

APPENDIX J: ACTIVE INSTALLATIONS ENVIRONMENTAL RESTORATION PROGRESS

Restoration

Through Fiscal Year (FY) 2006, the Department of Defense (DoD) has conducted environmental activities at 21,136 sites on active installations across all Components—Army, Navy, Air Force, and the Defense Logistics Agency (DLA). DoD has achieved remedy in place (RIP) or response complete (RC) at 17,072 sites, or approximately 81 percent. The overall site status at active installations is shown in Figure J-1.

The Defense Environmental Restoration Program (DERP) is divided into three programs: the Installation Restoration Program (IRP); the Military Munitions Response Program (MMRP); and the Building Demolition/Debris Removal (BD/DR). Due to the small size of the BD/DR program, BD/DR sites are typically included in the IRP site counts.

Site Status and Progress Towards Program Goals

DoD's goal under the IRP is to achieve RIP/RC status at all high relative-risk sites by the end of FY2007, all medium relative-risk sites by the end of FY2011, and all remaining sites by the end of FY2014. As of September 30, 2006, DoD had achieved RIP/RC at 85 percent of all active IRP sites.

By the end of FY2006, DoD had identified 1,310 MMRP sites at active installations, a decrease of 23 sites from FY2005. While the MMRP continues to mature, munitions response actions have been a part of the DERP for several years, primarily at Base Realignment and Closure (BRAC) sites and Formerly Used Defense Sites (FUDS), providing DoD with a solid experience base for addressing munitions-related environmental and safety hazards at active installations.

Similar to the IRP, the Department has established program metrics for the MMRP. DoD plans to complete preliminary assessments (PAs) for all MMRP sites at active installations by the end of FY2007 and finalize site

inspections (SIs) by the end of FY2010. RIP/RC goals are currently under development.

In FY2006, one DoD facility, the Army's Rocky Mountain Arsenal, was partially delisted from the National Priorities List (NPL). Two other facilities, Ellsworth Air Force Base and Army Research Laboratory-Watertown, began the final stage of the partial site delisting process; final delisting actions are expected in FY2007.

At Rocky Mountain Arsenal, the Army completed remediation of 7,399 acres, which were subsequently delisted from the NPL. Of these acres, the Army transferred 7,258 to the U.S. Fish and Wildlife Service, but retained jurisdiction of areas containing water treatment systems.

Funding and Cost-to-Complete

In FY2006, DoD obligated \$915.8 million in Environmental Restoration (ER) funding for IRP sites at active installations. Of this amount, 71 percent of the funds were obligated for cleanup activities and 21 percent went toward investigation activities. DoD used the remaining funds for long-term management and program management. Restoration funding is discussed in detail in Appendix D.

The site-level cost-to-complete (CTC) for environmental restoration at all active installations decreased from \$14.2 billion to \$12.8 billion in FY2006. The IRP site-level CTC decreased from \$8.2 billion to \$7.5 billion. Similarly, the MMRP site-level CTC decreased from \$6.0 billion to \$5.2 billion.

DoD continues to seek the most efficient and cost-effective strategies for achieving RC at active installations. Figure J-2 provides detailed cost data for DoD's active installations.

Figure J-1
DoD Site Status Summary Table

Sites by Classification				Phase	Completed		Underway		Future		
IRP Sites		MMRP Sites			IRP	MMRP	IRP	MMRP	IRP	MMRP	
Response Comp.	16,035	Response Comp.	226	Sites (Actions)							
High	687	RAC-1	85		Study	17,699	234	1,909	1,012	218	64
Medium	930	RAC-2	199		IRA	2,931 (4,018)	7 (7)	355 (418)	1 (2)		
Low	1,151	RAC-3	150		Design	1,860	1	327	2	724	581
Not Evaluated	195	RAC-4	200		RA-C	2,924	3	606	8	1,067	712
Not Required	828	RAC-5	351		RA-O	473	0	904	0	847	137
		Not Evaluated	99		LTM	632	0	805	3	1,604	463
Total IRP Sites	19,826	Total MMRP Sites	1,310								

Total Number of IRP Installations with Sites	1,564
Total Number of MMRP Installations with Sites	292

