Sites 4/5, 6, 24, and 29, and completed a proposed cleanup plan ROD for Site 39. The installation closed Site 6A (6 Operable Unit [OU] 1) in FY04. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site has been identified.

FY10 IRP Progress

Patuxent River NAS completed RODs for Sites 3 and 34, and began cleanup at Sites 4 and 5 (OUs 1 and 5). In addition, the installation began remedial investigations (RIs) at Sites 9, 31, and 34, and closed Site 44. The cost of completing environmental restoration has changed significantly due to technical issues.

FY10 MMRP Progress

Patuxent River NAS completed the site inspection report for one site.

Plan of Action

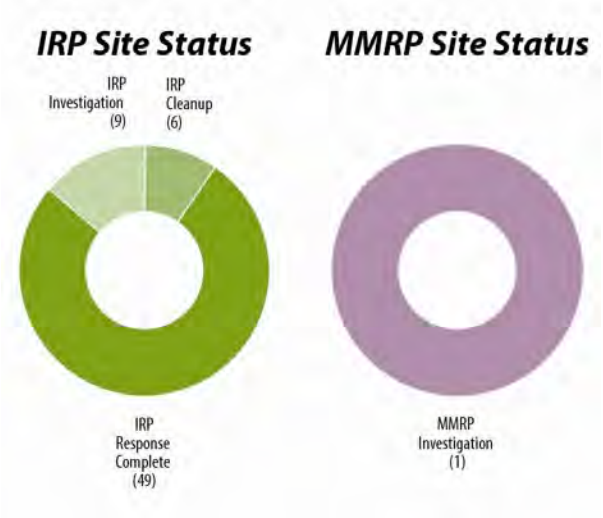
Plan of action items for Patuxent River Naval Air Station are grouped below according to program category.

IRP

- Complete engineering evaluation and cost analysis for Site 3 in FY11.
- Complete cleanup at Sites 4 and 5 in FY11.
- Complete RIs at Sites 9, 23, and 34 in FY11.
- Begin RIs at Sites 2, 21, and 28 in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Pearl Harbor Naval Complex

NPL

FFID:	HI917002434200, HI917002477900, HI917002434100, HI917002434000, HI917002433900, and HI917002433400	**IAG Status:**	FFA signed in March 1994	**IRP Sites (Final RIP/RC):**	101 (FY2020)
Location (Size):	Pearl Harbor, Hawaii (2,162 acres)	**Contaminants:**	VOCs, SVOCs, heavy metals, PCBs, pesticides, petroleum, hydrocarbons, solvents, explosives, propellants	**MMRP Sites (Final RIP/RC):**	2 (FY2020)
Mission:	Provide primary fleet support in the Pearl Harbor area	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Planned
HRS Score:	70.82; placed on NPL in October 1992	**Funding to Date:**	$ 200.6 million	**IRP/MMRP Status Table:**	Refer to page E-6-68, E-6-69, E-7-21, and E-8-19
		Est. CTC (Comp Year):	$ 176.9 million (FY2035)		

Introduction

The Pearl Harbor Naval Complex consists of seven installations: the Fleet and Industrial Supply Center (FISC), the Naval Station (NS), the Naval Magazine (NAVMAG), the Naval Shipyard (NSY) and Intermediate Maintenance Facility, the Public Works Center (PWC), the Naval Submarine Base, and the Inactive Ship Maintenance Facility. Fuel supply activities, landfills, and other support operations have contaminated the soil and groundwater with volatile organic compounds (VOCs), semi volatile organic compounds (SVOCs), and metals. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in October 1992. DoD and EPA signed a federal facility agreement (FFA) in March 1994 to outline how they were going to proceed with cleanup. Formed in FY90, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY95. The installation established three information repositories in FY90 and an administrative record in FY92. Pearl Harbor Naval Complex also completed a community involvement plan in FY92, which was updated in FY95 and FY05.

The installation has completed Record of Decisions (RODs), which selected cleanup actions, for PWC 2, NS Solid Waste Management Unit (SWMU) 6, FISC Sites 33 and 39, and NAVMAG Site 9. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Pearl Harbor Naval Complex completed the draft remedial investigation (RI) report for NS 19 and PWC SWMU 1, and began feasibility studies (FSs) to evaluate cleanup alternatives at SWMU 1 and NAVMAG Site 3. The installation also completed RODs for PWC 2, NS SWMU 6, and FISC 39. In addition, the installation continued site inspection (SI) fieldwork at NSY SWMU 84 and completed groundwater sampling for vanadium at NSY 42.

FY10 MMRP Progress

Technical issues delayed the SI report for NAVMAG Unexploded Ordnance (UXO) site 7.

Plan of Action

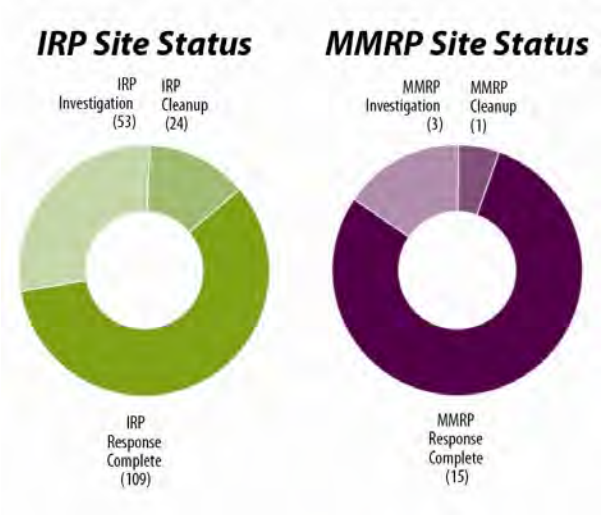
Plan of action items for Pearl Harbor Naval Complex are grouped below according to program category.

IRP

- Complete removal action at NS 58 in FY11.
- Submit SI report for NSY SMWU 84 in FY11.
- Begin RI/FS report for PWC SWMU 1 in FY11.
- Begin RI report for NAVMAG Site 3 in FY11.
- Complete final FS at NSY 42 in FY11.

MMRP

- Complete SI report for NAVMAG UXO 7.



Pease Air Force Base

NPL/BRAC 1988

FFID:	NH157002484700	**IAG Status:**	FFA signed in April 1991; modified in December 1992	**IRP Sites (Final RIP/RC):**	61 (FY2010)
Location (Size):	Portsmouth/Newington, New Hampshire (4,255 acres)	**Contaminants:**	VOCs, spent fuels, waste oils, POLs, pesticides, paints, TCE, SVOCs, metals, PCBs	**MMRP Sites (Final RIP/RC):**	1 (FY1996)
Mission:	Served as Strategic Air Command bomber and tanker base	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	39.42; placed on NPL in February 1990	**Funding to Date:**	$ 166.8 million	**IRP/MMRP Status Table:**	Refer to page E-6-109
		Est. CTC (Comp Year):	$ 19.2 million (FY2999)		

Introduction

Pease Air Force Base (AFB) served as a Strategic Air Command bomber and tanker base. Studies identified the following site types: fire training areas, burn pits, industrial facilities, landfills, and underground storage tanks. Petroleum products (JP-4 jet fuel) and industrial solvents, such as trichloroethylene (TCE), have contaminated the groundwater and soil. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1990. DoD and EPA signed a federal facility agreement (FFA) in 1991, which was last amended in 1992, to outline how they were going to proceed with cleanup. The 1988 BRAC Commission recommended closure of Pease AFB. In March 1991, the installation closed. The installation formed a BRAC cleanup team in FY93 to develop a process for cleanup of sites at Pease AFB. The installation formed a Restoration Advisory Board in FY95 to discuss the installation's cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY99, FY04, and FY09.

Cleanup sites at Pease AFB are grouped into 13 operable units (OUs). Before closure, the installation completed interim cleanup actions at four sites, soil removal at three sites, and test pit operations at two sites. To date, Pease AFB has signed 10 Records of Decision, selecting cleanup actions at OUs 1 through 6 and 8 through 11. In FY04, Pease AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Pease AFB completed construction of the air sparge/soil vapor extraction treatment system at Pumphouse 2 and began cleanup operations. The installation continued the investigation of contaminated Plume 13/14 conditions and began developing a series of plans to restart the treatment system. Additionally, the installation closed two petroleum sites, contaminated Plumes 31 and 32 on the flightline. The installation continued ongoing operations and maintenance (O&M). The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

FY10 MMRP Progress

The installation conducted no MMRP actions.

Plan of Action

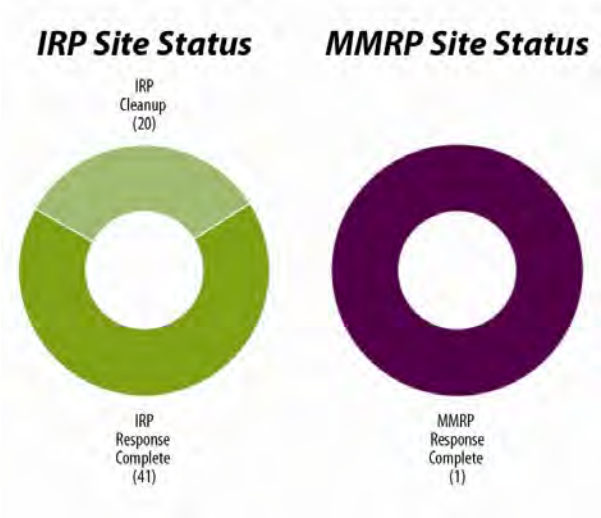
Plan of action items for Pease Air Force Base are grouped below according to program category.

IRP

- Continue ongoing O&M in FY11.
- Close petroleum Site 72 in FY11.
- Continue investigation and planning to restart the treatment system at Plume 13/14 in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Pensacola Naval Air Station

NPL/BRAC 2005 Realignment

FFID:	FL417002461000		chlorinated and nonchlorinated solvents, plating wastes, VOCs, SVOCs, explosives, propellants	**Five-Year Review Status:**	Completed and planned
Location (Size):	Pensacola, Florida (5,874 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-54
Mission:	Serve as a flight training center	**Funding to Date:**	$ 83.9 million		
HRS Score:	42.40; placed on NPL in December 1989	**Est. CTC (Comp Year):**	$ 47.1 million (FY2044)		
IAG Status:	FFA signed in October 1990	**IRP Sites (Final RIP/RC):**	65 (FY2017)		
Contaminants:	Ammonia, asbestos, benzene, cyanide, heavy metals, paints, PCBs, pesticides, phenols,	**MMRP Sites (Final RIP/RC):**	1 (FY2018)		

Introduction

Pensacola Naval Air Station (NAS), which now serves as a flight training center, was formerly a naval air rework facility and an aviation depot. Operations that have caused contamination at the station include a foundry, machine shops, coating and paint shops, paint stripping and plating shops, various maintenance and support facilities, landfills, and storage facilities. Investigations have identified 38 CERCLA sites, 1 solid waste management unit (SWMU), and 14 underground storage tank (UST) sites. Site types include landfills, disposal sites, polychlorinated biphenyls (PCBs) transformer and spill areas, industrial wastewater treatment plant areas, and evaporation ponds. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in December 1989. DoD and EPA signed a federal facility agreement (FFA) in October 1990 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Pensacola NAS for realignment. Formed in FY90, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY94. To ensure continuous monitoring and improvement, the installation completed the first five-year review report in FY03 and a second five-year review report for Operable Units (OUs) 1, 4, 11, and 13 in FY08.

To date, 13 Records of Decision (RODs) have been signed by the installation, which selected cleanup actions for 22 environmental restoration sites; 7 of these RODs required no further cleanup action for 11 environmental restoration sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

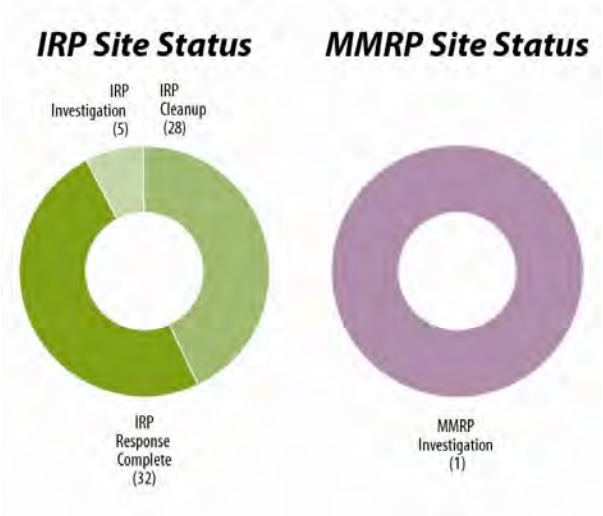
FY10 IRP Progress

Pensacola NAS continued groundwater monitoring at SWMU 1, Sites 1, 8, 15, 24, and UST Site 17. The installation completed feasibility studies (FSs) to evaluate cleanup alternatives for OUs 19 (Site 44), 20 (Site 45), and 21 (Site 46). In addition, Pensacola NAS completed a ROD for OU 18 (Site 43) and radium cleanup at OU 2 (Sites 25 and 27).

Regulatory issues delayed the FS and proposed plan (PP) for OU 16 (Site 41) and the PP for OUs 19 through 21 (Sites 44 through 46). Regulatory issues also delayed RODs for OUs 20 and 21(Sites 45 and 46).

FY10 MMRP Progress

Pensacola NAS completed site inspections at two sites.



Plan of Action

Plan of action items for Pensacola Naval Air Station are grouped below according to program category.

IRP

- Continue groundwater monitoring at SWMU 1, Sites 1, 8, 11, 12, 15, 24 through 27, 30, 38, and 43 in FY11.
- Complete FS and PP for OU 16 (Site 41) in FY11.
- Complete the design for cleanup and the construction of a cleanup system required at OU 18 (Site 43) in FY11.
- Complete the PPs for OUs 19 through 21 (Sites 44 through 46) in FY11.
- Complete RODs for OUs 20 and 21 (Sites 45 and 46) in FY11.
- Complete radium cleanup at Sites 2 and 12 in FY11.

MMRP

- Begin remedial investigations at two sites in FY11.

Philadelphia Naval Complex

BRAC 1988

FFID:	PA317002775600, PA317002219800, and PA317002241800	**HRS Score:**	N/A	**IRP Sites (Final RIP/RC):**	31 (FY2009)
Location (Size):	Philadelphia, Pennsylvania (1,494 acres)	**IAG Status:**	N/A	**MMRP Sites (Final RIP/RC):**	None
Mission:	Provide logistical support for ships and service craft; overhaul, repair, and outfit ships and craft; conduct research and development; test and evaluate shipboard systems	**Contaminants:**	POLs, heavy metals, PCBs, solvents, VOCs, SVOCs	**Five-Year Review Status:**	Completed and planned
		Media Affected:	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-8-53
		Funding to Date:	$ 22.7 million		
		Est. CTC (Comp Year):	$ 1.2 million (FY2009)		

Introduction

Philadelphia Naval Complex is comprised of Philadelphia Naval Shipyard (NSY), Naval Station (NS), and Naval Hospital (NH). Site types at the complex include landfills, oil spill areas, and disposal areas where petroleum/oil/lubricants (POLs) and heavy metals were released into groundwater and soil. In December 1988, the BRAC Commission recommended closure of the Philadelphia NH, and in July 1991, recommended closure of the Philadelphia NS and the Philadelphia NSY. Formed in FY89, the installation converted its technical review committee, responsible for communicating cleanup progress with the community, into a Restoration Advisory Board (RAB) in FY89. The installation formed a BRAC cleanup team to develop a process for cleanup of sites. The team prepared a BRAC cleanup plan in FY94 to prioritize sites requiring environmental restoration. The BRAC cleanup plan was revised in FY97. In FY95, Philadelphia Naval Complex established an information repository and developed a community relations plan. In FY01, the installation obtained a technical assistance for public participation grant to provide the RAB with input during the property transfer process. Upon completion of all property transfer, the RAB shifted its focus to the Naval Surface Warfare Center Ship System Engineering Station. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY04 and FY09.

To date, the installation has signed eight Records of Decision, which selected cleanup actions at environmental restoration sites. The installation also has transferred 1,218 acres of property. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Philadelphia Naval Complex continued landfill (LF) operation and maintenance at Site 4 and completed repairs to the LF cap. This is the last narrative for this installation, as cleanup is complete at all sites.

FY10 MMRP Progress

Philadelphia Naval Complex has identified no MMRP sites.

Plan of Action

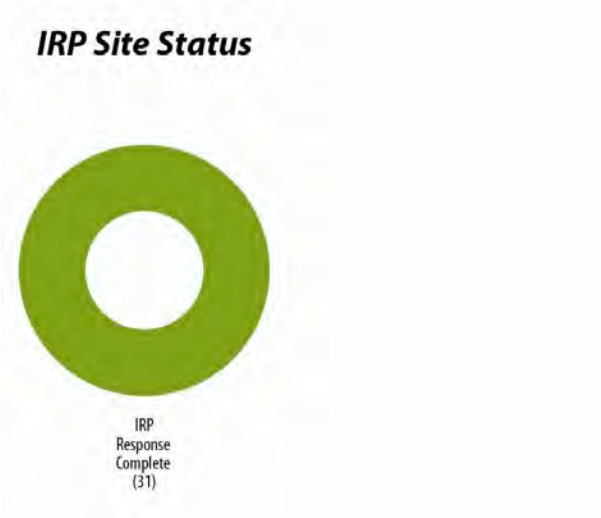
Plan of action items for Philadelphia Naval Complex are grouped below according to program category.

IRP

- Continue LF operation and maintenance at Site 4 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Picatinny Arsenal

NPL

FFID:	NJ221382070400	**Contaminants:**	VOCs, explosives, PCBs, heavy metals, SVOCs, propellants, radioactive materials, BTEX	**Five-Year Review Status:**	Completed and planned
Location (Size):	Rockaway Township, New Jersey (6,500 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-110
Mission:	Serve as host to the Army Armaments Research, Development, and Engineering Center	**Funding to Date:**	$ 131.3 million		
HRS Score:	42.92; placed on NPL in February 1990	**Est. CTC (Comp Year):**	$ 85.9 million (FY2027)		
IAG Status:	IAG signed in April 1991	**IRP Sites (Final RIP/RC):**	178 (FY2014)		
		MMRP Sites (Final RIP/RC):	15 (FY2016)		

Introduction

In 1880, Dover Powder Depot, now known as Picatinny Arsenal, was established to store gunpowder. Untill the 1970s, the installation manufactured explosives, propellants, and ammunition. It now houses the Joint Munitions and Lethality Life Cycle Management Command. Contaminated sites include a burning ground, landfills, underground storage tanks, former production areas, and former testing sites. Identified contaminants include volatile organic compounds (VOCs), explosives, and heavy metals. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1990. DoD and EPA signed an interagency agreement (IAG) in April 1991 to outline how they were going to proceed with cleanup. In FY96, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. In FY98, FY05, FY08, and FY09, the installation received technical assistance for public participation funding. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01 and FY06.

To date, the installation has signed 15 Records of Decision (RODs), selecting cleanup actions for 29 sites. In FY03, Picatinny Arsenal completed an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

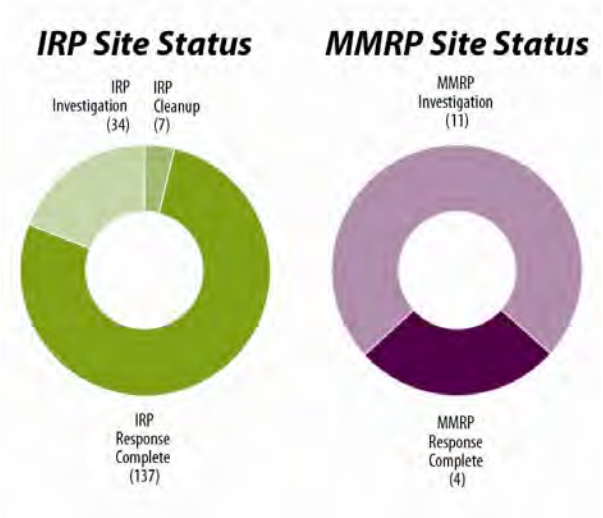
Picatinny Arsenal released public notices for three proposed plans (PPs) regarding the Groups 1 and 3 sites and Site 78. The installation completed construction of cleanup systems at two sites and the feasibility study (FS) to evaluate cleanup alternatives for 600 Hill. Picatinny Arsenal completed the ROD for Groups 1 and 3 sites. The installation monitored and continued groundwater cleanup using natural processes at two sites.

Technical issues delayed the release of public notices for three PPs and delayed the construction of cleanup systems at 11 sites.

FY10 MMRP Progress

Picatinny Arsenal completed removal actions on eight acres at Tilcon Mines. The installation awarded a contract and began the remedial investigation (RI) at all eligible sites. In addition, Picatinny Arsenal performed unexploded ordnance (UXO) clearances and construction support for various projects.

Administrative issues delayed the removal actions on two acres at Tilcon Mines.



Plan of Action

Plan of action items for Picatinny Arsenal are grouped below according to program category.

IRP

- Complete ROD and cleanup at Site 78 in FY11.
- Complete five-year review reports for sites that have signed RODs in FY11.
- Complete FS for Lake Denmark and Lake Picatinny in FY11.
- Complete RODs selecting land use controls (LUCs) for cleanup actions at over 140 individual sites in FY11-FY12.

MMRP

- Initiate RI work plan for all sites in FY11.
- Continue UXO clearances and constuction support for various projects in FY11.
- Complete the removal action on the two remaining acres at Tilcon Mines in FY11.
- Complete LUCs for all eligible sites in FY11-FY12.
- Complete RI at Former Skeet Range in FY11-FY12.

Plattsburgh Air Force Base

NPL/BRAC 1993

FFID:	NY257002477400	**Contaminants:**	Organic solvents, pesticides, fuels, PCBs, lead, VOCs, SVOCs, metals, PCBs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Plattsburgh, New York (3,447 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-119
Mission:	Served as former bomber and tanker aircraft operations	**Funding to Date:**	$ 70.0 million		
HRS Score:	30.34; placed on NPL in November 1989	**Est. CTC (Comp Year):**	$ 12.0 million (FY2084)		
IAG Status:	FFA signed in July 1991	**IRP Sites (Final RIP/RC):**	42 (FY2011)		
		MMRP Sites (Final RIP/RC):	6 (FY2003)		

Introduction

Plattsburgh Air Force Base (AFB) formerly supported bomber and tanker aircraft operations. Groundwater at a former fire training (FT) area is contaminated with chlorinated solvents, as well as benzene, toluene, ethyl benzene, and xylene. Other contaminated site types include underground storage tanks, aboveground storage tanks, landfills, industrial facilities, spill sites (SS), and training areas. The potential risk to human health and the environment was significant enough for EPA to place Plattsburgh AFB on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in July 1991 to outline how they were going to proceed with cleanup. The 1993 BRAC Commission recommended closure of Plattsburgh AFB, and the installation closed in September 1995. Plattsburgh AFB updated the BRAC cleanup plan with community input in FY04 to prioritize sites requiring environmental restoration. In FY94, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. In FY95, Plattsburgh AFB completed a community relations plan. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY99, FY04 and FY10.

Plattsburgh AFB has grouped contaminated sites into 21 operable units (OUs). To date, the installation has closed 21 sites in concurrence with regulators. The installation has completed 12 Records of Decision (RODs), which selected cleanup actions for 12 OUs. In FY04, Plattsburgh AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Plattsburgh AFB completed the third five-year review report with EPA concurrence. Plattsburgh AFB also constructed and began operations of a soil vapor extraction system and a combined air sparge/vapor extraction system. The installation submitted a supplemental proposed plan (PP) and revised ROD for FT 002 groundwater OU. In addition, the installation prepared and submitted a PP for SS 041.

Technical issues at FT 002 delayed the ROD for three sites.

FY10 MMRP Progress

Plattsburgh AFB conducted no MMRP actions in FY10.

Plan of Action

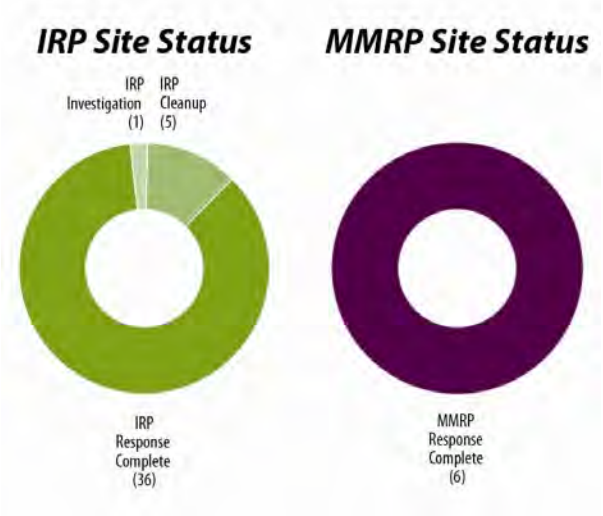
Plan of action items for Plattsburgh Air Force Base are grouped below according to program category.

IRP

- Complete RODs for three sites in FY11.
- Complete implementation of all cleanup systems in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Portsmouth Naval Shipyard

NPL

FFID:	ME117002201900	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-88
Location (Size):	Kittery, Maine (278 acres)	**Funding to Date:**	$ 57.4 million		
Mission:	Maintain, repair, and overhaul nuclear submarines	**Est. CTC (Comp Year):**	$ 31.2 million (FY2037)		
HRS Score:	67.70; placed on NPL in May 1994	**IRP Sites (Final RIP/RC):**	34 (FY2014)		
IAG Status:	FFA signed in 1999	**MMRP Sites (Final RIP/RC):**	1 (FY2005)		
Contaminants:	Pesticides, PCBs, VOCs, heavy metals, SVOCs	**Five-Year Review Status:**	Completed and planned		

Introduction

The Portsmouth Naval Shipyard (NSY) maintains, repairs, and overhauls nuclear submarines. A RCRA facility assessment in FY86 identified 28 solid waste management units (SWMUs). Site types at the installation include a landfill (LF), a salvage and storage area, and waste oil tanks. The potential risk to human health and the environment from contamination in groundwater and sensitive wetland communities was significant enough for EPA to place the installation on the NPL in May 1994. DoD and EPA signed a federal facility agreement (FFA) in 1999 to outline how they were going to proceed with cleanup. Formed in FY87, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY95. Portsmouth NSY developed a community relations plan, which was updated in FY97. To ensure continuous monitoring and improvement, the installation also completed a five-year review report for Operable Unit (OU) 3 in FY07.

To date, the installation determined that no further cleanup actions were necessary for SWMUs 12, 13, 16, and 23. The installation also has completed Records of Decision (RODs), which selected cleanup actions for three environmental restoration sites and OU 1. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Portsmouth NSY completed the feasibility study (FS) to evaluate cleanup alternatives, the proposed plan, and the ROD for OU 1. The installation also continued monitoring at Jamaica Island LF and the constructed wetlands. The installation also continued off-shore monitoring of the OU 4 area under the interim ROD.

Technical issues delayed completion of the interim cleanup of lead-contaminated soil and a remedial investigation (RI) at OU 2 (Sites 6 and 29).

FY10 MMRP Progress

Portsmouth NSY conducted no MMRP actions.

Plan of Action

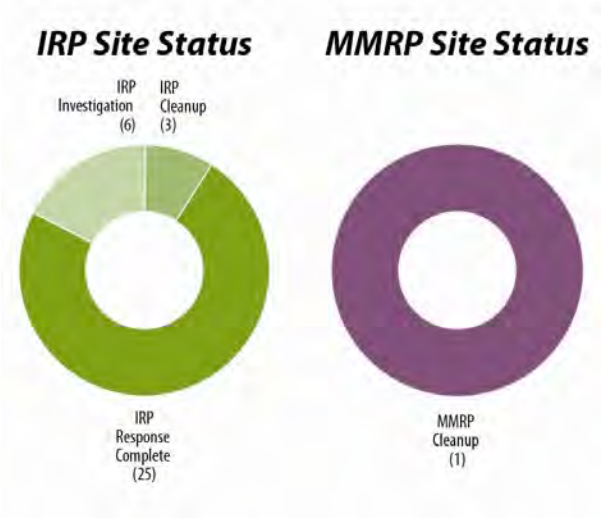
Plan of action items for Portsmouth Naval Shipyard are grouped below according to program category.

IRP

- Complete an RI/FS at OU 2 (Sites 6 and 29) in FY11.
- Complete interim cleanup of lead-contaminated soil at OU 2 (Sites 6 and 29) in FY11.
- Begin RI at OU 8 (Site 31) in FY11.
- Begin interim removal action at Site 30 in FY11.
- Update community relations plan in FY11.
- Prepare second five-year review report in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Pueblo Chemical Depot

BRAC 1988

FFID:	CO821382072500	**Contaminants:**	POLs, heavy metals, VOCs, pesticides, explosives, PCBs, UXO, SVOCs, propellants, BTEX	**MMRP Sites (Final RIP/RC):**	14 (FY2018)
Location (Size):	Pueblo, Colorado (23,121 acres)			**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Mission:	Store chemical munitions, plan for future closure.	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-47
HRS Score:	N/A	**Funding to Date:**	$ 146.8 million		
IAG Status:	N/A	**Est. CTC (Comp Year):**	$ 88.9 million (FY2023)		
		IRP Sites (Final RIP/RC):	43 (FY2018)		

Introduction

Pueblo Chemical Depot (CD), formerly Pueblo Chemical Activity, stores chemical munitions. Contaminated sites include a landfill, open burning and detonation grounds, ordnance and explosives waste areas, lagoons, former building sites, oil-water separators, a TNT washout facility and discharge system, and hazardous waste storage units. Heavy metals, volatile organic compounds (VOCs), and explosives are the primary contaminants affecting soil and groundwater. In December 1988, the BRAC Commission recommended realignment of the installation. In FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites at Pueblo CD. Also in FY94, the installation formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the public. The community formed a local redevelopment authority, which prepared a land reuse plan. In FY96, the installation developed Team Pueblo to coordinate public involvement in restoration, reuse, closure. In FY99, RAB members approved the RAB charter.

In FY03, Pueblo CD conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

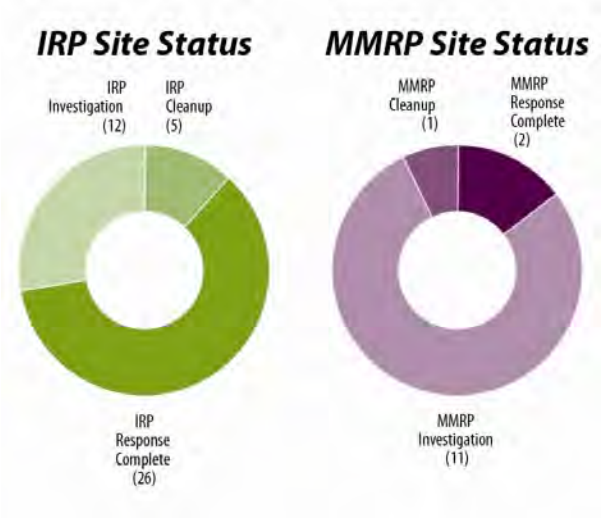
FY10 IRP Progress

Pueblo CD continued cleanup at Solid Waste Management Units (SWMUs) 14, 17, 28, 36 and 58. The installation received regulatory approval for no further cleanup action at SWMUs 49 and 50. Pueblo CD also completed work plans for corrective measure investigations at SWMUs 19 and 25, completed and submitted an investigation report for SWMU 38, and submitted a work plan for cleanup at SWMU 40 to the State for approval. Pueblo CD also finalized the justification for no further cleanup action for SWMU 35 and submitted it to the State for approval.

Regulatory issues delayed the submission of the justification for no further action for SWMU 21 to the State for approval.

FY10 MMRP Progress

Technical issues delayed the completion and submission of the supplemental RCRA facility investigation for SWMU 34.



Plan of Action

Plan of action items for Pueblo Chemical Depot are grouped below according to program category.

IRP

- Continue cleanup at SWMUs 14, 17, 28, 36 and 58 in FY11.
- Receive state approval for the work plan for cleanup at SWMU 25 and implement the remedy in FY11.
- Draft a justification for no further action for SWMUs 19 and 21 and submit for state approval in FY11.
- Submit the investigation report for SWMU 38 for state approval in FY11.
- Complete the investigation at SWMU 39 and submit the report for state approval in FY11.
- Complete work plan for cleanup at SWMUs 40 and 43 and submit for state approval in FY11.

MMRP

- Complete supplemental investigation at SWMUs 7 and 34 in FY11.

Puget Sound Naval Shipyard

NPL

FFID:	WA017002341800, WA017002342600, WA017002726800	**IAG Status:**	IAG signed for Bremerton Naval Complex in 1998; IAG signed for Jackson Park Housing Complex in 2004	**Funding to Date:**	$ 206.7 million
Location (Size):	Kitsap County, Washington (1,392 acres)			**Est. CTC (Comp Year):**	$ 104.1 million (FY2042)
Mission:	Support ship logistics; work in construction and overhaul; provide housing and healthcare for active duty families	**Contaminants:**	Heavy metals, VOCs, POLs, solvents, construction debris, acids, silver nitrate, SVOCs, explosives, propellants	**IRP Sites (Final RIP/RC):**	36 (FY2016)
				MMRP Sites (Final RIP/RC):	3 (FY2017)
HRS Score:	50.00; placed on NPL in May 1994	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
				IRP/MMRP Status Table:	Refer to page E-6-176 and E-7-55

Introduction

Puget Sound Naval Shipyard (NSY) supports ship logistics, works in construction and overhaul, and provides housing and healthcare for active duty families. Naval Facilities Engineering Command Northwest manages all cleanup activities at Bremerton Naval Complex (BNC) and Jackson Park Housing Complex (JPHC). Most of BNC, which includes the Puget Sound NSY, is built on contaminated fill material. Initial assessment studies identified six sites for BNC and eight at JPHC. The main sources of contamination are past operations, such as cleaning and demilitarization of ordnance and ship construction, maintenance, and demolition. Metals and petroleum/oil/lubricants (POLs) are the primary contaminants. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in May 1994. DoD and EPA signed an interagency agreement (IAG) for BNC in 1998 to outline how they were going to proceed with cleanup; they signed an IAG for JPHC in 2004. Formed in FY91 and FY92 respectively, JPHC and BNC converted their technical review committees responsible for communicating cleanup progress with the community to Restoration Advisory Boards in FY94. To ensure continuous monitoring and improvement, the installation completed five-year review reports for BNC in FY02 and FY07, and for JPHC in FY05.

To date, BNC has completed Records of Decision (RODs) for Operable Units (OUs) A, BM (Marine), BT (Terrestrial), D, and Naval Supply Center, which selected cleanup actions for these sites. JPHC has completed a ROD for OU 1. Puget Sound NSY transferred approximately two acres of BNC OU D property to the City of Bremerton. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

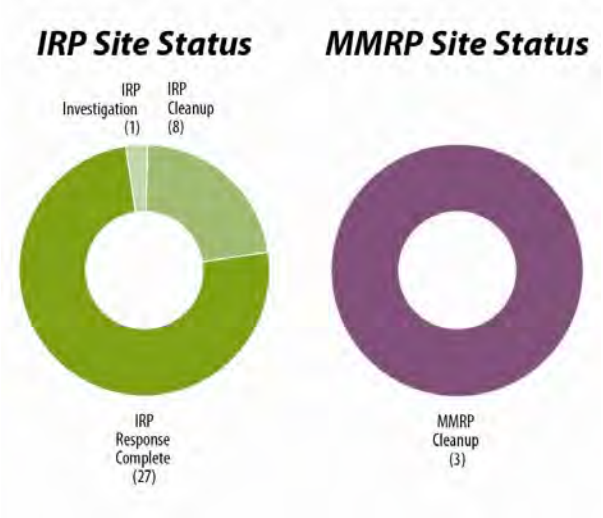
Puget Sound NSY continued long-term monitoring and completed field work supporting a focused feasibility study (FS) to evaluate cleanup alternatives at JPHC OU 1. The installation also continued long-term monitoring at BNC OU BT and completed the fourth round of long-term monitoring at BNC OU BM. In addition, Puget Sound NSY completed an assessment of potential risks to human health from mercury at BNC OU BM. The cost of completing environmental restoration has changed significantly due to technical issues.

Regulatory issues delayed the second JPHC five-year review report.

FY10 MMRP Progress

Puget Sound NSY resolved the formal dispute for stipulated penalties at JPHC OU 3T. The installation also completed a Phase II remedial investigation (RI) and FS for JPHC OU 3T. In addition, Puget Sound NSY completed a draft RI/FS report for JPHC OU 3M and a draft FS and proposed plan (PP) for JPHC OU 2.

Regulatory issues delayed completion of the PP for JPHC OU 3T.



Plan of Action

Plan of action items for Puget Sound Naval Shipyard are grouped below according to program category.

IRP

- Complete focused FS at JPHC OU 1 in FY11.
- Complete second JPHC five-year review report in FY11.
- Complete RI/FS and PP for JPHC OU 2 in FY11.
- Continue long-term monitoring at BNC OU BT in FY11.

MMRP

- Complete ROD and begin design and cleanup at JPHC OU 3T in FY11.
- Complete RI/FS and PP for JPHC OU 3M in FY11.
- Complete PP for JPHC OU 3T in FY11.

Red River Army Depot

BRAC 1995/BRAC 2005 Realignment

FFID:	TX621382073800	**IAG Status:**	N/A	**IRP Sites (Final RIP/RC):**	79 (FY2017)
Location (Size):	Texarkana, Texas (18,316 acres)	**Contaminants:**	Trichloroethylene (TCE), cadmium, chromium, lead, zinc, dichloroethane, dichloroethene, VOCs, SVOCs, metals	**MMRP Sites (Final RIP/RC):**	13 (FY2017)
Mission:	Conduct ground combat; air defense systems certification; equipment support services; munitions storage, renovation and demilitarization; defense logistic support	**Media Affected:**	Soil	**Five-Year Review Status:**	Planned
HRS Score:	N/A	**Funding to Date:**	$ 49.0 million	**IRP/MMRP Status Table:**	Refer to page E-6-155
		Est. CTC (Comp Year):	$ 60.3 million (FY2017)		

Introduction

Red River Army Depot (AD) conducts ground combat; air defense systems certification; equipment support services; munitions storage, renovation, and demilitarization; and defense logistic support. Areas of environmental concern at Red River AD include spill sites associated with previous industrial and disposal activities. Trichloroethylene (TCE) is the main contaminant affecting groundwater at the installation. In 1995, the BRAC Commission realigned Red River AD by moving the M113 vehicle mission to other depots. In 2005, the BRAC Commission further realigned Red River AD to close the munitions center and move the missile facilities. The installation retained its Tactical Wheeled Vehicle Programs, intern training, and rubber production missions. In FY95, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. In FY96, the installation prepared a BRAC cleanup plan to prioritize sites requiring environmental restoration and updated it in FY01. In FY95, the community formed the Red River Redevelopment Authority. In FY96, Red River AD formed a Restoration Advisory Board to discuss cleanup progress with the the community.

To date, the installation has removed more than 2,000 cubic yards of contaminated sediment from the north and south stormwater drainage ditches in the Western Industrial Area. Red River AD also transferred 694 of the 797 acres of BRAC property to the Red River Redevelopment Authority. In FY03, Red River AD conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP) at the non-BRAC portion of this installation; MMRP sites were identified.

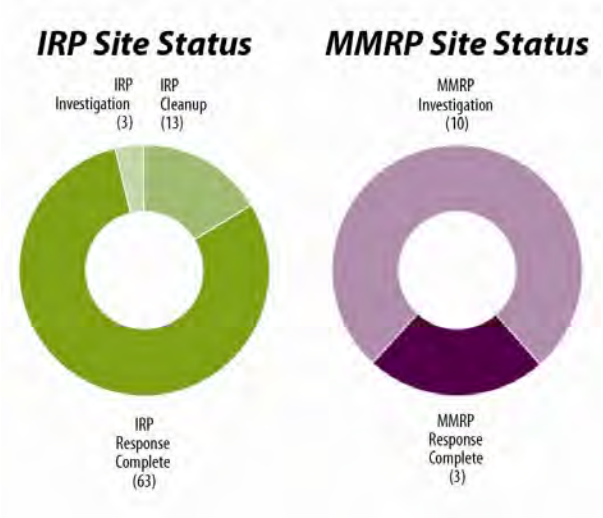
FY10 IRP Progress

Red River AD completed the response action plan for the Panther Creek barrier walls after receiving approval from the Texas Commission on Environmental Quality. The installation completed the remedial investigation (RI) of the Defense Reutilization and Marketing Office Scrap Yard. Red River AD also completed the draft finding of suitability for transfer for the X1 Sewer Treatment Plant. In addition, the installation completed fieldwork for investigations. Red River AD conducted groundwater monitoring at the open burn/open detonation grounds, chromate equalization lagoon, Ordnance Training Center Landfill (LF) and sludge drying beds in accordance with the compliance plan. The cost of completing environmental restoration has changed significantly due to technical issues and changes in estimating criteria.

FY10 MMRP Progress

Red River AD completed fieldwork for the RI and feasibility study (FS) to evaluate cleanup alternatives for five active sites and two BRAC 2005 sites.

Technical issues delayed completion of the draft RI/FS report for five active sites and two BRAC 2005 sites.



Plan of Action

Plan of action items for Red River Army Depot are grouped below according to program category.

IRP

- Complete the reports for the investigations in FY11.
- Complete draft RI reports at four BRAC 2005 sites FY11.
- Conduct vacuum extraction of fuel-contaminated groundwater at Site 37 in FY11-FY12.
- Monitor performance of barrier protecting Panther Creek from solvent-contaminated groundwater in FY11-FY12.
- Conduct groundwater monitoring at the open burn/open detonation grounds, chromate equalization lagoon, Ordnance Training Center LF and sludge drying beds in FY11-FY12.

MMRP

- Complete draft RI/FS for five active sites and two BRAC 2005 sites in FY11.
- Complete RIs at the NW and SW Surveillance Function Test Ranges FY11.

FFID:	AL421382074200	**IAG Status:**	FFA under negotiation	**IRP Sites (Final RIP/RC):**	271 (FY2014)
Location (Size):	Huntsville, Alabama (38,300 acres)	**Contaminants:**	Heavy metals, solvents, MEC, perchlorate, CWM, pesticides, VOCs, SVOCs, PCBs, explosives, propellants, PAHs, BTEX	**MMRP Sites (Final RIP/RC):**	30 (FY2014)
Mission:	Serve as host to the Army Aviation and Missile Command, the Space and Missile Defense Command, Redstone Technical Test Center, and the Missile and Space Intelligence Center	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Planned
		Funding to Date:	$ 241.9 million	**IRP/MMRP Status Table:**	Refer to page E-6-1
HRS Score:	33.40; placed on NPL in June 1994	**Est. CTC (Comp Year):**	$ 50.5 million (FY2025)		

Introduction

Past operations at Redstone Arsenal included production, receipt and shipment, storage, demilitarization, and disposal of chemical and high-explosive munitions. Industrial firms also produced commercial chemicals and pesticides at the installation. Redstone Arsenal currently conducts military training, research and development; manages procurement; and supports the Army's aviation and missile weapons systems. Site types include past disposal sites, landfills, open burning and open detonation areas, chemical munitions disposal sites, and releases from rocket motor production processes. Primary contaminants of concern are heavy metals, solvents, chemical weapon materiels, munitions and explosives of concern, and pesticides. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in June 1994. DoD and EPA are currently negotiating a federal facility agreement (FFA) to outline how they will proceed with cleanup. In FY94, Redstone Arsenal formed a technical review committee to discuss cleanup progress with the community. In FY05, the BRAC Commission recommended Redstone Arsenal for realignment.

Sites at Redstone Arsenal are grouped into groundwater operable units (OUs) and surface media OUs. To date, the installation has closed 21 sites and completed 10 Records of Decision (RODs), selecting cleanup actions at 13 sites. Redstone Arsenal has also signed one interim ROD for groundwater land use controls (LUCs), which restrict the use of and access to sites.

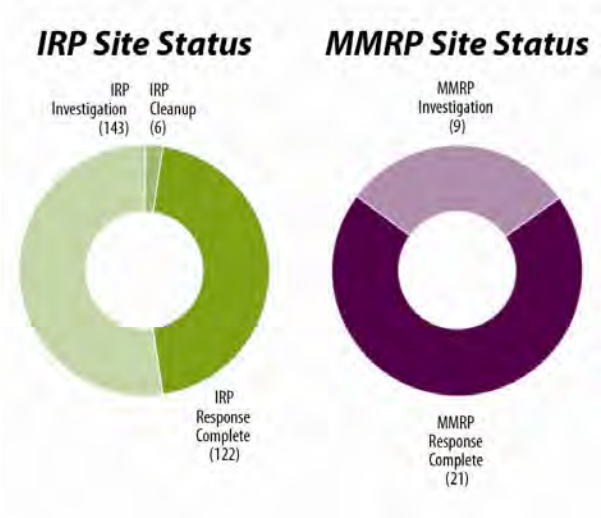
FY10 IRP Progress

Redstone Arsenal began removal actions to address soil at sites 097 and 138M to support future facility construction, and began removal actions at Sites 122 and 183. The installation began preparing site inspection (SI) and remedial investigation (RI) work plans for 56 sites, began SIs at 37 sites, and began RIs at 33 sites. The installation also began drafting five feasibility study (FS) reports to evaluate cleanup alternatives. Redstone Arsenal finalized SI reports and obtained approval for Sites 271 and 197, and finalized SI workplans for Sites 255 and C. The installation completed a final closure report for site 057, and a decision document (DD) at Site 197. The cost of completing environmental restoration has changed significantly due to technical issues.

Redstone Arsenal submitted a request for interest in forming a RAB, but there was not enough community interest.

FY10 MMRP Progress

Redstone Arsenal employed an Explosive Detonation System to destroy 15 munitions recovered and stored at the installation, and began an RI/FS to evaluate cleanup alternatives at RSA-141, RSA-072, RSA-278, and MSFC-003.



Plan of Action

Plan of action items for Redstone Arsenal are grouped below according to program category.

IRP

- Complete 18 FSs, 20 proposed plans (PPs), 25 RIs, and 13 SIs in FY11.
- Complete a cleanup closure report, 10 LUC plans, and 11 cleanup work plans in FY11.
- Complete 11 DDs and 15 RODs in FY11.
- Continue removal actions to address soil at Sites 097 and 138M to support future facility construction in FY11-FY12.
- Continue removal actions at Sites 122 and 183 in FY11-FY12.
- Continue SIs at 37 sites and RIs at 33 sites in FY11-FY12.
- Contiue preparing SI and RI workplans for 56 sites, and the five draft FSs in FY11-FY12.

MMRP

- Complete three RIs, two FSs, and two PPs in FY11.

Reese Air Force Base

BRAC 1995

FFID:	TX657152409100	**Media Affected:**	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-49
Location (Size):	Lubbock, Texas (2,987 acres)	**Funding to Date:**	$ 128.0 million		
Mission:	Conducted pilot training	**Est. CTC (Comp Year):**	$ 2.1 million (FY2014)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	18 (FY2006)		
IAG Status:	FFA signed in 1987 and terminated in June 1999	**MMRP Sites (Final RIP/RC):**	3 (FY2000)		
Contaminants:	VOCs, POLs, metals, pesticides, herbicides, TCE, SVOCs	**Five-Year Review Status:**	Completed and planned		

Introduction

Reese Air Force Base (AFB) formerly supported pilot training and related activities. Sites identified at the installation include landfills, surface impoundments, underground storage tanks, sludge spreading areas, industrial drain lines, and fire training areas. DoD and EPA signed a federal facility agreement (FFA) in 1987 to outline how they were going to proceed with cleanup, the FFA terminated in June 1999. The 1995 BRAC Commission recommended closure of Reese AFB, and the installation closed in September 1997. In FY96, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. Reese AFB formed a Restoration Advisory Board (RAB) in FY95 to discuss the installation's cleanup progress with the community; the RAB adjourned in FY10. To ensure continuous monitoring and improvement, Reese AFB completed a five-year review report in FY06.

To date, the installation has transferred all property. In FY06, Reese AFB determined that no further construction of cleanup systems was required. In FY04, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified. Reese AFB closed all MMRP sites in FY07.

FY10 IRP Progress

Reese AFB continued the enhanced groundwater cleanup action. The installation also continued compliance with the RCRA Order and continued landfill maintenance and monitoring.

Reese AFB formally adjourned the RAB.

FY10 MMRP Progress

The installation conducted no MMRP actions.

Plan of Action

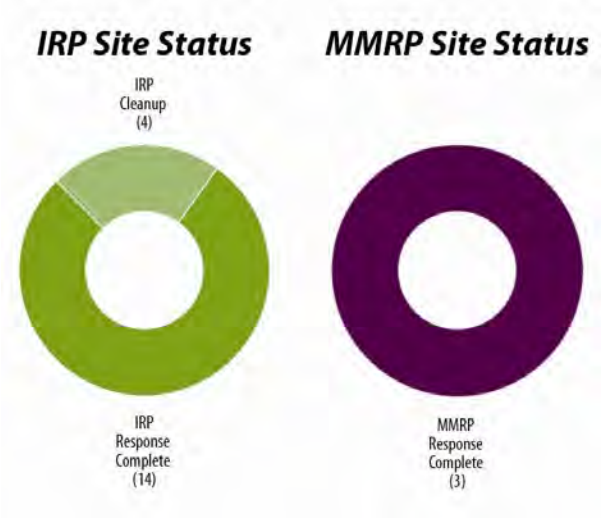
Plan of action items for Reese Air Force Base are grouped below according to program category.