Figure J-2
DoD Budget and CTC Summary Table

Phase	Costs Through FY2006 (\$000)		FY2006 Funds Obligated (\$000)		FY2007 Execution Planned (\$000)		FY2008 Planning Estimate (\$000)		Estimated Costs (\$000)		
	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP
Study	\$5,834,098	\$103,997	\$192,912	\$37,280	\$125,091	\$62,739	\$144,509	\$71,792	FY2009	\$843,102	\$233,931
IRA	\$2,872,262	\$3,592	\$121,472	\$64	\$116,866	\$0	\$102,105	\$5,820	FY2010	\$695,419	\$356,236
Design	\$718,570	\$1,000	\$15,049	\$1,000	\$13,573	\$5,088	\$18,322	\$2,484	FY2011	\$648,753	\$446,472
RA-C	\$4,793,529	\$18,902	\$325,192	\$18,891	\$312,272	\$19,763	\$319,108	\$29,822	FY2012	\$501,580	\$594,398
RA-O	\$1,286,314	\$0	\$175,960	\$0	\$226,425	\$0	\$251,828	\$0	FY2013	\$444,005	\$659,668
LTM	\$532,502	\$1,247	\$72,903	\$1,247	\$82,969	\$204	\$79,436	\$496	FY2007-Comp. IRP		\$7,467,528
Total	\$16,037,275	\$128,738	\$903,488	\$58,482	\$877,196	\$87,794	\$915,308	\$110,414	FY2007-Comp. MMRP		\$5,147,867
									FY2007-Complete		\$12,615,395

Army

The Army continues to make progress in successfully cleaning up sites and ensuring land is ready for reuse, while identifying the most efficient and cost-effective strategies for achieving program completion. Commitment to protecting human health and the environment remains the primary focus of the Army's Environmental Restoration Program. The overall site status and cost-to-complete data at Army active installations is shown in Figure J-3.

Site Status and Progress Towards Program Goals

The Army had 10,451 IRP sites at active installations in FY2006, a decrease of 61 sites from FY2005. To date, 9,670 IRP sites have achieved RIP/RC status; overall, 69 more than in FY2005. Under the MMRP, the Army has identified 785 sites through FY2006, a decrease of 36 sites from FY2005. The Army met the goal of completing all PAs at active installations in FY2004, three years before the FY2007 goal, and is on schedule to complete all active installation SIs by the end of FY2010.

The Army projects meeting its FY2014 IRP goal of having all sites at active installations achieve RIP/RC status. The Army has made significant progress in reducing the number of sites in all relative-risk categories.

Funding and Cost-to-Complete

In FY2006, the Army obligated \$395.3 million in ER funding for IRP and MMRP sites at active installations. Of the total obligations, approximately 83 percent were spent on active IRP sites, with \$242.6 million obligated for cleanup activities and \$35.1 million for investigation activities. The Army used the remaining funds for long-term management activities, as well as program management. The Army obligated \$12.4 million of Army ER funds for the MMRP at active installations, mostly to continue SIs and provide program management.

The site-level CTC for environmental restoration at Army's active installations, including IRP and MMRP, decreased from \$6.7 billion in FY2005 to \$5.2 billion in FY2006. The IRP site-level CTC decreased from \$2.4 billion to \$2.1 billion. Similarly, the MMRP site-level CTC decreased from \$4.3 billion to \$3.0 billion.

In FY2006, the Army expanded its use of performance-based contracts (PBCs) at active installations by awarding over 54 percent of program funds to PBCs. Since FY2001, the Army has awarded 52 contracts at 87 active Army installations, totaling approximately \$577.5 million, including 12 PBCs at 30 active installations in FY2006. Within those 12 PBCs, a third went to small business. The Army's goal is to have 60 percent of program funds going toward PBCs by FY2007.