IRP

- Prepare a five-year review report in FY11.
- Continue enhanced groundwater cleanup action in FY11-FY12.
- Continue compliance with the RCRA Order in FY11-FY12.
- Continue landfill maintenance and monitoring in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Richards-Gebaur Air Reserve Station

BRAC 1991

FFID:	MO757002429200	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-32
Location (Size):	Kansas City, Missouri (429 acres)	**Funding to Date:**	$ 12.1 million		
Mission:	Supported fighter and attack aircraft operations	**Est. CTC (Comp Year):**	$ 3.0 million (FY2999)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	12 (FY2004)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	POLs, PAHs, PCBs, VOCs, heavy metals, SVOCs, explosives, propellants	**Five-Year Review Status:**	Completed and planned		

Introduction

Richards-Gebaur Air Reserve Station (ARS) formerly supported fighter and attack aircraft operations. Site types identified at the installation include a fire training area, vehicle maintenance areas, hazardous waste drum storage areas, fuel storage areas, and underground storage tanks. In July 1991, the BRAC Commission recommended closure of Richards-Gebaur ARS. The installation closed in September 1994. In FY94, Richards-Gebaur ARS formed a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community. The installation updated the community relations plan to indicate the status of cleanup efforts and identify ongoing opportunities for community involvement, the RAB adjourned in FY04. To ensure continuous monitoring and improvement, Richards-Gebaur ARS completed a five-year review report in FY07.

To date, Richards-Gebaur ARS has completed Decision Documents for three sites, which determined that no further cleanup actions were necessary. Richards-Gebaur ARS has signed Records of Decision selecting cleanup actions for Operable Units 1 and 2. The installation has transferred all property to the local communities (which are the cities of Kansas City and Belton) or assigned to the Navy and the Army. In FY06, the installation transferred environmental responsibility for Spill Sites 003 and 009 to the Navy. In FY04, Richards-Gebaur ARS conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Restoration Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Richards-Gebaur ARS conducted annual groundwater monitoring and land use controls (LUC), which restrict the use of or access to sites, and institutional control (IC) inspections at four sites in FY10.

Technical and administrative issues delayed the five-year review report.

FY10 MMRP Progress

Richards-Gebaur ARS has identified no MMRP sites.

Plan of Action

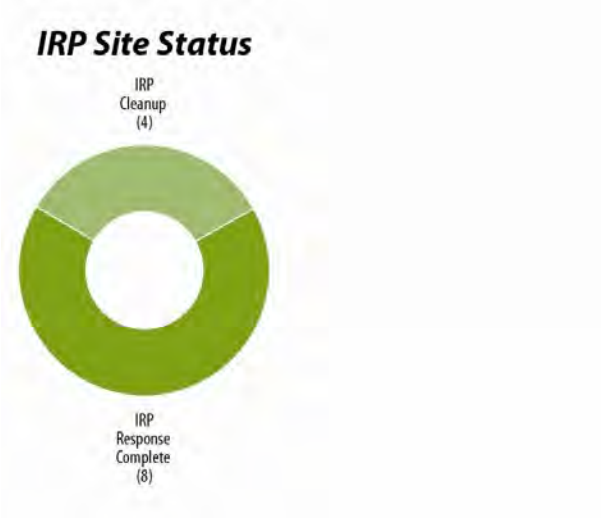
Plan of action items for Richards-Gebaur Air Reserve Station are grouped below according to program category.

IRP

- Continue groundwater monitoring and LUC/IC inspections at four sites in FY11.
- Award a nine-year, multi-base performance-based contract in FY11.
- Complete the five-year review report in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Rickenbacker Air National Guard Base

Proposed NPL/BRAC 1991

FFID:	OH557002454400	**Contaminants:**	Pesticides, paints, POLs, solvents, heavy metals, VOCs, SVOCs, explosives, propellants	**Five-Year Review Status:**	Completed and planned
Location (Size):	Columbus, Ohio (2,076 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-43
Mission:	Supported fighter, tanker, and cargo aircraft operations	**Funding to Date:**	$ 26.9 million		
HRS Score:	50.00; proposed for NPL in January 1994	**Est. CTC (Comp Year):**	$ 7.9 million (FY2036)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	45 (FY2001)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Rickenbacker Air National Guard Base (ANGB) formerly supported aircraft operations. The installation has identified groundwater sites contaminated with metals, pesticides, and volatile organic compounds (VOCs). The potential risk to human health and the environment was significant enough for EPA to propose placing the installation on the NPL in January 1994. The 1991 BRAC Commission recommended closure of Rickenbacker ANGB. The 1993 BRAC Commission recommended realignment rather than base closure, and the installation was realigned in September 1994. The installation has formed a BRAC cleanup team to develop a process for cleanup of sites. The installation also formed a Restoration Advisory Board in FY94 to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY08.

To date, Rickenbacker ANGB has signed two Records of Decision, which selected cleanup actions at nine environmental restoration sites. The installation has also signed documents determining no further cleanup action is necessary at three areas of concern and 16 sites suspected to contain contamination for the Installation Restoration Program (IRP). Seven other IRP sites have been closed with regulatory concurrence. The installation has transferred over 1,700 acres to the local redevelopment authority. In FY04, Rickenbacker ANGB conducted an inventory of sites suspected to contain contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Rickenbacker ANGB continued groundwater monitoring at Sites 1, 21, 41, and 42. The installation also updated the administrative record.

The BRAC cleanup team met twice.

FY10 MMRP Progress

Rickenbacker ANGB has no identified MMRP sites.

Plan of Action

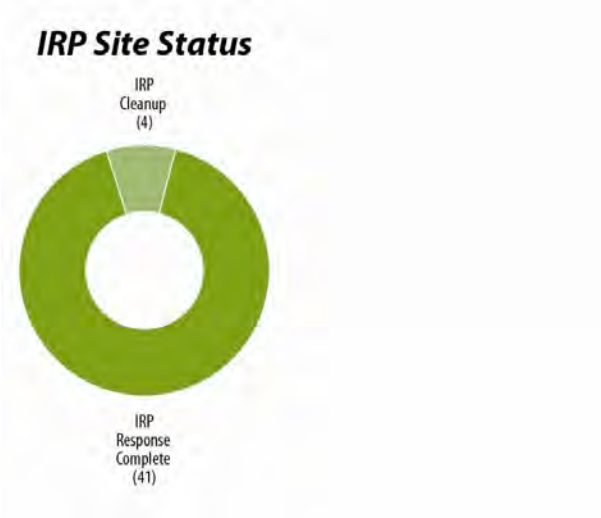
Plan of action items for Rickenbacker Air National Guard Base are grouped below according to program category.

IRP

- Continue groundwater monitoring at Sites 1, 21, 41, and 42 in FY11.
- Perform a groundwater and soil delineation investigation at Site 1 in FY11.
- Update the land use control management plan, which restrict the use of or access to sites in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Riverbank Army Ammunition Plant

NPL/BRAC 2005 Closure

FFID:	CA921382075900	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-7
Location (Size):	Riverbank, California (172 acres)	**Funding to Date:**	$ 58.8 million		
Mission:	Manufacture grenades, projectiles, and steel cartridge casings	**Est. CTC (Comp Year):**	$ 1.4 million (FY2014)		
HRS Score:	63.94; placed on NPL in February 1990	**IRP Sites (Final RIP/RC):**	12 (FY1998)		
IAG Status:	IAG signed in April 1990	**MMRP Sites (Final RIP/RC):**	1 (FY2008)		
Contaminants:	Chromium, cyanide, zinc, PCBs	**Five-Year Review Status:**	Completed and underway		

Introduction

In 1942, the Army constructed the Riverbank Army Ammunition Plant (AAP) as an aluminum reduction plant to supply military requirements. Since 1951, the installation has manufactured brass and steel cartridge cases for the Army and the Navy. Other manufactured products include grenades and projectiles, which the Army ships to other ammunition plants for loading operations. Contaminated sites inlcude an industrial wastewater treatment plant, an abandoned landfill, and four evaporation and percolation ponds located north of the plant near the Stanislaus River. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1990. DoD and EPA signed an interagency agreement (IAG) in April 1990 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Riverbank AAP for closure. Riverbank AAP formed a technical review committee in FY94 to discuss the installation's cleanup progress with the community. To ensure continuous monitoring and improvement, Riverbank AAP completed five-year review reports in FY01 and FY06.

To date, the installation has completed one Record of Decision (ROD), which selected cleanup actions for all sites. In FY03, Riverbank AAP conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Riverbank AAP investigated polychlorinated biphenyl (PCB) contamination resulting from asbestos-protected metal siding.

FY10 MMRP Progress

Riverbank AAP conducted no MMRP actions.

Plan of Action

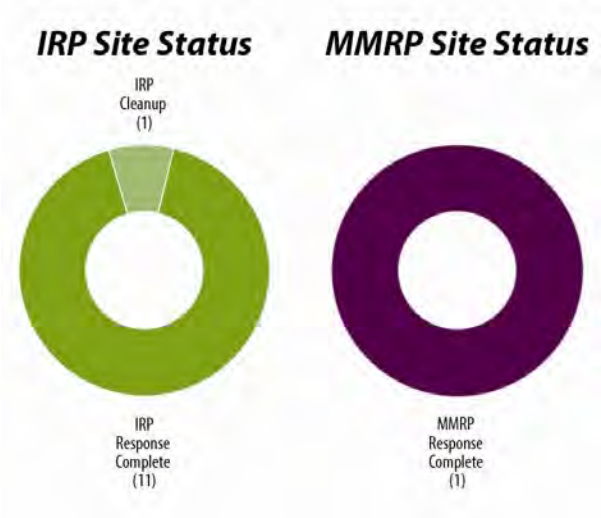
Plan of action items for Riverbank Army Ammunition Plant are grouped below according to program category.

IRP

- Submit revised explanations for significant differences with the RODs for institutional controls and treatment in FY11.
- Conduct cleanup with ferrous iron treatment in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Robins Air Force Base

NPL/BRAC 2005 Realignment

FFID:	GA457172433000	**Contaminants:**	VOCs, paint strippers and thinners, paints, solvents, phosphoric and chromic acids, cyanide, carbon, oils, TCE	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Houston County, Georgia (8,855 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
Mission:	Provide logistics support for aircraft	**Funding to Date:**	$ 194.8 million	**IRP/MMRP Status Table:**	Refer to page E-6-61
HRS Score:	51.66; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 108.6 million (FY2028)		
IAG Status:	FFA signed in June 1989	**IRP Sites (Final RIP/RC):**	48 (FY2005)		

Introduction

The mission of Robins Air Force Base (AFB) is to provide logistics support for aircraft. Primary contaminants at the installation include trichloroethylene (TCE) and tetrachloroethane in soil and groundwater. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed a federal facility agreement (FFA) in June 1989 to outline how they were going to proceed with cleanup. The Robins AFB NPL site designation consists of landfill 004 and an adjacent sludge lagoon (Waste Pile site 14) and is divided into three operable units (OUs): source control (OU 1), wetlands (OU 2), and groundwater (OU 3). In August 2003, OU 2 was removed from the NPL designation and is addressed under RCRA. In 2005, the BRAC Commission recommended Robins AFB for realignment. The installation formed a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, Robins AFB completed five-year review reports in FY01 and FY06.

To date, the installation has signed one Record of Decision, which selected cleanup actions for OUs 1 and 3.

FY10 IRP Progress

Robins AFB continued operations and maintenance (O&M) activities at eight sites and maintained land use controls (LUCs), which restrict use of or access to four sites. Robins AFB began installation-level partnering with state regulators.

The RAB continued to meet quarterly to discuss ongoing partnering efforts with the Georgia Environmental Protection Department.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.

Plan of Action

Plan of action items for Robins Air Force Base are grouped below according to program category.

IRP

- Continue O&M activities at eight sites in FY11.
- Maintain LUCs at four sites in FY11.
- Complete the five-year review report for the NPL site in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Rocky Mountain Arsenal

NPL

FFID:	CO821382076900	**Contaminants:**	Pesticides, chemical agents, VOCs, chlorinated organics, PCBs, UXO, heavy metals, solvents, SVOCs	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Adams County, Colorado (17,228 acres)			**Five-Year Review Status:**	Completed and underway
Mission:	Manufactured and stored chemical munitions	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-48
HRS Score:	58.15; placed on NPL in July 1987	**Funding to Date:**	$ 1,773.8 million		
IAG Status:	IAG and FFA signed in FY89	**Est. CTC (Comp Year):**	$ 170.4 million (FY2040)		
		IRP Sites (Final RIP/RC):	213 (FY2011)		

Introduction

Rocky Mountain Arsenal (RMA) operated chemical munitions production and destruction facilities from 1942 until 1982. Contaminated sites have included liquid waste in unlined and lined basins, open burning and detonations areas, and structures and trenches that received both liquid and solid wastes. Primary contaminants of concern are compounds used for chemical weapons materiel production and pesticides. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed an interagency agreement (IAG) and a federal facility agreement (FFA) in FY89 to outline how they were going to proceed with cleanup. In 1994, RMA converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01 and FY08.

To date, RMA has transferred 15,743 acres. EPA delisted 15,906 acres from the NPL between FY03 and FY10. In FY96, RMA and regulators signed Records of Decisions (RODs) selecting cleanup actions for both operable units at the installation. RMA completed an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

RMA transferred 2,500 acres of land to the U.S. Fish and Wildlife Service and began its third five-year review report. The installation completed the construction of engineering controls at Basin A, Lime Basins, South Plants Balance of Areas Phase II, Complex Army Disposal Trenches, Shell Disposal Trenches, and Basin F/Basin F Exterior. In addition, RMA demolished the CERCLA wastewater treatment plant, the last of more than 750 structures identified for demolition. The cost of completing environmental restoration has changed significantly due to technical issues.

FY10 MMRP Progress

RMA has identified no MMRP sites.

Plan of Action

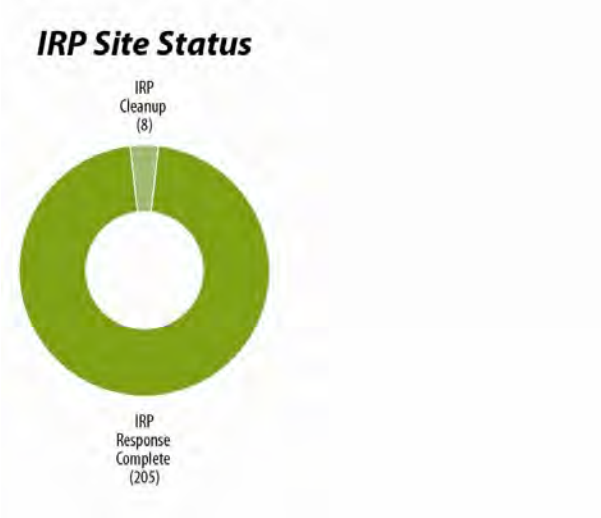
Plan of action items for Rocky Mountain Arsenal are grouped below according to program category.

IRP

- Award the long-term operations and maintenance contract to manage the landfill caps, cover systems, and groundwater treatment systems in FY11.
- Complete the third five-year review report in FY11.
- Complete the Construction Completion Reports for Basin A, Lime Basins, South Plants Balance of Areas Phase II, Complex Army Disposal Trenches, Shell Disposal Trenches, the Enhanced Hazardous Waste Landfill, and Basin F/Basin F Exterior in FY11.
- Continue to operate the groundwater treatment systems in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Sacramento Army Depot

NPL/BRAC 1991

FFID:	CA921382078000	**Contaminants:**	Oil and grease, cyanide, metals, solvents, metal plating wastes, wastewater containing caustics	**Five-Year Review Status:**	Completed and planned
Location (Size):	Sacramento, California (485 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-7
Mission:	Repaired and maintained communications and electronic equipment	**Funding to Date:**	$ 69.2 million		
HRS Score:	44.46; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 3.4 million (FY2017)		
IAG Status:	IAG signed in September 1988	**IRP Sites (Final RIP/RC):**	16 (FY1997)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Sacramento Army Depot (AD) provided support for communications and electronic equipment when in operation. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. In FY88, DoD and EPA signed an interagency agreement (IAG) to outline how they were going to proceed with cleanup. In 1991, the BRAC Commission recommended closure of Sacramento AD, and the installation closed in March 1995. In FY93, the installation completed a BRAC cleanup plan to prioritize sites requiring environmental restoration. The installation formed a Restoration Advisory Board (RAB) in FY94 to discuss its cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY01 and FY08.

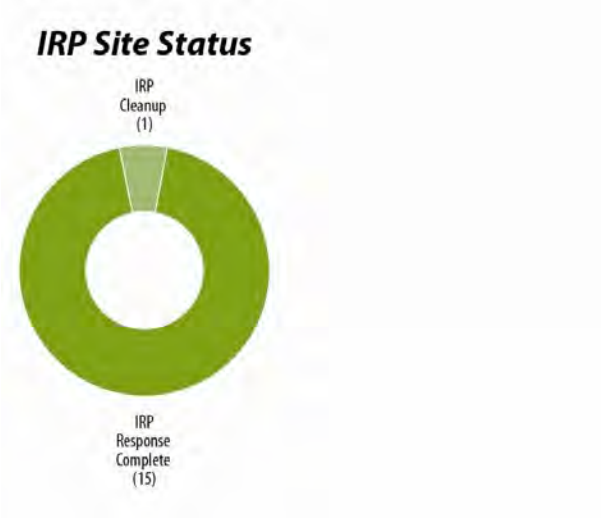
To date, Sacramento AD has transferred all acreage. Sacramento AD divided its contaminated sites into four operable units (OUs). In FY92, the installation signed Records of Decision (RODs), which selected cleanup actions for all four OUs. Sacramento AD signed a ROD selecting cleanup actions for the entire installation in FY95. The installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Sacramento AD gathered data for inclusion in a future bioremediation pilot study and feasibility study (FS) to evaluate cleanup alternatives. The installation finalized the Berry Avenue extraction system work plan and continued groundwater monitoring and extraction. Moreover, Sacramento AD installed and began operating the Berry Avenue extraction system and soil vapor extraction pilot system.

FY10 MMRP Progress

Sacramento AD has identified no MMRP sites.



Plan of Action

Plan of action items for Sacramento Army Depot are grouped below according to program category.

IRP

- Complete fact sheet to update the RAB on decisions, regulatory drivers and Army responsibilities influencing site cleanup in FY11.
- Complete easements on all properties associated with off-site monitoring and extraction wells in FY11.
- Continue soil vapor extraction pilot study and begin integrating findings into an FS for possible future actions in FY11-FY12.
- Continue groundwater extraction and monitoring and evaluate the efficiency of the Berry Avenue extraction system in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

San Diego Naval Training Center

BRAC 1993

FFID:	CA917002320200	**Contaminants:**	Pesticides, solvents, POLs, paints, VOCs, SVOCs, metals, radioactive materials	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Location (Size):	San Diego, California (541 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-8
Mission:	Provided recruit training for enlisted personnel and specialized training for officers and enlisted personnel	**Funding to Date:**	$ 37.2 million		
		Est. CTC (Comp Year):	$ 7.2 million (FY2015)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	10 (FY2014)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	None		

Introduction

Prior to its closure, San Diego Naval Training Center (NTC) provided recruit training for enlisted personnel and specialized training for officers and enlisted personnel. Sites include a landfill and petroleum-contaminated areas. In July 1993, the BRAC Commission recommended closure of San Diego NTC and relocation of personnel, equipment, and mission support to other naval training centers. The installation closed in April 1997. Certain installation facilities and activities continued to support other Navy operations in the San Diego area. In FY99, the installation updated its BRAC cleanup plan with community input to prioritize sites requiring environmental restoration. The installation also developed a community relations plan in FY92, which was updated in FY95. In FY94, San Diego NTC established a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community, and an information repository, containing the most current documents of the administrative record. The installation deactivated the RAB in 2004, but reestablished it in FY07.

To date, the installation has signed one Record of Decision which selected cleanup actions for environmental restoration sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

San Diego NTC met with regulators to discuss issues associated with the evaluation and cleanup of the Boat Channel (Site 12).

FY10 MMRP Progress

San Diego NTC has identified no MMRP sites.

Plan of Action

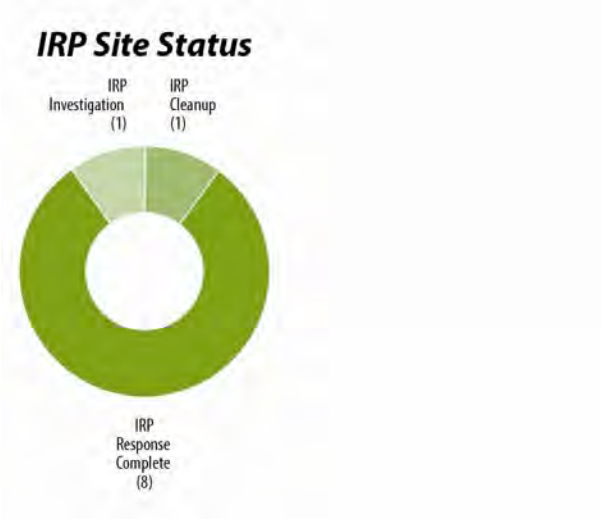
Plan of action items for San Diego Naval Training Center are grouped below according to program category.

IRP

- Resolve issues with regulators regarding cleanup and finalize the feasibility study to evaluate cleanup alternatives for Site 12 in FY11.
- Begin the proposed plan for Site 12 in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Sangamo Electric Dump/Crab Orchard National Wildlife Refuge

NPL

FFID:	IL59799F217200	**Contaminants:**	Organic solvents, inorganic compounds, PAHs, PCBs, munitions, heavy metals, VOCs, explosives, SVOCs, propellants	**MMRP Sites (Final RIP/RC):**	1 (FY2003)
Location (Size):	Carterville, Illinois (43,000 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
Mission:	Manufactured and loaded ordnance for shipping	**Funding to Date:**	$ 11.4 million	**IRP/MMRP Status Table:**	Refer to page E-8-21
HRS Score:	43.70; placed on NPL in July 1987	**Est. CTC (Comp Year):**	$ 1.8 million (FY2004)		
IAG Status:	IAG signed in September 1991	**IRP Sites (Final RIP/RC):**	4 (FY2004)		

Introduction

The former Illinois Ordnance Plant, which operated from 1942 to 1945, is located on the eastern portion of the U.S. Fish and Wildlife Service's (FWS's) Crab Orchard National Wildlife Refuge. The ordnance plant served as a manufacturing and loading site for high-explosive shells, bombs, and other weapons components. The potential risk to human health and the environment was significant enough for EPA to place the property on the NPL in July 1987. DoD and EPA signed an interagency agreement (IAG) in September 1991, to outline how they were going to proceed with cleanup. The FWS established a technical working group in FY00 consisting of FWS, EPA, Illinois EPA, and the U.S. Army Corps of Engineers (USACE). To ensure continuous monitoring and improvement, USACE completed a five-year review report in FY07.

The installation initially identified 33 areas that required further investigation. The Army grouped these areas into four operable units (OUs): the Polychlorinated Biphenyls (PCBs) OU, the Metals OU, the Miscellaneous Area OU, and the Explosives and Munitions Manufacturing Area OU.

FY10 IRP Progress

USACE completed revisions to the plan for potentially new investigations; no new investigations are planned at this time. USACE attended both technical working group meetings. This is the last narrative for this property, as cleanup is complete at all sites.

Administrative issues delayed completion of the potentially responsible parties (PRPs) inventory project report.

FY10 MMRP Progress

Administrative issues delayed completion of the Military Munitions Response Program (MMRP) realignment process and MMRP project revision.

Plan of Action

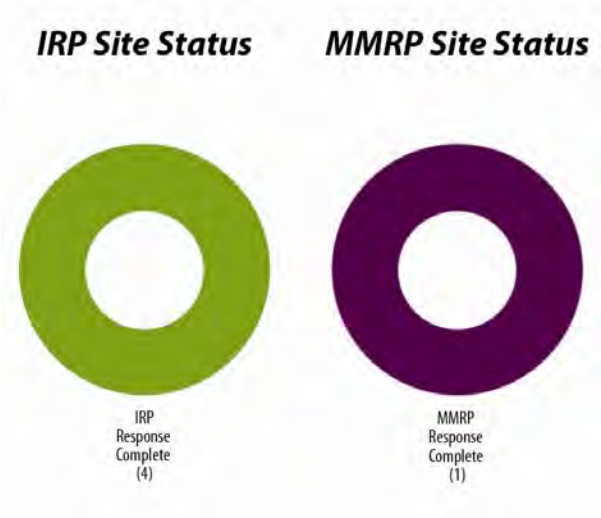
Plan of action items for Sangamo Electric Dump/Crab Orchard National Wildlife Refuge are grouped below according to program category.

IRP

- Complete PRPs inventory project report in FY11.

MMRP

- Update long-term management sampling plan in FY11.
- Complete MMRP realignment process and MMRP project revision in FY11.



Savanna Army Depot

NPL/BRAC 1995

FFID:	IL521382080300	**Contaminants:**	Explosives, metals, solvents, POLs, VOCs, SVOCs, propellants, BTEX, radioactive materials, PCBs	**MMRP Sites (Final RIP/RC):**	15 (FY2018)
Location (Size):	Savanna, Illinois (13,062 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Mission:	Receive, store, and demilitarize ammunition; manufacture ammunition-specific equipment	**Funding to Date:**	$ 121.1 million	**IRP/MMRP Status Table:**	Refer to page E-6-77
HRS Score:	42.20; placed on NPL in March 1989	**Est. CTC (Comp Year):**	$ 84.0 million (FY2046)		
IAG Status:	IAG signed in FY1989	**IRP Sites (Final RIP/RC):**	127 (FY2018)		

Introduction

Savanna Army Depot (AD) began operation in 1917 as the Savanna Proving Grounds. During the 1920s, the mission changed to include storage, receipt, issuance, demilitarization, and renovation of ammunition. Contaminanted areas include landfills; the open burning and open detonation ground; the fire training area; and ammunition load, assemble, and pack facilities. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in March 1989. DoD and EPA signed an interagency agreement (IAG) in FY89 to outline how they were going to proceed with cleanup. In July 1995, the BRAC Commission recommended closure of the Savanna Depot Activity and relocation of the Army Defense Ammunition Center and School to McAlester Army Ammunition Plant in Oklahoma. In FY96, Savanna AD formed a BRAC cleanup team to develop a process for cleanup of sites. In FY97, the installation completed a BRAC cleanup plan to prioritize sites requiring environmental restoration, and updated it in FY04, FY05, and FY08. In FY96, Savanna AD formed a Restoration Advisory Board (RAB) to discuss the installation's cleanup progress with the community.

To date, Savanna AD and regulators have signed three Records of Decision (ROD), which selected cleanup actions at sites and recommended no cleanup actions at one site. The installation has also transferred approximately 4,507 acres of land. The installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

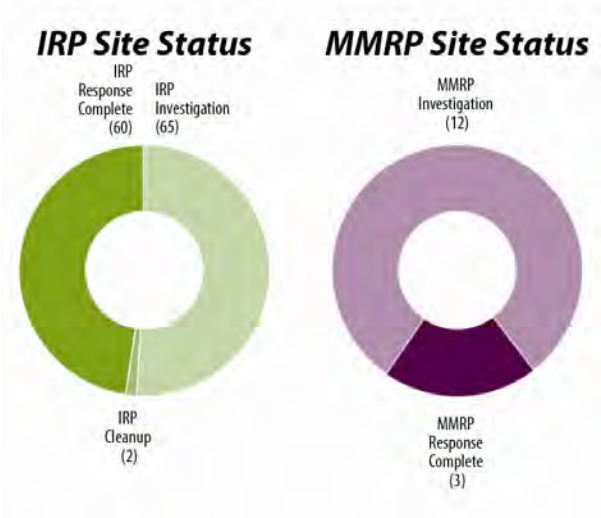
Savanna AD signed RODs for Sites 111 and 192, which selected cleanup actions for these sites. The installation also signed a No Further Action ROD for Site 44, determining that no further cleanup actions were necessary. The installation started cleanup fieldwork at Sites 111, 192, and 226 (J-609 Open Burn Area), and began the work plan for the removal actions at the Cosmoline Burial Pit. The cost of completing environmental restoration has changed significantly due to technical issues and changes in estimating criteria.

Regulatory issues delayed the transfer of U.S. Fish and Wildlife Service Parcels 8C and 9. Regulatory issues also delayed the transfer of Local Redevelopment Authority (LRA) Parcel 14. The Sewage Treatment Plant Parcel is no longer a priority with the LRA.

The Savanna AD RAB met six times and discussed cleanup projects, property transfers, and the efforts of the LRA and U.S. Fish and Wildlife Service. The BRAC Cleanup Team, which includes representatives from the Army, EPA, and Illinois EPA, conducted monthly partnering phone conferences to prioritize sites requiring environmental restoration.

FY10 MMRP Progress

Savanna AD completed munitions and explosives of concern (MEC) investigations at the Site 29 90-mm Case Test Area and the Site 50 open burning and open detonation (OB/OD) Area.



Plan of Action

Plan of action items for Savanna Army Depot are grouped below according to program category.

IRP

- Complete cleanup fieldwork at Sites 32 and 85 (bullet removal), 36 (Imhoff Tanks), 111, 122 (septic system closure), 192, 224 (Cosmoline Pit), and A-Area Det Pit asbestos in FY11.

MMRP

- Complete the remedial investigation at the Site 50 OB/OD Area in FY11.
- Complete small arms ammunition removal at Site 223 in FY11-FY12.
- Resolve the land use control and MEC issues at LRA Parcel 14 in FY11-FY12.

Seneca Army Depot

NPL/BRAC 1995

FFID:	NY221382083000	**Contaminants:**	Heavy metals, radioactive isotopes, petroleum hydrocarbons, VOCs, SVOCs, chlorinated solvents, radioactive materials	**MMRP Sites (Final RIP/RC):**	13 (FY2013)
Location (Size):	Romulus, New York (10,594 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**Five-Year Review Status:**	Planned
Mission:	Received, stored, distributed, maintained, and demilitarized conventional ammunition, explosives, and special weapons	**Funding to Date:**	$ 105.5 million	**IRP/MMRP Status Table:**	Refer to page E-7-39
HRS Score:	37.30; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 5.7 million (FY2022)		
IAG Status:	FFA signed in January 1993	**IRP Sites (Final RIP/RC):**	72 (FY2011)		

Introduction

During its operation, Seneca Army Depot (AD) stored munitions and supplies, and distributed them to the Army. The installation's operations included demilitarization and disposal of munitions and explosives of concern. Environmental studies identified the following sites or site types: an open burning ground, an ash landfill, other landfills, low-level radioactive waste burial grounds, underground storage tanks, spill areas, fire training areas, and munitions disposal areas. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed a federal facility agreement (FFA) in January 1993 to outline how they were going to proceed with cleanup. In July 1995, the BRAC Commission recommended closing Seneca AD, except for an enclave to store hazardous materials and ores. In FY96, the installation established a BRAC cleanup team to develop a process for cleanup at Seneca AD. In September 2000, the installation closed. In FY96, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. The community formed a local reuse authority and began developing a land reuse plan.

To date, Seneca AD has transferred 9,808 acres, including 6,981 acres of Military Munitions Response Program (MMRP) sites. The installation has signed 14 Records of Decision (RODs), selecting cleanup actions at 65 areas of concern. The installation also has signed a ROD requiring no further cleanup actions at 22 sites. In FY03, Seneca AD completed an inventory of all sites suspected to contain munitions contamination for the MMRP; MMRP sites were identified.

FY10 IRP Progress

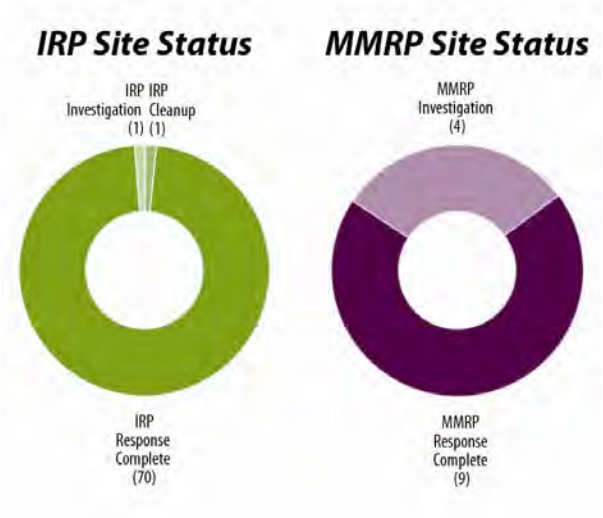
Seneca AD performed annual monitoring of land use controls (LUCs), which restrict the use of and access to the Industrial Area. The installation also performed cleanup actions at Sites 6 and 25. Additionally, the installation completed cleanup actions at Sites 12 and 70 and closed Sites 11, 24, 48 and 59.

Regulatory issues delayed completion of the ROD for Site 12.

FY10 MMRP Progress

Seneca AD began the removal action at Site 6R and continued long-term management at Site 1R.

Regulatory issues delayed completion of the ROD for Sites 2R, 3R and 7R.



Plan of Action

Plan of action items for Seneca Army Depot are grouped below according to program category.

IRP

- Complete the five-year review report in FY11.
- Complete ROD for Site 12 in FY11.
- Monitor the LUC restrictions at the Industrial Area in FY11-FY12.
- Complete the transfer of property found suitable to transfer in FY11-FY12.
- Continue to monitor the cleanup at Sites 6 and 25 in FY11-FY12.

MMRP

- Complete ROD at Sites 2R, 3R and 7R in FY11.
- Continue removal actions at Site 6R in FY11-FY12.
- Complete transfer of sites found suitable to transfer in FY11-FY12.

FFID:	CA921382084300	**HRS Score:**	N/A	**IRP Sites (Final RIP/RC):**	48 (FY2012)
Location (Size):	Herlong, California (37,977 acres)	**IAG Status:**	FFA signed in May 1991	**MMRP Sites (Final RIP/RC):**	16 (FY2018)
Mission:	Provide world-wide expeditionary logistics support for the defenders of our Nation through: Long-term Storage, Maintenance, Care of Supplies in Storage Reset, and Container management, while embracing the Army values	**Contaminants:**	Petroleum products, solvents, explosives, metals, VOCs, TCE	**Five-Year Review Status:**	Completed and planned
		Media Affected:	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-22
		Funding to Date:	$ 96.7 million		
		Est. CTC (Comp Year):	$ 29.0 million (FY2030)		

Introduction

Sierra Army Depot (AD) provides logistics support, long-term storage, and maintenance. The mission resulted in contamination from burn trenches, explosives leaching beds, landfills, burial sites, spill sites, sewage lines, underground storage tanks (USTs), sumps, and fire training areas. Primary contaminants in soil and groundwater include trichloroethylene (TCE), petroleum products, and explosives. DoD and EPA signed a federal facility agreement (FFA) in May 1991 to outline how they were going to proceed with cleanup. The 1995 BRAC Commission recommended realignment of Sierra AD; the 2005 BRAC Commission recommended further realignment of Sierra AD. In FY96, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. In FY97, the installation published the BRAC cleanup plan to prioritize sites requiring environmental restoration. The installation established a Restoration Advisory Board to discuss cleanup progress with the community in FY97. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY02 and FY07.

To date, Sierra AD has completed Records of Decision (RODs), selecting cleanup actions for 22 sites; 12 of these sites require no further cleanup action. The installation has transferred approximately 62,636 acres. Sierra AD conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

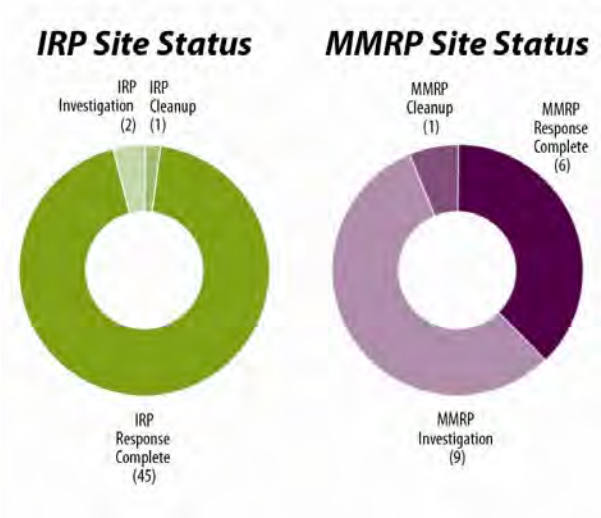
FY10 IRP Progress

Sierra AD continued bioremediation (reactive dechlorination) at four sites and installed an on-site groundwater treatment system. The installation also awarded a contract for a remedial investigation (RI) at a UST. The cost of completing environmental restoration has changed significantly due to technical issues.

Administrative issues delayed completion of the ROD for the off-site Building 210.

FY10 MMRP Progress

Sierra AD received regulatory approval for a work plan for the Upper Burning Grounds and prepared a performance-based contract for eight sites. The installation also began an RI at the Building 640 UST.



Plan of Action

Plan of action items for Sierra Army Depot are grouped below according to program category.

IRP

- Continue bioremediation at four sites in FY11.
- Install an off-site groundwater treatment system in FY11.
- Complete the ROD for the off-site Building 210 in FY11.
- Prepare preliminary assessments for previous compliance cleanup sites in FY11-FY12.
- Complete soil cleanup at the Defense Reutilization and Marketing Office (DRMO) and remove the soil vapor extraction system in FY11-FY12.

MMRP

- Address newly discovered site at DRMO Yard in FY11.
- Install engineering controls at sites in FY11.
- Conduct RIs at eight sites in FY11-FY12.

South Weymouth Naval Air Station

NPL/BRAC 1995

FFID:	MA117002202200	**Contaminants:**	UXO, VOCs, SVOCs, hydrocarbons, industrial wastes, solvents, petroleum, acids, paints, metals, photographic chemicals, explosives and propellants	**IRP Sites (Final RIP/RC):**	13 (FY2014)
Location (Size):	Weymouth, Massachusetts (2,094 acres)			**MMRP Sites (Final RIP/RC):**	2 (FY2008)
Mission:	Provided logistical support for Reserve units and the Marine Air Reserve Training Detachment South Weymouth	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	50.00; placed on NPL in May 1994	**Funding to Date:**	$ 64.4 million	**IRP/MMRP Status Table:**	Refer to page E-6-93
IAG Status:	FFA signed in November 1999	**Est. CTC (Comp Year):**	$ 22.5 million (FY2041)		

Introduction

Prior to closure, South Weymouth Naval Air Station (NAS) provided logistical support for reserve units and the Marine Air Reserve Training Detachment South Weymouth. Prominent contaminated site types include landfills, underground storage tanks, a tank farm storing jet fuel, sewage treatment facilities, a rubble disposal area, and a fire training area. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in May 1994. DoD and EPA signed a federal facility agreement (FFA) in April 2000 to outline how they were going to proceed with cleanup. In July 1995, the BRAC Commission recommended closure of the South Weymouth NAS. The installation formed a BRAC cleanup team in FY92 to develop a process for cleanup of sites. Operations transferred to Brunswick NAS, and the installation closed in September 1997. Formed in FY92, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board (RAB) in FY94. In FY92, South Weymouth NAS established an administrative record and four information repositories, and also completed its community relations plan, which was updated in August 1998. The RAB received a technical assistance for public participation grant in FY99.

The installation has completed Records of Decision (RODs) selecting cleanup actions for for Sites 1 through 5, 7, and 8; Areas of Concern (AOCs) 4A, 8, 53, 55D, and Hangar 1; and review item areas (RIAs) 99, 10C, 104, and 62. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

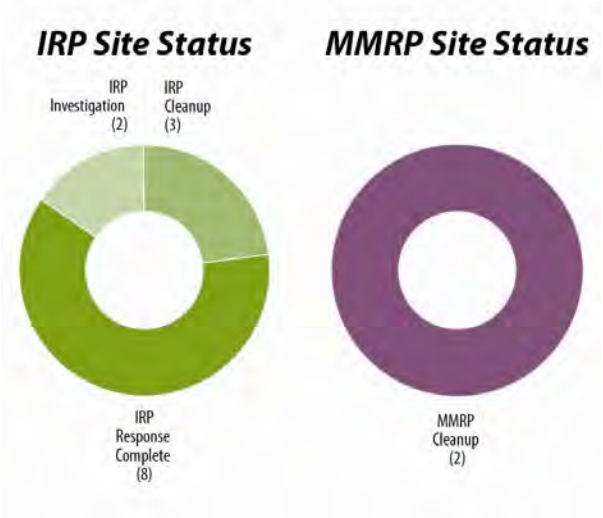
FY10 IRP Progress

South Weymouth NAS completed supplemental investigations at Sites 9, 10, and 11. The installation also completed the design for cleanup and cleanup actions at Site 3, and cleanup actions at AOC 55C. South Weymouth NAS completed RODs and no further action decision documents, which selected cleanup actions for one AOC and four RIAs.

Regulatory issues delayed final remedial investigation (RI) and feasibility studies (FSs) to evaluate cleanup alternatives at Sites 9, 10, and 11.

FY10 MMRP Progress

Administrative issues delayed the completion of the FS, proposed plan (PP), and ROD for Unexploded Ordnance (UXO) 1. Technical issues delayed the implementation of land use controls (LUCs), which restrict the use of or access to UXO 1.



Plan of Action

Plan of action items for South Weymouth Naval Air Station are grouped below according to program category.

IRP

- Complete RI/FS at Sites 9, 10 and 11 in FY11.
- Complete cleanup actions for Site 1 and AOC main gate encroachment area in FY11.
- Complete RODs determining that no further cleanup actions are necessary at AOC 55C and AOC MGEA in FY11-FY12.

MMRP

- Complete the FS, PP, and ROD for UXO 1 in FY11.
- Begin to implement LUCs at UXO 1 in FY11.

St. Juliens Creek Annex

NPL

FFID:	VA317002758100	**IAG Status:**	FFA signed in July 2004	**IRP Sites (Final RIP/RC):**	16 (FY2012)
Location (Size):	Chesapeake, Virginia (490 acres)	**Contaminants:**	Pesticides, heavy metals, SVOCs, solvents, explosives, VOCs, propellants, radioactive materials	**MMRP Sites (Final RIP/RC):**	1 (FY2018)
Mission:	Provide radar testing range and various administrative and warehousing facilities for the nearby Norfolk Naval Shipyard and other local Navy activities	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	50.0; placed on NPL in August 2000	**Funding to Date:**	$ 26.5 million	**IRP/MMRP Status Table:**	Refer to page E-6-171
		Est. CTC (Comp Year):	$ 18.8 million (FY2039)		

Introduction

The St. Juliens Creek Annex has been used since 1849 for storing, loading, assembling, issuing, and receiving naval ammunition. Currently, St. Juliens Creek Annex provides a radar testing range and various administrative and warehousing facilities for the nearby Norfolk Naval Shipyard and other local Navy activities. Contamination resulted from past handling of and operations involving hazardous materials. The initial assessment study revealed low concentrations of ordnance materials throughout the installation. The potential risk to human health and the environment was significant enough for EPA to place the facility on the NPL in August 2000. In 2004, DoD and EPA signed a federal facility agreement (FFA) to outline how they were going to proceed with cleanup. The installation established an administrative record in FY99, formed a Restoration Advisory Board in FY00 to discuss cleanup progress with the community, and completed a community relations plan in FY01. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY10.

The installation has completed a Record of Decision (ROD) for Site 6 in FY03, Site 4 in FY04, and Site 3 in FY06, which selected cleanup actions for these sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

St. Juliens Creek Annex completed a five-year review report, a feasibility study (FS) to evaluate cleanup alternatives and proposed cleanup plan for Site 2. The installation also completed the interim ROD and design for cleanup for the Site 21 interim (groundwater) remedy, and the draft remedial investigation and FS addendum, which reports the findings and recommendations of the vapor intrusion investigation. The cost of completing environmental restoration has changed significantly due to technical issues.

Technical issues delayed completion of the interim cleanup action at Site 5. Regulatory issues delayed the ROD for Site 2.

FY10 MMRP Progress

St. Juliens Creek Annex completed the site inspection (SI) report for Unexploded Ordnance (UXO) site 001.

Plan of Action

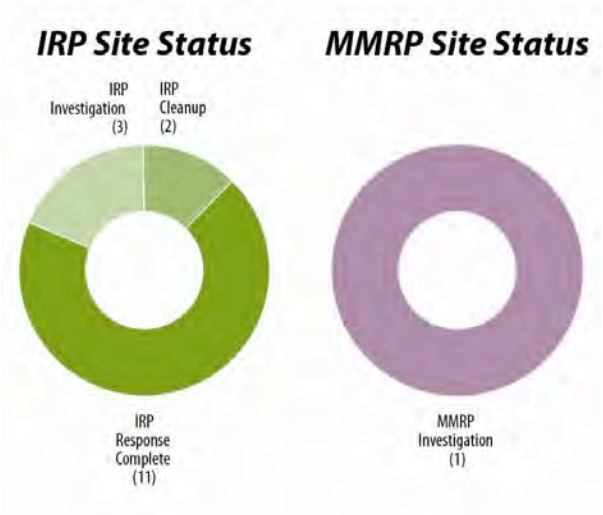
Plan of action items for St. Juliens Creek Annex are grouped below according to program category.

IRP

- Complete ROD and design for cleanup for Site 2 in FY11.
- Complete interim cleanup action at Site 5 in FY11.
- Complete the final ROD and design for cleanup for Site 21 in FY11.

MMRP

- Complete sampling and draft SI addendum for UXO 001 in FY11-FY12.



Stratford Army Engine Plant

BRAC 1995

FFID:	CT121382292400	**Contaminants:**	PCBs, asbestos, VOCs, solvents, metals, PAHs, SVOCs, BTEX	**Five-Year Review Status:**	Planned
Location (Size):	Stratford, Connecticut (77 acres)	**Media Affected:**	Groundwater, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-51
Mission:	Manufactured engines for heavy armor vehicles and rotary wing aircraft	**Funding to Date:**	$ 18.6 million		
HRS Score:	N/A	**Est. CTC (Comp Year):**	$ 27.6 million (FY2019)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	4 (FY2019)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

Stratford Army Engine Plant formerly manufactured engines. Contaminated site types at the installation include transformers, underground storage tanks, sludge lagoons, a fire training and explosives equipment testing area, hazardous materials and hazardous waste storage areas, and buildings constructed with material containing asbestos. Studies show that contaminants include polychlorinated biphenyls (PCBs), fuel-related volatile organic compounds (VOCs), solvents, metals, polyaromatic hydrocarbons (PAHs), and asbestos. In July 1995, the BRAC Commission recommended closure of the Stratford Army Engine Plant, which closed in 1998. In FY96, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. The installation drafted a BRAC cleanup plan to prioritize sites requiring environmental restoration and updated the plan in FY97 and FY99. In FY96, the installation formed a Restoration Advisory Board to discuss the installation's cleanup progress with the community. The community formed a local redevelopment authority to address socioeconomic issues related to the closure of the installation and to develop a land reuse plan. Stratford Army Engine Plant also implemented a community relations plan, which included the establishment of an on-site public information repository.

In FY02, Stratford Army Engine Plant conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

The Connecticut Department of Environmental Protection issued a RCRA permit to Stratford Army Engine Plant. According to the permit, the installation must modify its plans to complete a proposed plan and Record of Decision. To comply, the installation submitted schedules and conceptual plans for corrective action and closure activities to the Connecticut Department of Environmental Protection. The cost of completing environmental restoration has changed significantly due to regulatory issues and changes in estimating criteria.

FY10 MMRP Progress

Stratford Army Engine Plant has identified no MMRP sites.

Plan of Action

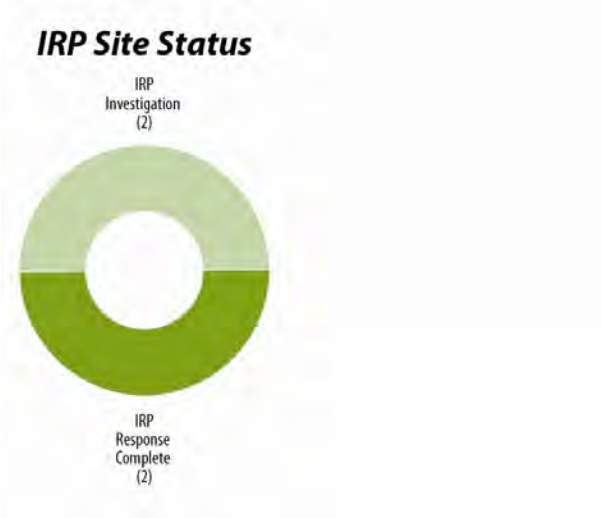
Plan of action items for Stratford Army Engine Plant are grouped below according to program category.

IRP

- Submit closure plans and reports for the five hazardous waste storage areas in FY11.
- Submit a revised post-closure plan for surface inpoundments in FY11.
- Submit cleanup goals for sediment in FY11.
- Conduct groundwater monitoring in FY11.
- Prepare a cleanup plan for offsite groundwater migration in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Tinker Air Force Base
Soldier Creek and Building 3001

NPL/BRAC 2005 Realignment

FFID:	OK657172439100	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-132
Location (Size):	Oklahoma City, Oklahoma (5,041 acres)	**Funding to Date:**	$ 222.5 million		
Mission:	Repair aircraft, weapons, and engines	**Est. CTC (Comp Year):**	$ 47.5 million (FY2023)		
HRS Score:	42.24; placed on NPL in July 1987	**IRP Sites (Final RIP/RC):**	55 (FY2008)		
IAG Status:	FFA signed in December 1988	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	Organic solvents, heavy metals, petroleum, phenols, VOCs, SVOCs, PCBs	**Five-Year Review Status:**	Completed and planned		

Introduction

The mission of Tinker Air Force Base (AFB) is to repair aircraft, weapons, and engines. Environmental studies at Tinker AFB revealed a 220-acre contaminated area in the upper aquifer at Soldier Creek and Building 3001. Additional sites at Tinker AFB include landfills, underground storage tanks, waste pits, fire training areas, spill sites, and low-level radioactive waste sites. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. The NPL designation consists of the Building 3001 and Soldier Creek sites. DoD and EPA signed a federal facility agreement (FFA) in December 1988 to outline how they would proceed with cleanup. In 2005, the BRAC Commission recommended Tinker AFB for realignment. The installation formed a Restoration Advisory Board in FY94 to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, Tinker AFB completed five-year review reports in FY99, FY03, and FY07.