Figure J-3

Army Active Installations Summary Table

				Completed		Underway		Future		Costs Through FY2006 (\$000)		FY2006 Funds Obligated (\$000)		FY2007 Execution Planned (\$000)		FY2008 Planning Estimate (\$000)		Estimated Costs (\$000)			
				IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP	
Sites by Classification																					
IRP Sites		MMRP Sites																			
RC	9,568	RC	127																		
High	222	RAC-1	57																		
Medium	305	RAC-2	146																		
Low	249	RAC-3	78																		
Not Evaluated	5	RAC-4	92																		
Not Required	102	RAC-5	284																		
		Not Evaluated	1																		
Total Sites	10,451	Total Sites	785																		
				Total						\$6,012,203	\$30,826	\$328,970	\$12,401	\$309,643	\$26,703	\$340,340	\$37,009				
				Total Number of IRP Installations with Sites																1,083	
				Total Number of MMRP Installations with Sites																157	
																	FY2009		\$261,866	\$132,718	
																	FY2010		\$161,786	\$210,961	
																	FY2011		\$130,043	\$283,224	
																	FY2012		\$96,089	\$326,361	
																	FY2013		\$71,316	\$360,459	
																	FY2007-Comp. IRP		\$2,144,727		
																	FY2007-Comp. MMRP		\$3,032,076		
																	FY2007-Complete		\$5,176,803		

Navy

The Department of the Navy's (DON's) Environmental Restoration Program, which addresses cleanups at both Navy and Marine Corps installations, is focused on moving sites through the appropriate environmental restoration phases to complete all cleanup requirements.

Site Status and Progress Towards Program Goals

To date, the DON has identified 3,704 active IRP sites; approximately 78 percent of which have achieved RIP/RC. Forty-three percent of the remaining sites are classified as high relative-risk. In FY2006 alone, one hundred active IRP sites achieved RIP/RC.

DON has identified a total of 221 sites on active installations potentially requiring a military munitions response. In FY2006, DON has continued to make excellent progress toward reaching DoD's management goal of completing its restoration program by FY2014. Many of DON's IRP sites have progressed to the final cleanup stages of the program, while the majority of MMRP sites are in the investigation process.

Funding and Cost-to-Complete

In FY2006, DON obligated \$295.9 million for environmental restoration work at active installations, including \$42.6 million for MMRP activities. Funding levels are projected at \$304.4 million for FY2007 and include \$49.3 million for MMRP activities. DON obligated approximately 59 percent of active site-level costs in FY2006 to design work, interim or final cleanup actions, operations and maintenance, and long-term management, while 25 percent of funding was spent on investigation activities.

The site-level CTC for environmental restoration at Navy's active installations, including IRP and MMRP, increased from \$2.5 billion to \$2.6 billion in FY2006. The IRP site-level CTC decreased from \$2.1 billion to \$2.0 billion, while the MMRP site-level CTC increased from \$466 million to \$619.5 million. The increase in MMRP CTC costs is related to the cleanup of munitions identified near Vieques, Puerto Rico. Figure J-4 shows FY2006 Navy active installation site status and CTC information.

Figure J-4
Navy Active Installations Summary Table

Sites by Classification				Completed		Underway		Future		Costs Through FY2006 (\$000)		FY2006 Funds Obligated (\$000)		FY2007 Execution Planned (\$000)		FY2008 Planning Estimate (\$000)		Estimated Costs (\$000)		
				IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP
Phase				Sites (Actions)				IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP			
Study				3,053	40	465	124	186	57	\$1,549,475	\$50,459	\$58,545	\$14,140	\$33,019	\$18,256	\$41,597	\$16,773	FY2009	\$216,647	\$43,410
IRA				821 (1,013)	4 (4)	54 (57)	0 (0)			\$937,713	\$3,167	\$49,445	\$0	\$57,015	\$0	\$42,435	\$676	FY2010	\$210,228	\$40,067
Design				473	1	29	1	243	20	\$109,120	\$1,000	\$2,205	\$1,000	\$4,604	\$5,063	\$3,211	\$2,381	FY2011	\$209,788	\$54,658
RA-C				695	0	82	4	334	120	\$1,141,719	\$18,902	\$50,633	\$18,891	\$71,894	\$19,763	\$65,568	\$24,944	FY2012	\$215,420	\$55,983
RA-O				151	0	229	0	248	10	\$284,269	\$0	\$39,565	\$0	\$42,183	\$0	\$46,149	\$0	FY2013	\$219,858	\$57,021
LTM				171	0	174	1	476	72	\$76,279	\$1,247	\$11,252	\$1,247	\$9,865	\$194	\$11,669	\$483	FY2007-Comp. IRP	\$1,987,354	
Total				\$4,098,575	\$74,775	\$211,645	\$35,278	\$218,580	\$43,276	\$210,629	\$45,257				FY2007-Comp. MMRP	\$619,475				
														FY2007-Complete	\$2,606,829					
Total Number of IRP Installations with Sites								202												
Total Number of MMRP Installations with Sites								58												