To date, the installation has signed Records of Decision (RODs) which selected cleanup actions for Building 3001 and Soldier Creek. In FY05, the Air Force conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Tinker AFB completed phase I of the update to Building 3001 contaminated area status and risk assessment for the amended ROD, which selected cleanup actions.

Administrative issues delayed the continuation of operation and maintenance (O&M) of active recovery systems, and optimizing all active cleanup systems. Technical issues delayed the completion of the update to Building 3001's contaminated area status and risk assessment for the amended ROD.

FY10 MMRP Progress

The Air Force is reviewing its inventory of sites known or suspected of containing munitions for the MMRP.

Plan of Action

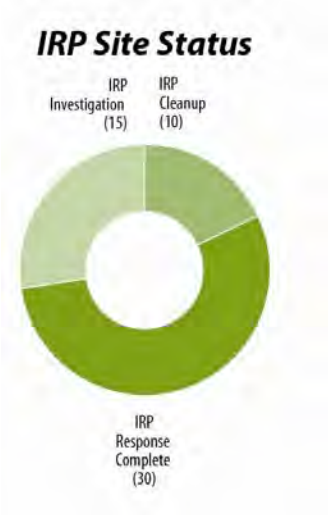
Plan of action items for Tinker Air Force Base are grouped below according to program category.

IRP

- Continue O&M at active recovery systems in FY11.
- Complete phase II of the update to Building 3001 contaminated area status and risk assessment for the amended ROD in FY11.
- Complete study for additional remedy technologies for Building 3001 in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Tobyhanna Army Depot

NPL

FFID:	PA321382089200	**Contaminants:**	Heavy metals, solvents, VOCs, PCBs, POLs, UXO	**Five-Year Review Status:**	Completed and planned
Location (Size):	Tobyhanna, Pennsylvania (1,296 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-45
Mission:	Provide logistics for communications and electronics equipment	**Funding to Date:**	$ 18.5 million		
HRS Score:	37.93; placed on NPL in August 1990	**Est. CTC (Comp Year):**	$ 1.1 million (FY2012)		
IAG Status:	IAG signed in September 1990	**IRP Sites (Final RIP/RC):**	67 (FY2005)		
		MMRP Sites (Final RIP/RC):	6 (FY2012)		

Introduction

Tobyhanna Army Depot (AD) provides support for communications and electronics equipment. Contaminated sites include landfills, a disposal pit, underground storage tanks, burn areas, drum staging areas, a surface disposal area, a waste treatment plant, a spill site area, an unexploded ordnance (UXO) area, and a fire fighting training area. Contamination at these sites has included volatile organic compounds (VOCs), solvents, and heavy metals in groundwater; solvents, metals, polychlorinated biphenyls (PCBs), and petroleum/oil/lubricants (POLs) in surface water and sediment; and solvents, metals, PCBs, POLs, and UXO in soil. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in August 1990. DoD and EPA signed an interagency agreement (IAG) in September 1990 to outline how they were going to proceed with cleanup. The 2005 BRAC Commission recommended Tobyhanna AD for realignment. In FY95, the installation formed a Restoration Advisory Board to discuss cleanup progress with the community and, in FY98, the installation completed a community relations plan. To ensure continuous monitoring and improvement, Tobyhanna AD completed five-year review reports in FY02 and FY07.

Environmental studies beginning in FY80 have identified 65 areas of concern (AOCs) covering the entire installation; EPA partially delisted 62 of the AOCs from the NPL in FY01. Tobyhanna AD has completed six Records of Decision, which selected cleanup actions for environmental restoration sites. In FY02, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Tobyhanna AD continued long-term groundwater monitoring at Operable Units (OUs) 1, 5, and Area U. In addition, the installation began off-post residential sampling for vapor intrusion and investigative study.

FY10 MMRP Progress

Tobyhanna AD completed UXO removal actions to support the main gate expansion project and the BRAC 2005 realignment. In addition, the installation completed fence maintenance to control access to OU 4.

Plan of Action

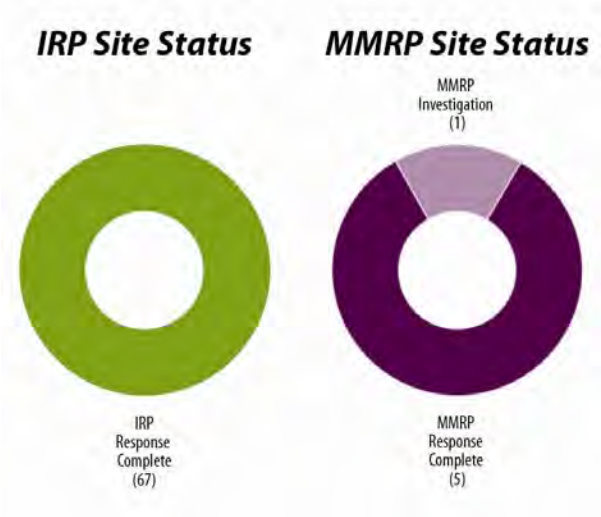
Plan of action items for Tobyhanna Army Depot are grouped below according to program category.

IRP

- Complete long-term groundwater monitoring (including two new wells) at OUs 1, 5, and Area U in FY11.
- Complete off-post residential sampling for vapor intrusion and investigative study in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Tooele Army Depot

NPL/BRAC 1993

FFID:	UT821382089400	**Media Affected:**	Groundwater	**IRP/MMRP Status Table:**	Refer to page E-6-165
Location (Size):	Tooele, Utah (24,732 acres)	**Funding to Date:**	$ 130.2 million		
Mission:	Store and demilitarize munitions	**Est. CTC (Comp Year):**	$ 38.8 million (FY2017)		
HRS Score:	53.95; placed on NPL in August 1990	**IRP Sites (Final RIP/RC):**	64 (FY2014)		
IAG Status:	FFA signed in September 1991	**MMRP Sites (Final RIP/RC):**	8 (FY2016)		
Contaminants:	Metals, VOCs, SVOCs, propellants, explosives, petroleum hydrocarbons, PCBs, solvents	**Five-Year Review Status:**	Completed and planned		

Introduction

Tooele Army Depot (AD) stores and demilitarizes munitions. Sites identified at Tooele AD include open burning and open detonation areas, ammunition demilitarization facilities, landfills, firing ranges, industrial sites, underground storage tanks, surface impoundments, and drain fields. Organic solvents and metals are the primary site contaminants. The potential risk to human health and the environment was significant enough for EPA to place Tooele AD on the NPL in August 1990. The Army and EPA signed a federal facility agreement (FFA) in September 1991 to outline how they were going to proceed with cleanup. In 1993, the BRAC Commission recommended realignment of the Tooele AD maintenance missions with the installation retaining its conventional ammunition storage and demilitarization mission. During FY94, the installation formed a BRAC cleanup team to develop a process for cleaning up sites and a Restoration Advisory Board to discuss the installation's cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed five-year review reports for all sites in FY02 and FY07.

To date, Tooele AD has competed four Records of Decision, which selected cleanup actions at seven operable units. The installation transferred 41 acres to the Tooele City Redevelopment Agency in FY96 and the remaining BRAC property consisting of 1,663 acres in FY99. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Tooele AD began implementing cleanup actions at Solid Waste Management Unit (SWMU) 58. Cleanup actions consist of installing and operating soil vapor extraction systems. The installation continued an evaluation of cleanup actions for groundwater contamination at SWMUs 2 and 58. The cost of completing environmental restoration has changed significantly due to technical issues and changes in estimating criteria. Technical issues delayed the complete implementation of cleanup actions for groundwater contamination at SWMUs 2 and 58. Technical issues delayed implementation of cleanup actions of source areas at SWMU 58.

FY10 MMRP Progress

The installation completed removal of lead-contaminated soil from the Old Burn Area (formerly SWMU 6) and remedial investigation (RI) fieldwork at all sites.

Plan of Action

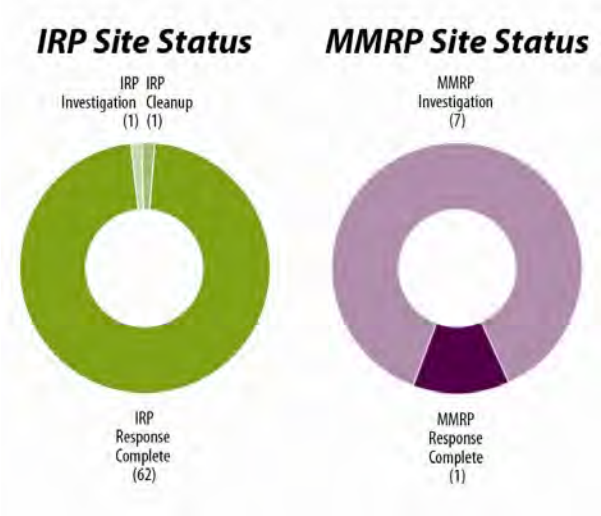
Plan of action items for Tooele Army Depot are grouped below according to program category.

IRP

- Complete cleanup actions of source areas at SWMU 58 in FY11.
- Select groundwater cleanup actions at SWMUs 2 and 58 in FY11.

MMRP

- Publish RI report for all sites in FY11.
- Begin feasibility study to evaluate cleanup alternatives for two sites in FY12.



Travis Air Force Base

NPL

FFID:	CA957182457500	**Contaminants:**	VOCs, heavy metals, POLs, PAHs, SVOCs, TCE, solvents, pesticides, PCBs, PAHs, BTEX	**Five-Year Review Status:**	Completed and planned
Location (Size):	Solano County, California (6,383 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-33
Mission:	Provide air refueling and strategic airlift services	**Funding to Date:**	$ 116.3 million		
HRS Score:	29.49; placed on NPL in November 1989	**Est. CTC (Comp Year):**	$ 50.7 million (FY2036)		
IAG Status:	FFA signed in September 1990; amended May 1993, October 1995, July 1996, November 1997, July 1998, December 2003, February 2005	**IRP Sites (Final RIP/RC):**	48 (FY2012)		
		MMRP Sites (Final RIP/RC):	2 (FY2014)		

Introduction

Travis Air Force Base (AFB) was established in 1943. Contaminated sites include old landfills, a closed sewage treatment plant, four fire training areas, a cyanide disposal pit, solvent spill areas, a storm sewage drainage system, a pesticide disposal site, and a low-level radioactive waste burial site. Past activities at the installation resulted in the release of metals, pesticides, fuels, solvents, and petroleum/oils/lubricants (POLs), which migrated into the soil, sediment, surface water, and groundwater. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in November 1989. DoD and EPA signed a federal facility agreement (FFA) in September 1990, which was last updated in FY05, to outline how Travis AFB was going to proceed with cleanup. In FY95, the installation formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community. The installation received funding for technical assistance for public participation in FY99. To ensure continuous monitoring and improvement, Travis AFB completed five-year review reports in FY03 and FY08.

Cleanup activities at the installation were initially divided into four operable units (OUs), but were later regrouped by similar contaminants into two OUs. Travis AFB signed two interim Records of Decision (RODs) in 1997 and 1999, which selected interim groundwater cleanup actions for the two OUs. In addition, the installation signed a ROD in 2002 to select cleanup actions for soil cleanup at the West/Annexes/Basewide OU. The installation has completed all cleanup actions for soil sites in the West/Annexes/Basewide OU. Travis AFB also signed a ROD in 2006 for the North, East, and West Industrial OU and for soil, sediment, and surface water cleanup. In FY05, Travis AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); two MMRP sites were identified.

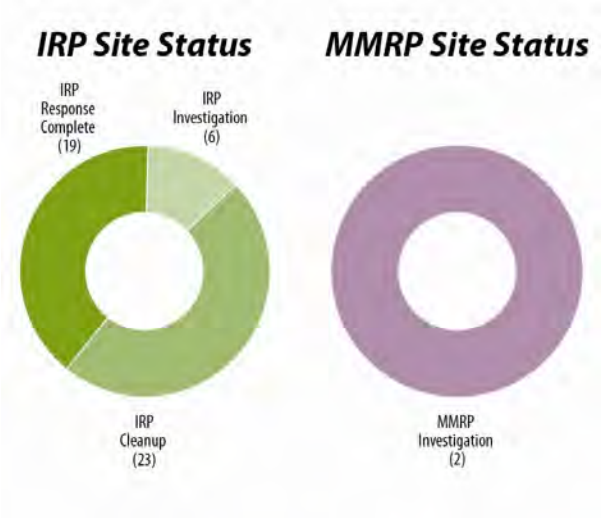
FY10 IRP Progress

Travis AFB updated the quality assurance plan and field sampling plan. The installation completed an assessment report on cleanup using natural processes and a vapor intrusion assessment report with support from the Technical Focus Group members of the RAB. Travis AFB developed five site project work plans, and prepared the first and second Disposal Pit (DP) site 039 Sustainable Bio-reactor Progress Reports. The installation also began construction of the Site 018 methyl tertiary butyl ether treatment system, developed the DP 039 bio-barrier, completed soil characterization at Fire Training site 005, installed the second solar powered bio-reactor, and performed oil injections at Sediment (SD) site 037 and DP 039. Travis AFB completed the annual report for land use control, which restricted the use of or access to sites; the corrective action management unit report; and the groundwater sampling and analysis program report. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory and technical issues delayed completion of the feasibility study (FS) to evaluate cleanup alternatives for remaining groundwater sites, and the proposed plan (PP) and ROD for remaining groundwater sites.

FY10 MMRP Progress

Travis AFB completed the site inspection (SI) and developed the SI report which is under regulatory review.



Plan of Action

Plan of action items for Travis Air Force Base are grouped below according to program category.

IRP

- Develop the PP in preparation for a public meeting in FY11.
- Complete the ROD for the remaining groundwater sites in FY11.
- Complete the FS for remaining groundwater sites in FY11.

MMRP

- Conduct a removal action at the Old Skeet Range, munitions response area (MRA) TS 060 in FY11-FY12.
- Prepare an after action report for the Old Skeet Range, MRA TS 060 in FY11-FY12.
- Prepare an Explosive Safety Submission indicating no DoD action necessary for the Old Skeet Range and former munitions storage area in FY11-FY12.

Treasure Island Naval Station

BRAC 1993

FFID:	CA917002333000	**Contaminants:**	Petroleum hydrocarbons, VOCs, SVOCs, chlorinated solvents, metals, pesticides, PCBs, explosives, propellants	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Treasure Island, California (1,075 acres)			**Five-Year Review Status:**	Planned
Mission:	Provide services and materials to support units of operating forces and shore activities	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-29
HRS Score:	N/A	**Funding to Date:**	$ 165.5 million		
IAG Status:	FFSRA signed in September 1992	**Est. CTC (Comp Year):**	$ 26.8 million (FY2032)		
		IRP Sites (Final RIP/RC):	35 (FY2016)		

Introduction

Treasure Island Naval Station (NS) provides services and materials to support units of operating forces and shore activities. Contamination is largely the result of migration of petroleum products from fueling operation areas and disposal of waste materials. Sites include former fire training areas, a landfill, a former dry cleaning facility, an old bunker area, fuel farms, a service station, and a waterline replacement area. DoD and EPA signed a federal facility site remediation agreement (FFSRA) in September 1992 to outline how they were going to proceed with cleanup. In July 1993, the BRAC Commission recommended closure of Treasure Island NS with relocation of the Naval Reserve Center and the Naval Technical Training Center. The installation completed operational closure in September 1997. In FY92, the installation established two information repositories and an administrative record, and completed a community relations plan, which was updated in FY02 and FY08. Formed in FY92, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board (RAB) in FY94. The RAB received a technical assistance for public participation grant in FY99.

To date, the installation has signed Records of Decision (RODs) for Sites 30 and 31, which selected cleanup actions for those sites. The installation also signed five RODs requiring no further action at Sites 9, 10 and 13. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

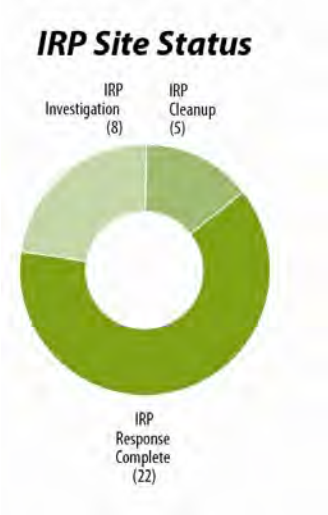
FY10 IRP Progress

Treasure Island NS completed cleanup of polychlorinated biphenyls (PCBs) in soils at Site 32 under the Toxic Substances Control Act. Treasure Island NS also completed an interim remedial investigation (RI) at Site 11, and an RI at Site 33. The installation also completed feasibility studies (FSs) to evaluate cleanup alternatives for Site 27, a proposed plan (PP) for Site 28, and a design for cleanup at Site 31. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed regulatory concurrence for closure of the Petroleum Site 25, the RI at Site 12, and PPs for Sites 21 and 24. Technical issues delayed completion of removal actions at 12 Solid Waste Disposal Areas, the RI at Site 6, and radiological fieldwork for the sewer drain systems associated with Building 233. Administrative issues delayed the FS for Site 33. Regulatory issues delayed the PP for Site 27 and cleanup completion at Site 31.

FY10 MMRP Progress

Treasure Island NS has identified no MMRP sites.



Plan of Action

Plan of action items for Treasure Island Naval Station are grouped below according to program category.

IRP

- Complete cleanup at Site 31 in FY11.
- Receive regulatory concurrence for closure of Petroleum Site 25 in FY11.
- Complete removal action at 12 Solid Waste Disposal Areas in FY11.
- Complete RIs for Sites 6 and 12; an FS for Site 33; and PPs for Sites 21, 24, and 27 in FY11.
- Complete radiological fieldwork for the sewer drain systems associated with Building 233 in FY11.
- Complete ROD for Site 28 and cleanup action at Site 31 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Trenton Naval Air Warfare Center Aircraft Division

BRAC 1993

FFID:	NJ217002269500	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-110
Location (Size):	Trenton, New Jersey (529 acres)	**Funding to Date:**	$ 28.2 million		
Mission:	Test engine systems and components	**Est. CTC (Comp Year):**	$ 22.0 million (FY2041)		
HRS Score:	N/A	**IRP Sites (Final RIP/RC):**	11 (FY2006)		
IAG Status:	N/A	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	Freon, mercury, solvents, fuels, VOCs, SVOCs, metals, TCE	**Five-Year Review Status:**	Completed and planned		

Introduction

Trenton Naval Air Warfare Center (NAWC) Aircraft Division tests engine systems and components. Site types include underground storage tanks, disposal areas, and spill sites. Contamination at the installation resulted from various fuels used to operate engines during tests and from trichloroethylene (TCE), ethylene glycol, and freon used to cool the air entering the engines. Investigations have detected residues of fuels and solvents in the groundwater and soil. In July 1993, the BRAC Commission recommended closure of Trenton NAWC. Operations were transferred to the Arnold Engineering Development Center and the Patuxent River Naval Air Station in December 1998. Formed in FY91, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board (RAB) in FY93; the RAB formally adjourned in FY01. To ensure continuous monitoring and improvement, Trenton NAWC completed five-year review reports in FY04 and FY09.

In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Trenton NAWC continued operations and maintenance (O&M) of the groundwater treatment system. The installation also completed the Biennial Certification for Deed Notice and engineering controls for soil sites. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Trenton NAWC performed public outreach and notifications.

FY10 MMRP Progress

Trenton NAWC has identified no MMRP sites.

Plan of Action

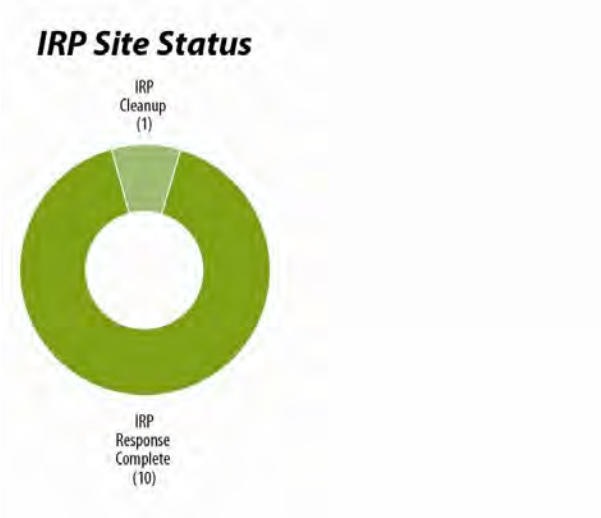
Plan of action items for Trenton Naval Air Warfare Center Aircraft Division are grouped below according to program category.

IRP

- Conduct evaluation to reduce infiltration into storm sewers in FY11-FY12.
- Continue O&M of groundwater treatment system in FY11-FY12.
- Complete classification exception area report for groundwater and submit to New Jersey Department of Environmental Protection in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Tucson International Airport

NPL

FFID:	AZ957282593400	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-7-5
Location (Size):	Tucson, Arizona (84 acres)	**Funding to Date:**	$ 18.4 million		
Mission:	Provide Air National Guard training	**Est. CTC (Comp Year):**	$ 3.2 million (FY2017)		
HRS Score:	57.86; placed on NPL in September 1983	**IRP Sites (Final RIP/RC):**	8 (FY1997)		
IAG Status:	FFA signed in October 1994	**MMRP Sites (Final RIP/RC):**	None		
Contaminants:	POLs, petroleum hydrocarbons, TCE, chromium, PCE, VOCs	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.		

Introduction

The Air National Guard (ANG) base at Tucson International Airport (IAP) provides fighter pilot training and is home to the 162nd Fighter Wing. The installation is part of the Tucson IAP. In addition to the ANG base, the IAP (covering approximately 10 square miles) includes Air Force Plant 44, airport property owned by the City of Tucson (and managed by the Tucson Airport Authority), adjacent Indian reservation property, and several residential areas in Tucson and South Tucson. Sites identified at this installation include fire training areas, solvent dumping areas, storm drainage discharge areas, the old wash rack area, petroleum/oil/lubricant (POL) areas, and spill areas. The principal contaminant is trichloroethylene (TCE) in groundwater, but tetrachloroethylene (PCE) and chromium are also present. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in September 1983. DoD and EPA signed a federal facility agreement (FFA) covering the 84-acre ANG base in October 1994 to outline how they were going to proceed with cleanup. In FY95, the installation formed a Restoration Advisory Board to discuss the installation's cleanup progress with the community. To aid in environmental cleanup, the installation also established successful partnerships with citizens and regulators through the Unified Community Advisory Board (UCAB). To ensure continuous monitoring and improvement, Tuscon IAP completed five-year review reports in FY03 and FY09.

To date, the installation has signed one Record of Decision (ROD), which selected cleanup actions at eight sites. In FY05, Tuscon IAP conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Tucson IAP continued operation and maintenance (O&M) of the groundwater treatment system, basewide groundwater monitoring, and partnerships with EPA, the Arizona Department of Environmental Quality, and the UCAB. The installation also completed a chemical injection pilot test at groundwater wells, and maintained regulatory compliance within the framework of the FFA.

FY10 MMRP Progress

Tucson IAP has identified no MMRP sites.

Plan of Action

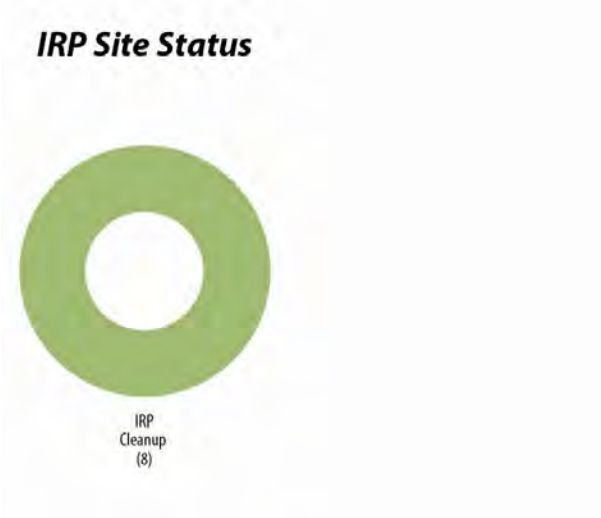
Plan of action items for Tucson International Airport are grouped below according to program category.

IRP

- Continue O&M of the groundwater treatment system in FY11-FY12.
- Continue basewide groundwater monitoring activities in FY11-FY12.
- Continue partnering with EPA, Arizona Department of Environmental Quality, and the UCAB, and participate in the development of a new proposed plan and ROD for Area B of the Tucson IAP Superfund Site in FY11-FY12.
- Maintain regulatory compliance within the framework of the FFA in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Tustin Marine Corps Air Station

BRAC 1991

FFID:	CA917302478300	**Contaminants:**	MTBE, petroleum hydrocarbons, pentachlorophenol, naphthalene, BTEX, TCP, SVOCs, metals, dichloroethane, dichloroethene, TCE, VOCs	**IRP Sites (Final RIP/RC):**	12 (FY2037)
Location (Size):	Tustin, California (1,603 acres)			**MMRP Sites (Final RIP/RC):**	None
Mission:	Supported operations of the Third Marine Aircraft Wing	**Media Affected:**	Groundwater and Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	N/A	**Funding to Date:**	$ 70.9 million	**IRP/MMRP Status Table:**	Refer to page E-6-30
IAG Status:	FFSRA signed in August 1999	**Est. CTC (Comp Year):**	$ 14.8 million (FY2042)		

Introduction

Tustin Marine Corps Air Station (MCAS) supports operations of the Third Marine Aircraft Wing. These operations have resulted in groundwater and soil contamination. DoD and EPA signed a federal facility site remediation agreement in FY99 to outline how they were going to proceed with cleanup. In FY94, the installation formed a BRAC cleanup team to develop a process for the cleanup of sites. In July 1991, the BRAC Commission recommended closure of Tustin MCAS with retention of the family housing and related personnel facilities to support El Toro MCAS. In FY93, the commission recommended closure of Tustin MCAS, which included those support facilities retained at Tustin MCAS. In FY94, Tustin MCAS formed a Restoration Advisory Board to discuss cleanup progress with the community. The installation regularly updates two administrative records and two information repositories.To ensure continuous monitoring and improvement, Tustin MCAS completed a five-year review report at Operable Unit (OU) 3 in FY07.

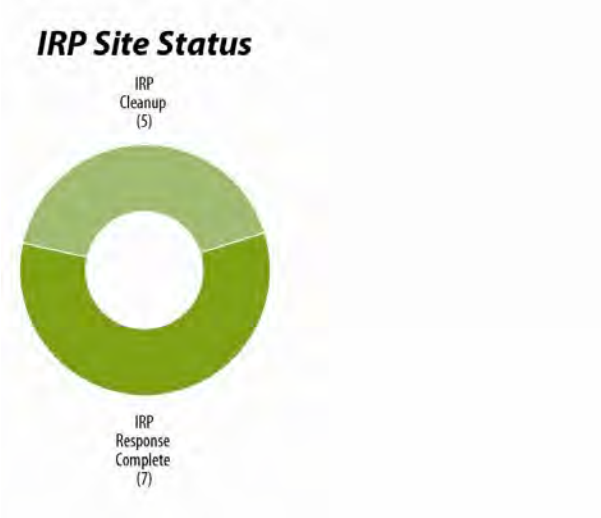
To date, the installation has signed Records of Decision (RODs), which selected cleanup actions for 6 sites. The installation also transferred over 1,300 acres of property. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Tustin MCAS continued cleanup at the Methyl Tertiary Butyl Ether (MTBE)-contaminated area (Underground Storage Tank [UST] 222), and long-term management (LTM) activities at OU 3. The installation completed the final ROD and began a design for cleanup and cleanup activities at OU 4B. Tustin MCAS also completed the final operating properly and successfully report, and continued operations and maintenance (O&M) activities at OUs 1A and 1B.

FY10 MMRP Progress

Tustin MCAS has identified no MMRP sites.



Plan of Action

Plan of action items for Tustin Marine Corps Air Station are grouped below according to program category.

IRP

- Continue cleanup at the MTBE-contaminated area (UST 222) in FY11.
- Complete pre-design pilot study and issue the cleanup design and work plans for the Low Concentration Sites and Moderate Concentration Sites at OU4B in FY11-FY12.
- Continue O&M activities at OUs 1A and 1B and complete an Annual Performance Evaluation Report in FY11-FY12.
- Continue LTM activities at OU3 in FY11-FY12.
- Continue implementation of petroleum corrective action activities at UST 222 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Twin Cities Army Ammunition Plant

NPL

FFID:	MN521382090800	**Contaminants:**	VOCs, PCBs, heavy metals, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Arden Hills, Minnesota (2,370 acres)	**Media Affected:**	Surface Water and Sediment	**IRP/MMRP Status Table:**	Refer to page E-6-98
Mission:	Provide support to DoD tenants; formerly manufactured small-arms ammunition and projectile casings	**Funding to Date:**	$ 162.5 million		
		Est. CTC (Comp Year):	$ 80.4 million (FY2040)		
HRS Score:	59.60; placed on NPL in September 1983	**IRP Sites (Final RIP/RC):**	26 (FY2011)		
IAG Status:	FFA signed in August 1987	**MMRP Sites (Final RIP/RC):**	None		

Introduction

Twin Cities Army Ammunition Plant (AAP) formerly manufactured small arms ammunition and projectile casings, and supported DoD tenants. The installation grouped sites requiring environmental restoration, including former landfills, burning and burial grounds, ammunition testing and disposal sites, industrial operations buildings, and sewer system discharge areas, into three Operable Units (OUs). Past waste disposal practices released contaminants into soil, groundwater, and sediment. Contaminated groundwater has impacted municipal water supplies. Ammunition-related metals, volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs) are the primary soil contaminants at Twin Cities AAP. The potential risk to human health and environment was significant enough for EPA to place the installation on the NPL in September 1983. DoD and EPA signed a federal facility agreement (FFA) in 1987 to outline how they were going to proceed with cleanup. In 1985, Twin Cities AAP established a technical review committee to discuss the installation's cleanup progress with the community, and converted it into a Restoration Advisory Board (RAB) in FY96. Twin Cities AAP procured funding for technical assistance for public participation to support the RAB in FY99. To ensure continuous monitoring and improvement, the installation completed five-year review reports for OUs 1, 2, and 3 in FY99, FY04, and FY09.

Twin Cities AAP has signed three Records of Decision selecting cleanup actions for 19 sites. In FY03, the installation conducted an inventory of sites suspected to contain munitions contaminations for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

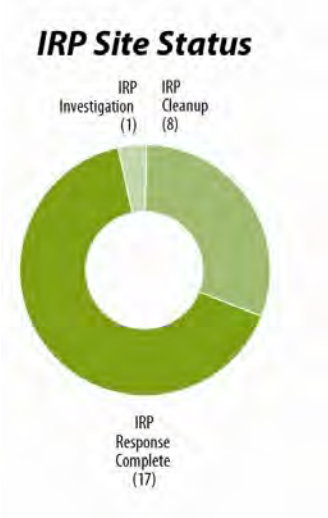
FY10 IRP Progress

Twins Cities AAP obtained approval for the OU 2 land use control design for cleanup, which puts land use controls into effect. The installation also completed contracting for additional sampling at the Aquatic Sites. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed approval for various soil closeout reports and completion of the feasibility study (FS) to evaluate cleanup alternatives at the Aquatic Sites. Administrative issues delayed the complete transfer of the remaining 585 acres, including Area 135.

FY10 MMRP Progress

Twin Cities AAP has identified no MMRP sites.



Plan of Action

Plan of action items for Twin Cities Army Ammunition Plant are grouped below according to program category.

IRP

- Obtain approval for various soil closeout reports at the Aquatic Sites in FY11.
- Obtain approval for the FS at Rice Creek, Sunfish Lake, Marsden Lake, and Pond G, and subsequent signature of the decision document (DD) in FY11.
- Complete additional sediment testing at Round Lake in FY11.
- Complete transfer of the remaining 585 acres, including Area 135, in FY11-FY12.
- Obtain approval for the FS for Round Lake, and subsequent signature of the DD in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Tyndall Air Force Base

NPL/BRAC 2005 Realignment

FFID:	FL457152412400	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-56
Location (Size):	Panama City, Florida (28,824 acres)	**Funding to Date:**	$ 43.0 million		
Mission:	Provide advanced F-15 and F-22 fighter training	**Est. CTC (Comp Year):**	$ 28.2 million (FY2038)		
HRS Score:	50.00; placed on NPL in April 1997	**IRP Sites (Final RIP/RC):**	92 (FY2020)		
IAG Status:	FFA under negotiation	**MMRP Sites (Final RIP/RC):**	11 (FY2021)		
Contaminants:	POLs, chlorinated solvents, pesticides, metals, PCBs, general refuse, VOCs, SVOCs, PCBs	**Five-Year Review Status:**	Planned		

Introduction

Tyndall Field was activated in 1941 and served as the Flexible Gunnery School of the U.S. Army Air Corps. The installation became Tyndall Air Force Base (AFB) in 1947, and its current mission F-22 Raptor fighter training and air battle management under the 325th Fighter Wing. The primary contaminant of concern is DDT in the sediments. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in April 1997. A federal facility agreement (FFA) between DoD and EPA is currently under negotiation and will outline how DoD and EPA will proceed with cleanup when signed. The 2005 BRAC Commission recommended Tyndall AFB for realignment.

Tyndall AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

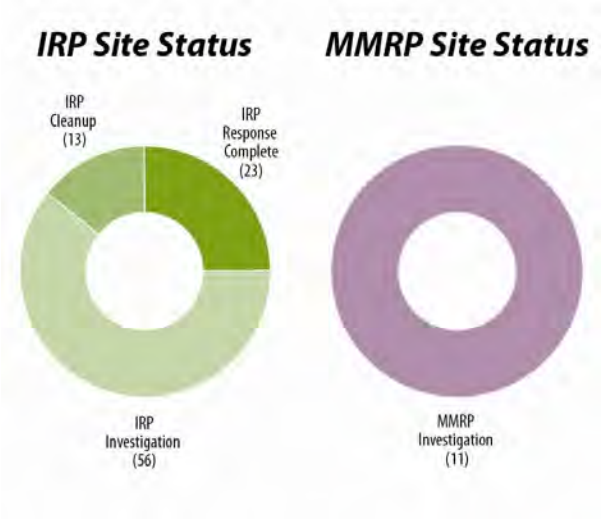
FY10 IRP Progress

Tyndall AFB acquired eight additional sites as a result of the addition of Compliance Restoration Program sites; this site count is under negotiation with EPA.

Regulatory issues delayed Tyndall AFB signing the FFA with EPA and the Florida Department of Environmental Protection. Regulatory issues also delayed additional investigation on Landfills (LFs) 001, 003, 006, 007, Firing Range (FR) 038, Spill Sites (SS) 015 and 026. Regulatory issues delayed closures at Fire Training Sites 016, 017, 023, Other (OT) Site 018, and SS 019. Regulatory issues also delayed the completion of a remedial investigation (RI) and feasibility study (FS) to evaluate cleanup alternatives at OT 029 and Debris (DB) Site 039. Regulatory issues also delayed the completion of site characterization, FSs, and select cleanup actions for LFs 001, 003, 005, 006, 007, SS 026, and FR 038. The cost of completing environmental restoration has changed significantly due to regulatory and technical issues.

FY10 MMRP Progress

Regulatory issues delayed completing the site inspection (SI) and beginning the RI.



Plan of Action

Plan of action items for Tyndall Air Force Base are grouped below according to program category.

IRP

- Sign FFA with EPA and the Florida Department of Environmental Protection in FY11.
- Perform additional investigation on LFs 001, 003, 005, 006, 007, FR 038, SSs 015 and 026 and Sites 239 and 264/280 in FY11.
- Close Fire Training Sites 016, 017, 023, OT 018, and SS 019 in FY11.
- Conduct RI/FS at OT 029 and DB Site 039 in FY11.

MMRP

- Complete SI in FY11.
- Identifiy sites requiring RIs in FY11.

U.S. Army Soldiers Systems Center

NPL

FFID:	MA121382063100	**Contaminants:**	Pesticides, herbicides, pentachlorophenol, solvents, PCBs, VOCs, SVOCs, metals, PAHs, TCE, PCE	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Natick, Massachusetts (78 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Research and develop food, clothing, equipment, and materials for military operations	**Media Affected:**	Surface Water and Sediment	**IRP/MMRP Status Table:**	Refer to page E-7-29
HRS Score:	50.00; placed on NPL in May 1994	**Funding to Date:**	$ 46.2 million		
IAG Status:	FFA signed in July 2006	**Est. CTC (Comp Year):**	$ 9.7 million (FY2029)		
		IRP Sites (Final RIP/RC):	17 (FY2012)		

Introduction

Since 1954, the U.S. Army Soldiers Systems Center (Soldiers Systems Center) has supported industrial, laboratory, and storage activities for research and development in food science and in aeromechanical, clothing, material, and equipment engineering. Contaminated site types include buildings, spill sites, storage areas, disposal pits, dry wells, and underground storage tanks. Operations used various volatile organic compounds (VOCs), including tetrachloroethylene (PCE), trichloroethylene (TCE), carbon disulfide, benzene, and chloroform. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in May 1994. In FY06, DoD and EPA signed a federal facility agreement (FFA) to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended the Soldiers Systems Center for realignment. In FY95, the installation established a Restoration Advisory Board to discuss cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed a five-year review report for the Natick Research, Development, and Engineering Center (NRDEC) 05 site in FY07.

Soldiers Systems Center has signed Records of Decision (RODs) selecting cleanup actions for Building T 25 and NRDECs 07, 10, and 17. The Building T 25 ROD contained a unique partnering cooperative agreement involving the Town of Natick, the Massachusetts Department of Environmental Protection, EPA, and the installation. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Soldiers Systems Center removed and disposed 4,395 cubic yards of polychlorinated biphenyl (PCB)-contaminated sediment off-site in accordance with the ROD. In addition, the installation installed two additional groundwater extraction wells to optimize containment.

Regulatory issues delayed completion of the groundwater ROD amendment.

FY10 MMRP Progress

Soldiers Systems Center has identified no MMRP sites.

Plan of Action

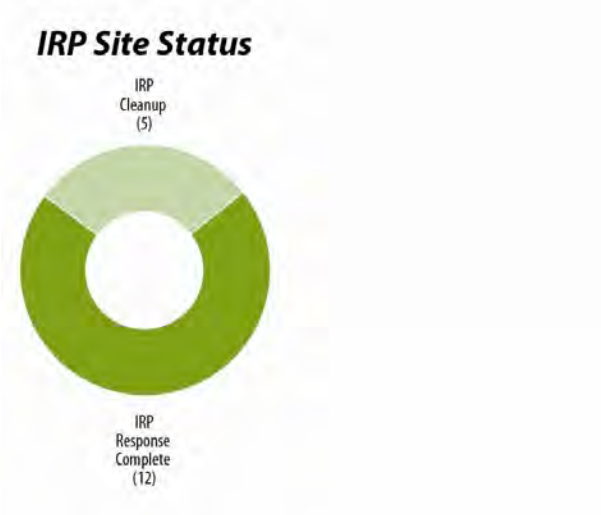
Plan of action items for U.S. Army Soldiers Systems Center are grouped below according to program category.

IRP

- Complete groundwater ROD amendment in FY11.
- Obtain EPA approval of Construction Completion Report for the Sediment Operable Unit in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Umatilla Chemical Depot

NPL/BRAC 1988

FFID:	OR021382091700	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-134
Location (Size):	Hermiston, Oregon (19,729 acres)	**Funding to Date:**	$ 56.3 million		
Mission:	Store ammunition	**Est. CTC (Comp Year):**	$ 28.8 million (FY2015)		
HRS Score:	31.31; placed on NPL in July 1987	**IRP Sites (Final RIP/RC):**	117 (FY2012)		
IAG Status:	FFA signed in October 1989	**MMRP Sites (Final RIP/RC):**	2 (FY2015)		
Contaminants:	UXO, pesticides, nitrates, explosives, heavy metals, sVOCs, propellants	**Five-Year Review Status:**	Completed and planned		

Introduction

In 1941, the Army established Umatilla Ordnance Depot as a facility for storing conventional munitions. Between 1945 and 1955, the installation's functions expanded to include demolition, renovation, and maintenance of ammunition. In 1962, the Army began to store chemical munitions at the depot. Identified sites include explosives-washout lagoons, an open burning and open detonation area, pesticide disposal pits, a deactivation furnace, and landfills. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1987. DoD and EPA signed a federal facility agreement (FFA) in October 1989 to outline how they were going to proceed with cleanup. In December 1988, the BRAC Commission recommended realignment of the installation, and in 2005 recommended its closure. In FY93, Umatilla Ordnance Depot transferred its conventional weapons mission to another installation, and in FY94, the installation formed a BRAC cleanup team to develop a process for cleanup of sites. Also in FY94, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. In FY98, the installation officially changed its name from Umatilla Ordnance Depot to Umatilla Chemical Depot (CD). To ensure continuous monitoring and improvement, Umatilla CD completed five-year review reports in FY99, FY04, and FY09.

To date, the installation has signed eight Records of Decision (RODs) and one decision document, selecting cleanup actions for 68 sites. In FY03, Umatilla CD conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

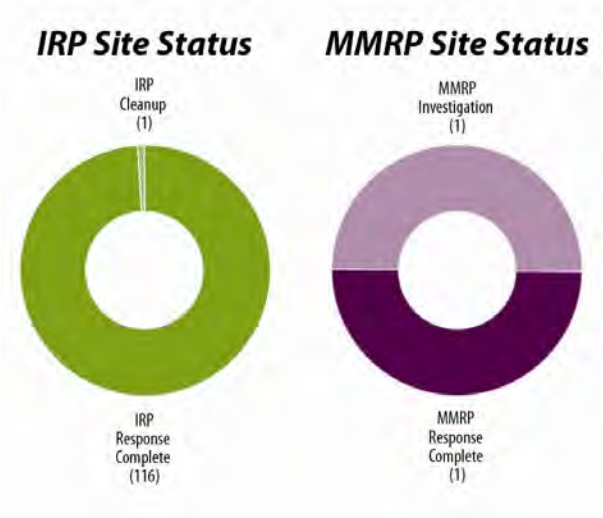
FY10 IRP Progress

Umatilla CD completed the environmental conditions report of all transferable property. The cost of completing environmental restoration has changed significantly due to regulatory issues and changes in estimating criteria.

Technical issues delayed completion of the pulse pumping and development of a plan to enhance pump-and-treat facility operation. Regulatory issues delayed completion of the ROD and monitoring plan for the landfill (LF).

FY10 MMRP Progress

Umatilla CD continued to support the local redevelopment authority in completion of the reuse plan for the Ammunition Demolition Area.



Plan of Action

Plan of action items for Umatilla Chemical Depot are grouped below according to program category.

IRP

- Complete the ROD and monitoring plan for the LF in FY11.
- Conduct a preliminary assessment at Building 608/614 in FY11.
- Complete ROD for selenium at the Closed Solid Waste LF in FY11.
- Complete pulse pumping and develop a plan to enhance pump-and-treat facility operation in FY11.
- Complete ROD amendment for and then begin bioremediation at the groundwater pump-and-treat facility in FY11-FY12.

MMRP

- Complete a focused feasibility study to evaluate cleanup alternatives and continue to support the local redevelopment authority reuse plan for the Ammunition Demolition Area in FY11.
- Complete cleanup of unexploded ordnance at the Ammunition Demolition Area in FY11-FY12.

Vint Hill Farms Station

BRAC 1993

FFID:	VA321382093100	**IAG Status:**	N/A	**IRP Sites (Final RIP/RC):**	37 (FY2007)
Location (Size):	Vint Hill Farms, Virginia (696 acres)	**Contaminants:**	Metals, VOCs, petroleum hydrocarbons, pesticides, PAHs, PCBs, asbestos, cyanide, photographic wastes	**MMRP Sites (Final RIP/RC):**	None
Mission:	Supported logistics for signal intelligence and electronics warfare weapon systems and equipment; provide intelligence fusion material capability	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	N/A	**Funding to Date:**	$ 12.1 million	**IRP/MMRP Status Table:**	Refer to page E-8-63
		Est. CTC (Comp Year):	$ 0.8 million (FY2010)		

Introduction

During the 1940s and 1950s, Vint Hill Farms Station served as a training center for Signal Corps personnel and as a refitting station for signal units. The mission resulted in contaminated underground storage tanks, landfills, lagoons, storage areas, pit areas, fire training areas, disposal areas, and spill sites. Site type contamination includes asbestos-containing materials, lead-based paint areas, transformers containing polychlorinated biphenyls (PCBs), and petroleum and solvent contamination. In 1993, the BRAC Commission recommended closure of Vint Hill Farms Station. Vint Hill Farms Station closed in October 1997. The installation formed a Restoration Advisory Board (RAB) in FY95 to discuss the installation's cleanup progress with the community; the RAB adjourned in FY06. To ensure continuous monitoring and improvement, Vint Hill Farms Stations completed a five-year review reports for Sites 1, 39, and 42 in FY10.

Vint Hill Farms Station transferred the entire 696 acres by FY03. With the exception of Area Requiring Environmental Evaluation 34, which was discovered post-transfer, all environmental investigation and cleanup is complete. In FY03, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Vint Hill Farms Station completed a five-year review report for Sites 1, 39 and 42. This is the last narrative for this installation, as cleanup is complete at all sites.

FY10 MMRP Progress

Vint Hill Farms Station has identified no MMRP sites.

Plan of Action

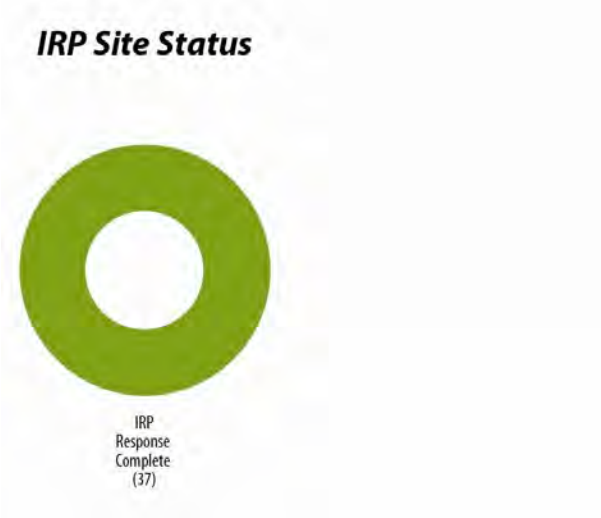
Plan of action items for Vint Hill Farms Station are grouped below according to program category.

IRP

- Continue annual sampling and inspection of institutional controls in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Warminster Naval Air Warfare Center Aircraft Division

NPL/BRAC 1991/BRAC 1995

FFID:	PA317002454500	**IAG Status:**	FFA signed in September 1990	**IRP Sites (Final RIP/RC):**	10 (FY2006)
Location (Size):	Warminster Township, Pennsylvania (817 acres)	**Contaminants:**	Heavy metals, firing range wastes, fuels, land sewage sludges, non-industrial solid wastes, paints, PCBs, VOCs, SVOCs	**MMRP Sites (Final RIP/RC):**	None
Mission:	Perform research, development, testing, and evaluation for naval aircraft systems and antisubmarine warfare systems; perform associated software development	**Media Affected:**	Groundwater, Surface Water, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	57.93; placed on NPL in October 1989	**Funding to Date:**	$ 27.5 million	**IRP/MMRP Status Table:**	Refer to page E-6-137
		Est. CTC (Comp Year):	$ 17.5 million (FY2042)		

Introduction

Warminster Naval Air Warfare Center (NAWC) Aircraft Division performs research, development, testing, and evaluation for naval aircraft systems and antisubmarine warfare systems. Contaminated site types include waste burn pits, sludge disposal pits, landfills, waste pits, and a fire training area. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in October 1989. DoD and EPA signed a federal facility agreement (FFA) in September 1990 to outline how they were going to proceed with cleanup. In July 1991 and July 1995, the BRAC Commission recommended Warminster NAWC for realignment and closure, respectively. The installation closed in March 1997. Formed in FY88, Warminster NAWC converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board (RAB) in FY94. The installation also completed a community relations plan and established an administrative record in FY94. To ensure continuous monitoring and improvement, Warminster NAWC completed five-year review reports in FY02 and in FY07.

To date, the installation has signed Records of Decision (RODs), which selected cleanup actions at Operable Unit (OU) 1, Area A, and Sites 6 and 7. In addition, the installation signed RODs requiring no further actions for Sites 4 (OU 6), 5, 8, and Areas B and D. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Warminster NAWC continued operations and maintenance (O&M) of the groundwater treatment system. In addition, the installation met the cleanup goal and stopped the pump-and-treat system at Area D.

FY10 MMRP Progress

Warminster NAWC has identified no MMRP sites.

Plan of Action

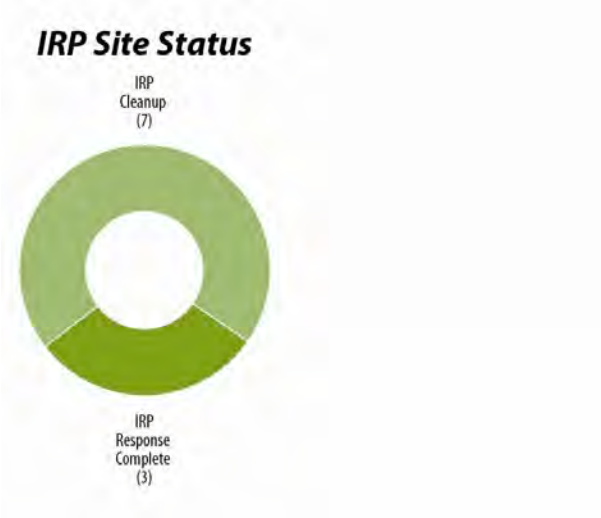
Plan of action items for Warminster Naval Air Warfare Center Aircraft Division are grouped below according to program category.

IRP

- Continue O&M of groundwater treatment system in FY11-FY12.
- Complete five-year review report in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Washington Navy Yard

NPL/BRAC 2005 Realignment

FFID:	DC317002431000	**IAG Status:**	FFA signed in June 1999	**MMRP Sites (Final RIP/RC):**	1 (FY2010)
Location (Size):	Washington, DC (63 acres)	**Contaminants:**	Solvents, metals, VOCs, SVOCs, PCBs, pesticides	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Mission:	Provide resources, including administrative space, housing, training facilities, logistical support, and supplies, for Washington Navy Yard tenants and other assigned units	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-16
		Funding to Date:	$ 35.4 million		
HRS Score:	48.57; placed on NPL in July 1998	**Est. CTC (Comp Year):**	$ 5.3 million (FY2017)		
		IRP Sites (Final RIP/RC):	31 (FY2013)		

Introduction

Washington Navy Yard (NY) provides resources, including administrative space, housing, training facilities, logistical support, and supplies, for the installation tenants and other assigned units. Investigations at the Washington NY initially identified 18 contaminated sites and 3 leaking underground storage tank sites. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in July 1998. DoD and EPA signed a federal facility agreement (FFA) in June 1999 to outline how they were going to proceed with cleanup. The installation updated the FFA with a RCRA consent order signed in July 1997. In 2005, the BRAC Commission recommended Washington NY for realignment. The installation developed a community relations plan in FY99.

To date, the installation has completed Records of Decision (RODs) selecting cleanup actions for Sites 1 through 5, 7, 9, 11, 13, 14, and 16. Washington NY has also signed two RODs requiring no further cleanup actions. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Washington NY completed the remedial investigation (RI) at Site Screening Area (SSA) 14 and the draft RI at Sites 22 and 23. The installation also completed field investigations at Operable Unit (OU) 2 and Sites 8 and 21.

Regulatory issues delayed the RI at SSA 12. Regulatory issues also delayed the feasibility study (FS) to evaluate cleanup alternatives at SSA 14.

FY10 MMRP Progress

Washington NY completed the site inspection at the Experimental Battery site.

Plan of Action

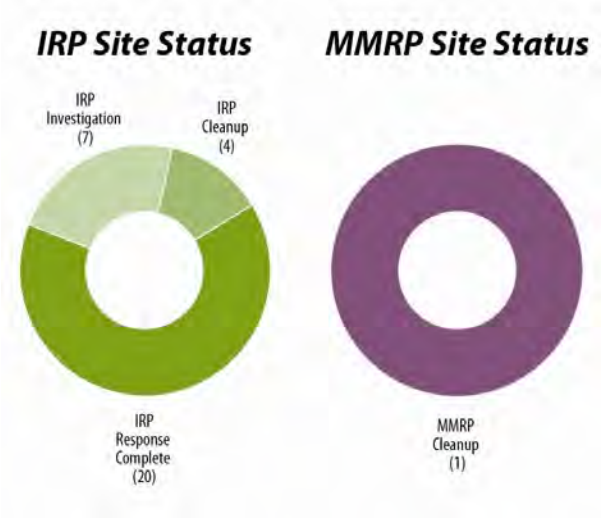
Plan of action items for Washington Navy Yard are grouped below according to program category.

IRP

- Complete FS for SSA 14 in FY11.
- Complete draft RI report for OU 2 and Sites 8 and 21 in FY11.
- Complete remedial investigation for SSA 12 in FY11.
- Complete field investigations for vapor intrusion sites in FY11.
- Draft RI report and complete fieldwork for supplemental work plan for Site 6 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Weldon Spring Training Area

NPL

FFID:	MO721372998500	**HRS Score:**	30.26; placed on NPL in February 1990	**IRP Sites (Final RIP/RC):**	2 (FY2013)
Location (Size):	MO (17,000 acres)	**IAG Status:**	FFA signed in August 1990	**MMRP Sites (Final RIP/RC):**	None
Mission:	Provides mission essential base operation support services for stakeholders within the Northwest Region, supports the Army Reserve operational force, and provides Command and Control for the bands and other units as directed.	**Contaminants:**	VOCs, SVOCs	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
		Media Affected:	Soil	**IRP/MMRP Status Table:**	Refer to page E-7-32
		Funding to Date:	$ 1.3 million		
		Est. CTC (Comp Year):	$ 5.2 million (FY2040)		

Introduction

The 88th Regional Support Command's (RSC) mission is to provide mission essential base operations support services for stakeholders within the Northwest Region, support the Army Reserve operational force, and provide Command and Control for the bands and other units as directed. The BRAC 2005 Commission recommended realignment of the 88th RSC to acquire Weldon Springs Training Area (WSTA). The contamination at the training area was a result of TNT and DNT production operations at the former Weldon Spring Ordnance Works (WSOW). The area is divided into two sites; WSTA 001 and WSTA 002. WSTA 001 consists of approximately 17,000 acres. The Army transferred approximately 205 acres of the original WSOW to the U.S. Atomic Energy Commission (now the Department of Energy) in 1955. WSTA 002 is approximately 7 acres in size and is located on the WSTA. The contaminants of concern at WSTA 001 are nitro-aromatic compounds, polyaromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCBs) and lead. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1990. WSTA 001 is made up of two operable units (OUs). OU 1 is made up of contaminated soils and wooden pipelines, and OU 2 is the contaminated groundwater and surface water associated with the former WSOW. EPA, the Army, and the Missouri Department of Natural Resources signed a federal facility agreement (FFA) for WSTA 001 in August 1990, which was updated in August 1991 to outline how they were going to conduct cleanup. In 1997, the installation formed a Restoration Advisory Board (RAB) to discuss cleanup progress with the community, which adjourned in FY10. To ensure continuous monitoring and improvement, the installation completed a five-year review report for OU 1 in FY05, and a five-year review report for OU 1s and 2 in FY10.

The installation signed a Record of Decision (ROD) in September 1996, which selected cleanup actions for OU 1, with an explanation of significant differences to the ROD signed in 2004. The installation signed a ROD for OU 2 in September 2004.

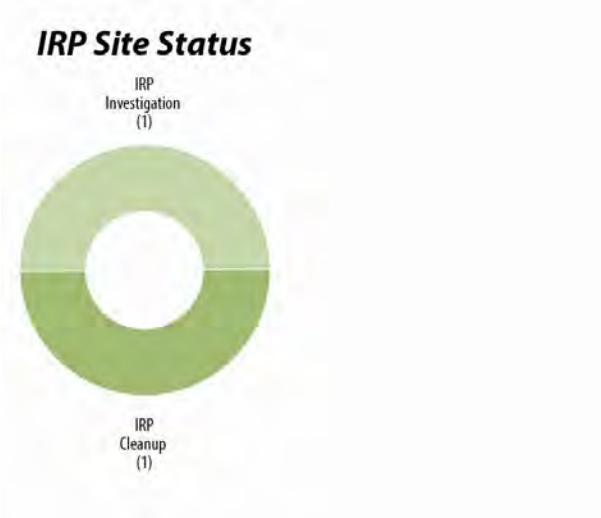
FY10 IRP Progress

The 88th RSC conducted annual monitoring and well sampling and completed a five-year review report for OU 2. The Kansas City District of the U.S. Army Corps of Engineers secured a contract to conduct a remedial investigation (RI) and feasibility study (FS) to evaluate cleanup alternatives at WSTA 002, and completed a draft final RI work plan.

The 88th RSC held a public meeting to discuss the draft five-year review report for OU 2, including strategies to streamline well monitoring for future sampling events, and proposed adjournment of the RAB.

FY10 MMRP Progress

The installation has identified no sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP).



Plan of Action

Plan of action items for Weldon Spring Training Area are grouped below according to program category.

IRP

- Obtain regulatory approval of RI work plan for WSTA 002 in FY11-FY12.
- Conduct well monitoring and sampling at OU 2 in FY11-FY12.
- Conduct RI/FS at WSTA 002 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

West Virginia Ordnance Works

NPL

FFID:	WV39799F346100	**Contaminants:**	TNT, DNT, organic compounds, VOCs, SVOCs, metals, propellants, explosives, other contaminants	**MMRP Sites (Final RIP/RC):**	1 (FY2009)
Location (Size):	Point Pleasant, West Virginia (2,704 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Complete and planned
Mission:	Manufactured TNT	**Funding to Date:**	$ 80.1 million	**IRP/MMRP Status Table:**	Refer to page E-6-179
HRS Score:	35.72; placed on NPL in September 1983	**Est. CTC (Comp Year):**	$ 46.7 million (FY2022)		
IAG Status:	IAGs signed in September 1987 and July 1989	**IRP Sites (Final RIP/RC):**	44 (FY2015)		

Introduction

From 1941 to 1946, West Virginia Ordnance Works manufactured TNT from toluene, nitric acid, and sulfuric acid. Principal contaminated sites include TNT manufacturing areas, wastewater sewer lines, and wastewater ponds known as the red and yellow water ponds. By-products of the manufacturing process included TNT, dinitrotoluene, and organic compounds, which migrated into groundwater, soil, surface water, and sediment. The potential risk to human health and the environment was significant enough for EPA to place West Virginia Ordnance Works on the NPL in September 1983. EPA partially delisted a 509-acre parcel from the NPL in FY03 and an additional 1,004 acres in FY04. DoD and EPA signed the first interagency agreement (IAG) in September 1987, and a second IAG in July 1989, to outline how they were going to proceed with cleanup. The U.S. Army Corps of Engineers (USACE) converted its technical review committee, that was formed in FY94 to communicate the installation's cleanup progress with the community, into a Restoration Advisory Board in FY98. To ensure continuous monitoring and improvement, USACE completed five-year review reports in FY95, FY00, and FY05.

The property is grouped into Operable Units (OUs) 1 through 5 and 7 through 13. OUs 7 OU 13 are under EPA management with no further cleanup action planned for the Army. To date, DoD and EPA have signed Records of Decision (RODs) which selected cleanup actions for OUs 1, 2, and 11. USACE and EPA determined that OUs 10 and 12 required no further cleanup action. The former OU 6 was changed to Environmental Unit 6. In FY03, USACE conducted an inventory of closed, transferred, and transferring ranges and sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

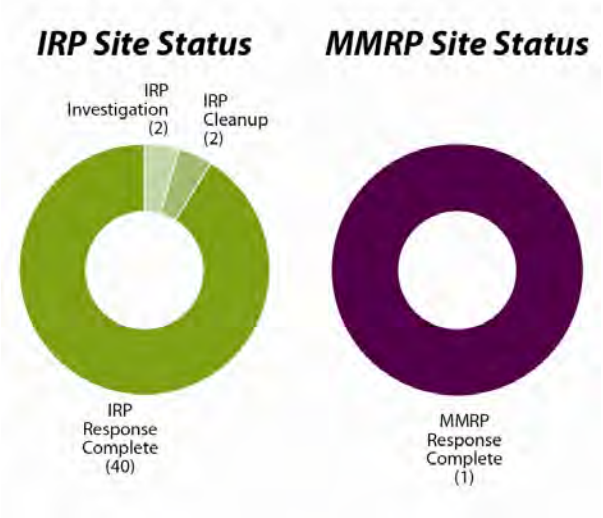
FY10 IRP Progress

USACE prepared the fourth five-year review report and also continued operation and maintenance (O&M) of groundwater treatment systems at OU 2. USACE continued evaluating results of the treatability study (TS) at OU 4 and also began an enhanced natural cleanup process TS to evaluate different carbon sources to cleanup groundwater for OU 9 in the TNT Manufacturing area. USACE continued the long-term management (LTM) program. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed the completion of the proposed plan (PP) and ROD for OUs 8 and 9, and the PP and ROD for OU 9 are delayed indefinitely while the installation evaluates the results of the TS. Regulatory and administrative issues delayed completion of the five-year review report.

FY10 MMRP Progress

West Virginia Ordnance Works conducted no MMRP activities.



Plan of Action

Plan of action items for West Virginia Ordnance Works are grouped below according to program category.

IRP

- Complete the PP and ROD for OU 8 in FY11.
- Complete the evaluation of TS results at OUs 4 and 9 in FY11-FY12.
- Continue the enhanced natural cleanup process TS for OU 9 in FY11-FY12.
- Continue LTM in FY11-FY12.
- Continue O&M of groundwater extraction and treatment systems in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.

Whidbey Island Naval Air Station Ault Field and Seaplane Base

NPL/BRAC 2005 Realignment

FFID:	WA017002336100		delisted in 1995; 48.48 (Ault Field), placed on NPL in February 1990	**Est. CTC (Comp Year):**	$ 38.1 million (FY2042)
Location (Size):	Oak Harbor, Washington (7,000 acres)	**IAG Status:**	FFA signed in September 1990	**IRP Sites (Final RIP/RC):**	92 (FY2017)
Mission:	Serve as host to training and operations center for two squadrons: Center for U.S. Marine Corps and Navy Reserve training in the Pacific Northwest	**Contaminants:**	PCBs, PAHs, chlorinated solvents, VOCs, SVOCs, metals	**MMRP Sites (Final RIP/RC):**	4 (FY2020)
		Media Affected:	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	39.64 (Seaplane Base), placed on NPL in February 1990,	**Funding to Date:**	$ 100.0 million	**IRP/MMRP Status Table:**	Refer to page E-6-177

Introduction

Whidbey Island Naval Air Station (NAS) is a training and operations center for two squadrons: Center for U.S. Marine Corps, and Navy Reserve training in the Pacific Northwest. Whidbey Island NAS occupies four areas on Whidbey Island, Washington: Ault Field, Seaplane Base, Coupville Outlying Field, and Lake Hancock Target Range. Past disposal practices from aircraft maintenance, vehicle maintenance, public works shop activities, and fire training activities have contributed to contamination. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in February 1990. DoD and EPA signed a federal facility agreement (FFA) in September 1990 to outline how they were going to proceed with cleanup. EPA delisted the Seaplane Base from the NPL in 1995. In 2005, the BRAC Commission recommended Whidbey Island NAS for realignment. In FY94, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board. Whidbey Island NAS updated the community relations plan in FY96. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY98, FY05, and FY09.

To date, the installation has completed five Records of Decision (RODs), which selected cleanup actions for five sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

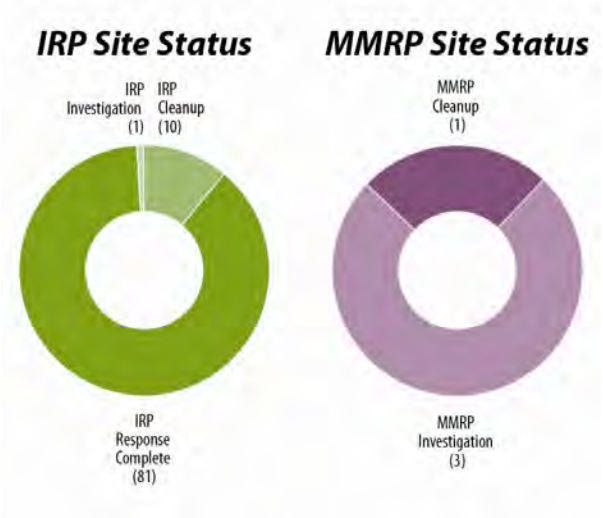
FY10 IRP Progress

Whidbey Island NAS maintained land use controls (LUCs), which restricted the use of or access to applicable areas. The installation evaluated the ROD for cleanup goals at selected compounds and for the addition of 1,4-dioxane. Whidbey Island NAS also continued operations and maintenance (O&M) of the groundwater extraction, treatment, and recharge at Operable Unit (OU) 1 (Area 6).

Technical issues delayed the installation of bioventing systems, which increases oxygen in the soil to stimulate microbial activity, to treat petroleum-contaminated soils.

FY10 MMRP Progress

Whidbey Island NAS continued the site inspection, which determined the need for a focused feasibility study (FS) to evaluate cleanup alternatives at the former Lake Hancock Target Range.



Plan of Action

Plan of action items for Whidbey Island Naval Air Station Ault Field and Seaplane Base are grouped below according to program category.

IRP

- Install the bioventing systems in FY11.
- Continue with O&M of the groundwater extraction, treatment, and recharge at OU 1, (Area 6) in FY11-FY12.
- Maintain LUCs at applicable areas in FY11-FY12.
- Continue to evaluate and assess the ROD for selected compounds and the addition of 1,4 dioxane in FY11-FY12.
- Conduct monitoring and inspection of the beach landfill at OU 5 (Area 1) in FY11-FY12.

MMRP

- Complete a focused FS to address munitions debris at the former Lake Hancock Target Range in FY11-FY12.

White Oak Naval Surface Warfare Center

BRAC 1995

FFID:	MD317002344400	**Contaminants:**	Explosive compounds, waste oils, PCBs, heavy metals, VOCs, SVOCs, propellants, radioactive materials	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Silver Spring, Maryland (710 acres)			**Five-Year Review Status:**	Completed and planned
Mission:	Research, develop, test, and evaluate ordnance technology	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-7-28
HRS Score:	N/A	**Funding to Date:**	$ 39.6 million		
IAG Status:	N/A	**Est. CTC (Comp Year):**	$ 1.5 million (FY2021)		
		IRP Sites (Final RIP/RC):	38 (FY2006)		

Introduction

White Oak Naval Surface Warfare Center (NSWC) researched, developed, tested, and evaluated ordnance technology. Past activities at the installation included landfill disposal of oils, polychlorinated biphenyls (PCBs), solvents, paint residue, and other chemicals (including mercury); disposal of chemical research wastewater in dry wells; burning of explosive ordnance; and composting of sludge. Records also indicate that a radium spill occurred. Contaminants of concern are volatile organic compounds (VOCs), PCBs, cadmium, chromium, lead, mercury, nickel, and ordnance compounds. In July 1995, the BRAC Commission recommended closure of White Oak NSWC. The facility closed in July 1997. White Oak NSWC formed a BRAC cleanup team in FY98 to develop a process for cleanup of sites. The BRAC cleanup team developed a cleanup plan with community input to prioritize sites requiring cleanup in FY96. White Oak NSWC updated the BRAC cleanup plan and community relations plan in FY02. Formed in FY89, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY96. In FY94, the installation established an administrative record, an information repository, and a community relations plan. To ensure continuous monitoring and improvement, White Oak NSWC completed a five-year review report in FY06.

To date, the installation has completed 12 Records of Decision, which selected cleanup actions for 12 sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no sites were identified.

FY10 IRP Progress

White Oak NSWC continued operations of cleanup systems at Sites 4, 5/13, 7, 9, 11, 46, 49, and Solid Waste Management Unit (SWMU) 87 (Area of Concern [AOC] 2).

FY10 MMRP Progress

White Oak NSWC has identified no MMRP sites.

Plan of Action

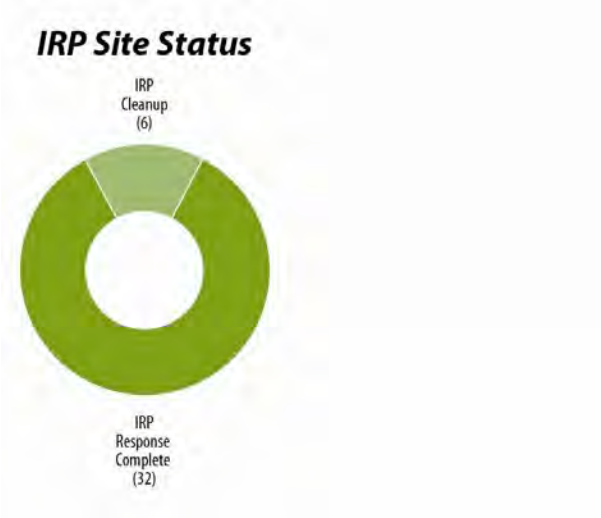
Plan of action items for White Oak Naval Surface Warfare Center are grouped below according to program category.

IRP

- Continue long-term management activities at Sites 4, 5/13, 7, 9, 11, 46, 49, and SWMU 87 (AOC 2) in FY11-FY12.
- Complete land use controls, which restrict the use of and access to Sites 4, 13, 49, and SWMU 87 (AOC 2) in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Whiting Field Naval Air Station

NPL

FFID:	FL417002324400	**Contaminants:**	Pesticides, PCBs, VOCs, heavy metals, chlorinated hydrocarbons, SVOCs, radioactive materials	**MMRP Sites (Final RIP/RC):**	1 (FY2012)
Location (Size):	Milton, Florida (3,842 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
Mission:	Train student naval aviators	**Funding to Date:**	$ 40.8 million	**IRP/MMRP Status Table:**	Refer to page E-6-54
HRS Score:	50.00; placed on NPL in May 1994	**Est. CTC (Comp Year):**	$ 18.9 million (FY2050)		
IAG Status:	FFA signed in March 2009	**IRP Sites (Final RIP/RC):**	46 (FY2011)		

Introduction

Whiting Field Naval Air Station (NAS) trains student naval aviators, and has administrative responsibility for the Outlying Landing Field Barin, located in Alabama. Beginning in FY85, studies at this installation identified contaminated sites at Whiting Field NAS and the Outlying Landing Field Barin. Site types include disposal areas and pits, storage areas, spill areas, landfills, a disposal and burning area, a maintenance area, underground storage tanks, fuel pits, fire training areas, and drainage ditches. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in May 1994. DoD and EPA signed a federal facility agreement (FFA) in FY09 to outline how they are going to proceed with cleanup. Whiting Field NAS formed a technical review committee responsible for communicating cleanup progress with the community in FY90; formed a technical review committee for the Outlying Landing Field Barin in FY02; converted both technical review committees to Restoration Advisory Boards (RABs) in FY05; and adjourned the RABs in FY09. The installation completed the Outlying Landing Field Barin's community relations plan in FY93 and updated the community relations plan in FY03. To ensure continuous monitoring and improvement, the installation completed five-year review reports for Sites 1 and 2 in FY06.

Whiting Field NAS has closed 12 sites. The installation closed Sites 3, 5/5A, 8, 9, 12, 14, 36, and 37 with no action, and Sites 6, 29, 31, and 38 with no further cleanup actions. The installation determined that Sites 1, 2, 10, 11, 13, 15, 17, 18, 30, 32, 33, and 35 required land use controls, which restrict access to the sites. The installation also has closed ten sites at Outlying Land Field Barin. To date, the installation has signed 22 Records of Decision (RODs), which selected cleanup actions for 22 environmental restoration sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

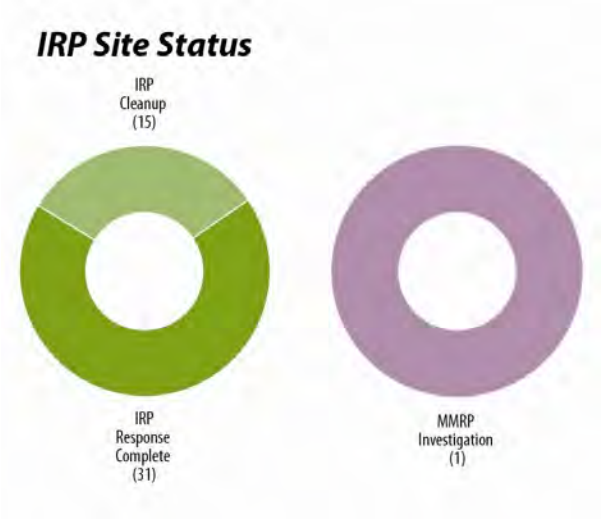
FY10 IRP Progress

Whiting Field NAS continued cleanup at Sites 4 and 7.

Regulatory issues delayed cleanup and RODs at Sites 39 and 41 and the remedial investigation (RI) at Site 40.

FY10 MMRP Progress

Whiting Field NAS completed the site inspection at the former Gunnery Area and Skeet Range.



Plan of Action

Plan of action items for Whiting Field Naval Air Station are grouped below according to program category.

IRP

- Complete proposed plan and feasibility study to evaluate cleanup alternatives for Site 39 in FY11.
- Complete RI at Site 40 in FY11.
- Complete ROD, design for cleanup, and cleanup actions at Sites 39 and 41 in FY11.

MMRP

- Complete interim removal action at Unexploded Ordnance Site 1 in FY11.

Williams Air Force Base

NPL/BRAC 1991

FFID:	AZ957002858200	**Contaminants:**	VOCs, POLs, heavy metals, pesticides, UXO, SVOCs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Mesa, Arizona (4,043 acres)	**Media Affected:**	Groundwater and Soil	**IRP/MMRP Status Table:**	Refer to page E-6-15
Mission:	Supported pilot training and ground equipment maintenance	**Funding to Date:**	$ 75.5 million		
HRS Score:	37.93; placed on NPL in November 1989	**Est. CTC (Comp Year):**	$ 56.8 million (FY2061)		
IAG Status:	FFA signed in FY1990	**IRP Sites (Final RIP/RC):**	33 (FY2011)		
		MMRP Sites (Final RIP/RC):	4 (FY2012)		

Introduction

Williams Air Force Base (AFB) formerly supported pilot training and ground equipment maintenance. The installation has identified restoration sites, which include the liquid fuels storage area, fire protection training area (FPTA) 002, a collapsed stormwater line, spill sites (SS), landfills (LFs), storage tanks (STs), and an old pesticide and paint shop. The potential risk to human health and the environment was significant enough for EPA to place Williams AFB on the NPL in 1989. DoD and EPA signed a federal facility agreement (FFA) in FY90 to outline how they were going to proceed with cleanup. The 1991 BRAC Commission recommended closure of the installation, and the installation closed in September 1993. With community input, the installation updated the BRAC cleanup plan to prioritize sites requiring environmental restoration in FY97 and FY05.

Williams AFB consolidated restoration sites into three operable units (OUs). In FY93, the installation created two more OUs after an environmental assessment of 30 additional areas. EPA and Williams AFB agreed to create a sixth OU in FY97. To date, Williams AFB has signed Records of Decision (RODs) selecting cleanup actions for OUs 1 through 5. The installations has transferred approximately 3,888 acres. In FY04, Williams AFB conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); four MMRP sites were identified.

FY10 IRP Progress

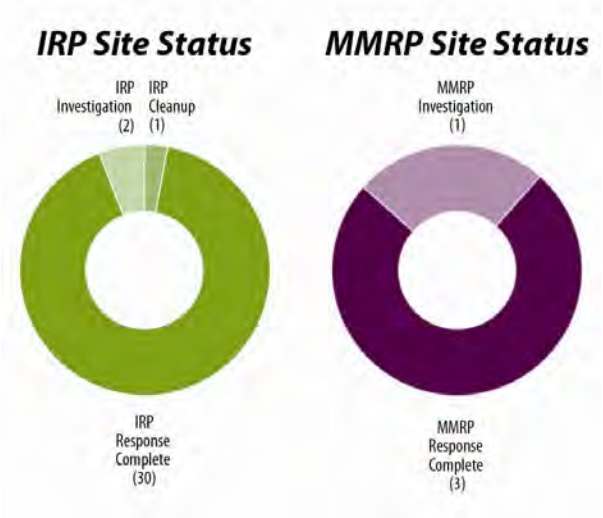
Williams AFB completed the thermal enhanced extraction pilot test study to evaluate this technology for cleanup of subsurface fuel contamination. In addition, Williams AFB completed the temporary treatment facility for overexcavated soil at OU 6 (SS 017). The ROD amendment for OU 3 (FPTA 002) and the feasibility study report to evaluate cleanup alternatives and ROD amendment for OU 1 (LF 004) were added into the pending award of the 2011 performance-based remediation contract.

Administrative issues delayed the ROD for OU 6.

The installation conducted a site tour for members of the BRAC Clean-up team Region 9 and the Arizona Department of Environmental Quality.

FY10 MMRP Progress

Williams AFB identified two types of munitions and explosives of concern (MEC) during the investigation at Parcel N. A three-acre area where the MEC findings were concentrated requires additional investigation. As a result, the installation assigned a new site within Parcel N Debris Area, XU 403.



Plan of Action

Plan of action items for Williams Air Force Base are grouped below according to program category.

IRP

- Award performance based contract for all cleanup activities in FY11.
- Complete ROD for OU 6 (SS 017) in FY11.
- Begin interim action at ST 012 and integrate pump-and-treat groundwater containment system in FY11.
- Install off-site wells at LF 004 to determine extent of contaminated areas in FY11.
- Complete five-year review report in FY11.

MMRP

- Complete site inspection and clearance of MEC at the Parcel N Debris Area, XU 403 in FY12.

Williamsburg FISC, Cheatham Annex

NPL

FFID:	VA317002460500	**Contaminants:**	VOCs, explosives, propellants, PAHs, metals, PCBs, SVOCs	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Location (Size):	Yorktown, Virginia (1,578 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-171
Mission:	Supply Atlantic Fleet ships and provide recreational opportunities to military and civilian personnel	**Funding to Date:**	$ 12.2 million		
HRS Score:	48.72; placed on NPL in December 2000	**Est. CTC (Comp Year):**	$ 11.5 million (FY2025)		
IAG Status:	FFA signed in March 2005	**IRP Sites (Final RIP/RC):**	17 (FY2017)		
		MMRP Sites (Final RIP/RC):	1 (FY2008)		

Introduction

Williamsburg Fleet Industrial Supply Center (FISC) supplies Atlantic Fleet ships and provides recreational opportunities to military and civilian personnel. Contaminants at the installation include semivolatile organic compounds (SVOCs), polyaromatic hydrocarbons (PAHs), metals, and polychlorinated biphenyls (PCBs). These primarily affect groundwater, surface water, and sediment. The potential risk to human health and the environment from eight sites that are hydrologically connected to the Chesapeake Bay was significant enough for EPA to place Williamsburg FISC on the NPL in December 2000. DoD and EPA signed a federal facility agreement (FFA) in FY05 to outline how they were going to proceed with cleanup. The Naval Weapons Station Yorktown Restoration Advisory Board meets twice per year to discuss cleanup progress for Williamsburg FISC with the community.

To date, Williamsburg FISC has completed a Record of Decision (ROD) requiring no further action at Sites 1 and 11. In FY03, the installation completed a Decision Document (DD) requiring no further response actions for Sites 2, 3, 5, 6, 8, and 10. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

Williamsburg FISC completed site inspections at Sites 4, 7, 9, area of concern (AOC) 3, and Penniman (AOCs). Williamsburg FISC also completed a proposed plan and ROD requiring no further cleanup actions at Site 11. The cost of completing environmental restoration has changed significantly due to technical issues.

FY10 MMRP Progress

Williamsburg FISC conducted no MMRP activities.

Plan of Action

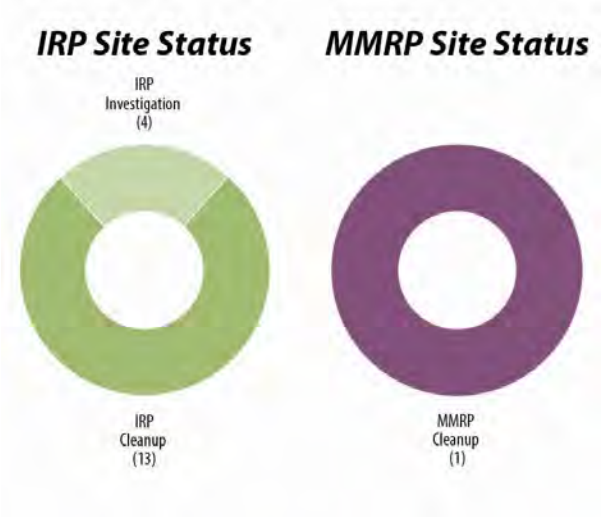
Plan of action items for Williamsburg FISC, Cheatham Annex are grouped below according to program category.

IRP

- Complete ROD for Site 7 in FY11.
- Compete remedial investigation at AOC 9 in FY11.
- Complete DD in FY11.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Willow Grove Air Reserve Station

NPL

FFID:	PA357122534900	**Contaminants:**	SVOCs, chlorinated solvents, jet fuel, VOCs, metals	**Five-Year Review Status:**	This installation is not required to complete a five-year review report.
Location (Size):	Willow Grove, Pennsylvania (210 acres)	**Media Affected:**	Surface Water, Sediment, Soil, Groundwater	**IRP/MMRP Status Table:**	Refer to page E-7-45
Mission:	Train personnel for air transport and air evacuation activities	**Funding to Date:**	$ 8.5 million		
HRS Score:	50.00; placed on NPL in September 1995	**Est. CTC (Comp Year):**	$ 1.1 million (FY2013)		
IAG Status:	None	**IRP Sites (Final RIP/RC):**	7 (FY2007)		
		MMRP Sites (Final RIP/RC):	None		

Introduction

The primary mission of the 913th Airlift Wing at the Willow Grove Air Reserve Station (ARS) was to train personnel for various air transport and air evacuation activities, to operate base facilities and air terminals, and to provide support to assigned units. Willow Grove ARS is owned by the Air Force Reserve Command and is co-located with the Navy-owned Naval Air Station Joint Reserve Base (NAS JRB) Willow Grove. Although NAS JRB Willow Grove is scheduled to close in 2011, Willow Grove ARS was not included as part of the closure of the NAS JRB. Industrial activities at Willow Grove ARS include aircraft maintenance, base civil engineering, and fuel storage. Base civil engineering operations involve generation of waste solvents, oils, miscellaneous chemicals, and paints from various shops, including a paint shop, plumbing shop, photography lab, carpentry shop, and several flammable-material storage facilities. Fuel storage operations include the bulk storage of jet fuel. The potential risk to human health and the environment was significant enough for DoD and EPA to jointly place the installation and the adjacent Willow Grove Naval Air Station on the NPL in September 1995. The installation formed a joint Restoration Advisory Board with the Navy in August 1994 to discuss the installation's cleanup progress with the community.

Willow Grove ARS conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP) in FY05; no MMRP sites were identified.

FY10 IRP Progress

Willow Grove ARS completed removal of the contaminated soils at Site 01. The installation also completed a pilot study on the contaminated soils and implemented recommendations for Site 01. In addition, Willow Grove ARS performed operations and maintenance (O&M) on the cleanup system, quarterly compliance monitoring, and installed the air manifold and relocated the cleanup system at Site 01.

FY10 MMRP Progress

Willow Grove ARS has identified no MMRP sites.

Plan of Action

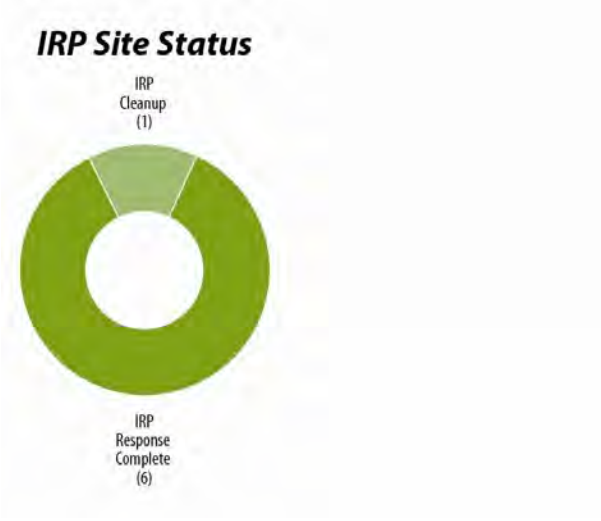
Plan of action items for Willow Grove Air Reserve Station are grouped below according to program category.

IRP

- Continue O&M on the cleanup system and conduct quarterly compliance monitoring at Site 01 in FY11.
- Submit the final report to Pennsylvania Department of Environmental Protection in FY11.
- Continue performance monitoring and sampling in FY11.
- Remove cleanup system and close wells and site in FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Willow Grove Naval Air Station Joint Reserve Base

NPL/BRAC 2005 Closure

FFID:	PA317002231200	**Contaminants:**	Heavy metals, PCBs, POLs, solvents, VOCs, SVOCs, explosives, propellants, radioactive materials	**MMRP Sites (Final RIP/RC):**	None
Location (Size):	Willow Grove, Pennsylvania (1,090 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Planned
Mission:	Serve as Reserve naval air station for aviation training activities	**Funding to Date:**	$ 12.2 million	**IRP/MMRP Status Table:**	Refer to page E-6-138
HRS Score:	50.00; placed on NPL in September 1995	**Est. CTC (Comp Year):**	$ 17.5 million (FY2028)		
IAG Status:	FFA signed in 2005	**IRP Sites (Final RIP/RC):**	14 (FY2015)		

Introduction

Willow Grove Naval Air Station (NAS) Joint Reserve Base serves as a reserve NAS for aviation training activities. Contaminated site types include landfills, underground storage tanks, and a fire training area. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in September 1995. In FY05, DoD and EPA signed a federal facility agreement (FFA) to outline how they were going to proceed with cleanup. The 2005 BRAC Commission recommended closure of Willow Grove NAS Joint Reserve Base. Formed in FY90, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board (RAB) in FY95; the RAB meets regularly. Willow Grove NAS Joint Reserve Base established an administrative record and information repository in FY91, and a community relations plan was developed in FY97.

To date, the installation has signed a Record of Decision (ROD) requiring no further cleanup actions for Sites 1 (Soils) and 2. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); no MMRP sites were identified.

FY10 IRP Progress

Willow Grove NAS Joint Reserve Base completed the implementation plan for land use controls for Site 1, which restrict the use of or access to the site. Willow Grove NAS Joint Reserve Base also signed the ROD requiring no further cleanup actions for Site 2. In addition, the installation completed a Phase I remedial investigation (RI) for Site 12. The cost of completing environmental restoration has changed significantly due to technical issues and changes in estimating criteria.

Technical issues delayed the groundwater pilot study and proposed plan (PP) for Site 5.

FY10 MMRP Progress

Willow Grove NAS has identified no MMRP sites.

Plan of Action

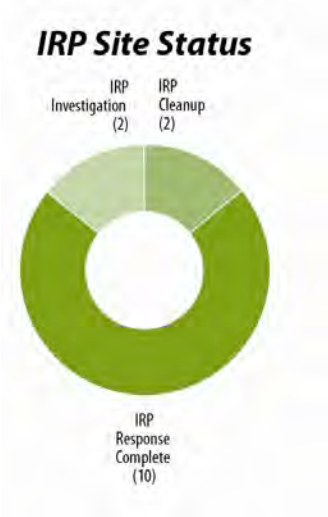
Plan of action items for Willow Grove Naval Air Station Joint Reserve Base are grouped below according to program category.

IRP

- Complete the PP and groundwater pilot study for Site 5 in FY11.
- Complete the RI, Feasibility Study (FS) to evaluate cleanup alternatives and PP for Site 3 in FY11-FY12.
- Complete Phase II RI at Site 12 in FY11-F12.
- Prepare the ROD for Site 5 in FY11-FY12.

MMRP

There are no MMRP actions scheduled for FY11 or FY12.



Wright-Patterson Air Force Base

NPL/BRAC 2005 Realignment

FFID:	OH557172431200	**Contaminants:**	Acids, plating wastes, VOCs, waste oils and fuels, SVOCs, solvents, TCE	**Five-Year Review Status:**	Completed and planned
Location (Size):	Dayton, Ohio (8,145 acres)	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-129
Mission:	Serve as host to many organizations, including headquarters Air Force Materiel Command	**Funding to Date:**	$ 198.7 million		
HRS Score:	57.85; placed on NPL in October 1989	**Est. CTC (Comp Year):**	$ 35.7 million (FY2028)		
IAG Status:	FFA signed in March 1991	**IRP Sites (Final RIP/RC):**	73 (FY2011)		
		MMRP Sites (Final RIP/RC):	1 (FY2003)		

Introduction

Wright-Patterson Air Force Base (AFB) serves as host to many organizations, including headquarters Air Force Materiel Command. Past activities at Wright-Patterson AFB created spill sites (SSs) and unlined waste disposal areas, including landfills (LFs), fire training areas, underground storage tanks, earth fill disposal areas, and coal storage areas. Soil and groundwater are contaminated with volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), trichloroethylene (TCE), benzene, toluene, ethyl benzene, xylene compounds, and fuel and its combustion by-products. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in October 1989. DoD and EPA signed a federal facility agreement (FFA) in March 1991 to outline how they were going to proceed with cleanup. To ensure continuous monitoring and improvement, the installation completed five-year review reports in FY00 and FY06.

To date, the installation has identified 66 sites and 4 areas of concern (AOCs). Wright-Patterson AFB has signed Records of Decision (RODs) to select cleanup actions at LFs 8 and 10 (Operable Unit [OU] 1) and SSs 2, 3, and 10 (OU 2). Additionally, the installation signed RODs requiring no further cleanup actions at 41 sites (38 sites, 2 AOCs, and an explosive ordnance disposal range) and 21 soil sites. In FY97, the installation signed the ROD for the Groundwater OU. After signing the RODs, the installation discovered contamination at two AOCs (Buildings 25 and 79/95) and two sites (Buildings 58 and 59). In FY05, the installation conducted an inventory of sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); one MMRP site was identified.

FY10 IRP Progress

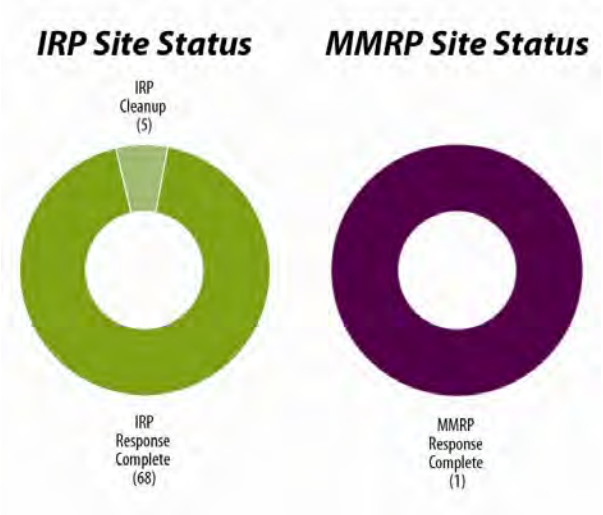
Wright-Patterson AFB continued operation and maintenance (O&M) at LFs and long-term management (LTM) of groundwater, and continued ROD optimization for OU2. The installation completed a draft five-year review report, and submitted it to agencies for review. Wright-Patterson AFB also submitted a draft groundwater treatment system optimization report to the regulatory agencies. The cost of completing environmental restoration has changed significantly due to changes in estimating criteria.

Regulatory issues delayed compilation of documentation for partial delisting of soils from the NPL. Technical and regulatory issues delayed the cleanup action, proposed plan (PP), and a ROD to select cleanup actions at Building 55.

FY10 MMRP Progress

Wright-Patterson AFB completed an evaluation of potential environmental hazards and submitted the draft final evaluation for regulatory review.

Technical issues delayed completion of review and coordination of a preliminary assessment (PA), and review and coordination and completion of the site inspection (SI) work plan.



Plan of Action

Plan of action items for Wright-Patterson Air Force Base are grouped below according to program category.

IRP

- Complete PP, cleanup actions, and ROD for Buildings 25, 55, 59, and 79/95 in FY11.
- Continue O&M at LFs and LTM of the groundwater in FY11.
- Continue groundwater treatment system optimization in FY11.
- Begin basewide Conceptual Site Models for OUs, and long-term monitoring well abandonment in FY11.
- Complete a land use control document, which will restrict use of and access to sites in FY11.
- Finalize five-year review report in FY11.
- Compile documentation for partial delisting of soils from the NPL and submit to regulators in FY11.

MMRP

- Complete review and coordination of a PA in FY11.
- Complete SI workplan in FY11.
- Complete final evaluation of potential environmental hazards in FY11-FY12.

Wurtsmith Air Force Base

Proposed NPL/BRAC 1991

FFID:	MI557002427800	**Contaminants:**	Spent solvents, UXO, VOCs, SVOCs, metals, POLs	**Five-Year Review Status:**	Completed and planned
Location (Size):	Oscoda, Michigan (4,627 acres)	**Media Affected:**	Groundwater, Surface Water, Soil	**IRP/MMRP Status Table:**	Refer to page E-6-96
Mission:	Supported fighter, bomber, and cargo aircraft operations	**Funding to Date:**	$ 70.3 million		
HRS Score:	50.00; placed on NPL in January 1994	**Est. CTC (Comp Year):**	$ 13.5 million (FY2047)		
IAG Status:	N/A	**IRP Sites (Final RIP/RC):**	62 (FY2013)		
		MMRP Sites (Final RIP/RC):	10 (FY2011)		

Introduction

Prior to its closure, the mission of Wurtsmith Air Force Base (AFB) was to conduct tactical fighter and bomber training. Sites at the installation include a waste solvent underground storage tank, bulk storage areas for petroleum/oil/lubricants (POLs), aboveground storage tanks, fire training areas, landfills (LFs), and an aircraft crash site. Volatile organic compounds (VOCs) at the installation include trichloroethylene (TCE), dichloroethene, vinyl chloride, benzene, toluene, ethyl benzene, and xylenes, all of which primarily affect groundwater. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in January 1994. The 1991 BRAC Commission recommended closure of Wurtsmith AFB and the installation closed in June 1993. The BRAC cleanup team developed a BRAC cleanup plan with community input to prioritize sites requiring environmental restoration. The installation formed a Restoration Advisory Board in FY94 to discuss its cleanup progress with the community. To ensure continuous monitoring and improvement, the installation completed a five-year review report in FY04.

In FY04, the installation conducted an inventory of sites suspected to contain contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Wurtsmith AFB drafted a decision document (DD) for LFs 030 and 031 to select cleanup actions in coordination with the BRAC cleanup team. The installation also began the investigation at LF 027 and awarded a contract to complete an explanation of significant differences for the Record of Decision at OT 024.

Administrative issues delayed the DD and feasibility study (FS) to evaulate cleanup alternatives at Spill Site (SS) 072. Technical issues delayed the DD for the Fire Pit Training Area (FPTA) 002; interview action continued. Administrative issues also delayed the completion of the five-year review report; interviews and research were conducted.

FY10 MMRP Progress

Wurstmith AFB conducted hazard recognition training. The installation began closeout documentation reviews for four sites.

Plan of Action

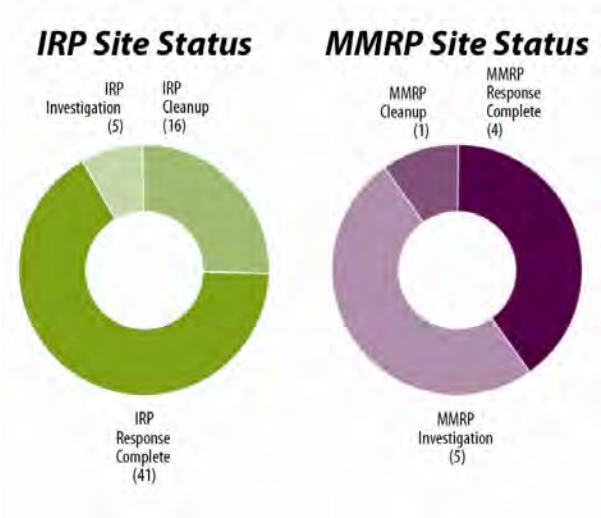
Plan of action items for Wurtsmith Air Force Base are grouped below according to program category.

IRP

- Complete DD and construction of cleanup system at LFs 030 and 031 in FY11.
- Complete five-year review report in FY11.
- Complete DD and FS to Install cleanup system at SS 072 in FY11.
- Conduct remedial investigation at LF 027 in FY11.
- Complete DD for FPTA 002 in FY11.

MMRP

- Complete closeout documentation for remaining sites in FY11 and FY12.



Yorktown Naval Weapons Station

FFID:	VA317002417000	**Contaminants:**	Acids, asbestos, explosives, cadmium, zinc, lead, mercury, PAHs, VOCs, paint thinners, solvents, PCBs, waste oils, nickel, varnishes, SVOCs, metals, propellants, explosives	**IRP Sites (Final RIP/RC):**	49 (FY2015)
Location (Size):	Yorktown, Virginia (10,624 acres)			**MMRP Sites (Final RIP/RC):**	2 (FY2017)
Mission:	Provide technical support and maintenance, modifications, production, loading, off-loading, and storage for Atlantic Fleet	**Media Affected:**	Groundwater, Surface Water, Sediment, Soil	**Five-Year Review Status:**	Completed and planned
HRS Score:	50.00; placed on NPL in October 1992	**Funding to Date:**	$ 59.1 million	**IRP/MMRP Status Table:**	Refer to page E-6-172
IAG Status:	FFA signed in August 1994	**Est. CTC (Comp Year):**	$ 25.4 million (FY2050)		

Introduction

Yorktown Naval Weapons Station (NWS) provides ordnance technical support and related services to the Atlantic Fleet. Six contaminated sites are hydrologically connected to the Chesapeake Bay. Contaminants include explosive nitramine compounds and volatile organic compounds (VOCs) that affect groundwater, surface water, and sediment. The potential risk to human health and the environment was significant enough for EPA to place the installation on the NPL in October 1992. DoD and EPA signed a federal facility agreement (FFA) in September 1994 to outline how they were going to proceed with cleanup. In 2005, the BRAC Commission recommended Yorktown NWS for realignment. Formed in FY91, the installation converted its technical review committee responsible for communicating cleanup progress with the community into a Restoration Advisory Board in FY95. In FY02, the installation updated the community relations plan. To ensure continuous monitoring and improvement, Yorktown NWS completed five-year review reports in FY02 and FY08.

To date, Yorktown NWS has completed 16 Records of Decision (RODs), which selected cleanup actions for environmental restoration sites. In FY02, the installation conducted an inventory of all sites suspected to contain munitions contamination for the Military Munitions Response Program (MMRP); MMRP sites were identified.

FY10 IRP Progress

Yorktown NWS completed the Phase II remedial investigation (RI) at Operable Unit 1; RODs for Sites 11, 17, 29, and 30; and a removal action at Site 32 (Supply Support Area 25).

Regulatory issues delayed completion of the RI at Site 31.

FY10 MMRP Progress

Yorktown NWS completed site inspection (SI) fieldwork, including a geophysical survey, at Turkey Road Landfill (LF).

Plan of Action

Plan of action items for Yorktown Naval Weapons Station are grouped below according to program category.

IRP

- Complete RIs at Sites 1, 3, 6, 24, and 31 in FY11.
- Complete RODs for Sites 4, 21, 22, and 32 in FY11-FY12.
- Complete feasibility study to evaluate cleanup alternatives at Site 22 in FY11-FY12.

MMRP

- Complete SI at Turkey Road LF in FY11-FY12.