Air Force

The Air Force continued to make progress toward accomplishing program goals under the IRP and MMRP in FY2006. By focusing on the best science and practices available, the Air Force manages a successful environmental restoration program that protects human health and the environment while restoring sites that support the Air Force's mission.

Site Status and Progress Towards Program Goals

The Air Force manages cleanup activities for 5,326 IRP and BD/DR sites at active installations and has achieved RIP/RC status at 3,941 of those sites. As of the end of FY2006, cleanup actions continued at 976 IRP sites.

Through FY2006, the Air Force has identified 304 MMRP sites at active installations. Of these, 64, or 21 percent, were RIP/RC. Evaluations will continue in FY2007 as the Air Force works with regulators to develop and adopt remedies to expedite decision processes and response actions at MMRP sites.

The Air Force began Comprehensive Site Evaluations (CSEs) for all identified MMRP sites in FY2005. The CSE goal is to gather all information, including

standard PA/SI data, required to determine the appropriate response actions necessary to support safe reuse of the encumbered asset. Under the current funding structure, the Air Force projects to complete the CSE at all sites in the current inventory by FY2009 and will meet DoD's goal for completing PAs for sites at active installations by the end of FY2007 and SIs by the end of FY2010.

Funding and Cost-to-Complete

During FY2006, the Air Force obligated \$359.0 million for environmental restoration activities at active installations. While restoration funding remains relatively constant, as the Environmental Restoration Program matures, a larger percentage of funds are spent on cleanup activities rather than on investigation.

As of the end of FY2006, the active Air Force's site-level CTC was approximately \$4.7 billion, with \$3.2 billion for IRP sites and \$1.5 billion for MMRP sites.

Figure J-5 shows FY2006 Air Force active installation site status and cost-to-complete.

Figure J-5
Air Force Active Installations Summary Table

Sites by Classification				Completed		Underway		Future		Costs Through FY2006 (\$000)		FY2006 Funds Obligated (\$000)		FY2007 Execution Planned (\$000)		FY2008 Planning Estimate (\$000)		Estimated Costs (\$000)			
				IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP	
Study				4,447	64	847	233	32	7	\$2,301,624	\$23,698	\$94,182	\$10,739	\$53,580	\$17,815	\$34,415	\$28,148	FY2009	\$355,553	\$57,803	
IRA				1,266 (1,745)	1 (1)	270 (328)	0 (0)			\$1,077,847	\$64	\$60,159	\$64	\$56,383	\$0	\$58,435	\$0	FY2010	\$315,962	\$105,208	
Design				540	0	119	0	313	165	\$405,440	\$0	\$10,641	\$0	\$4,064	\$0	\$9,919	\$0	FY2011	\$302,728	\$108,590	
RA-C				801	1	204	0	506	182	\$1,186,138	\$0	\$84,387	\$0	\$76,973	\$0	\$80,360	\$0	FY2012	\$184,476	\$212,054	
RA-O				203	0	446	0	474	105	\$557,470	\$0	\$88,513	\$0	\$129,699	\$0	\$154,474	\$0	FY2013	\$147,915	\$242,188	
LTM				279	0	352	0	727	164	\$226,555	\$0	\$10,356	\$0	\$20,835	\$0	\$17,838	\$0	FY2007-Comp. IRP	\$3,171,322		
								Total		\$5,755,074	\$23,762	\$348,238	\$10,803	\$341,534	\$17,815	\$355,441	\$28,148	FY2007-Comp. MMRP	\$1,496,316		
								Total Number of IRP Installations with Sites												\$4,667,638	
								Total Number of MMRP Installations with Sites													
Total Sites				5,326																	
Total Sites				304																	

DLA

DLA is committed to remaining a DoD leader in environmental restoration, and will continue to manage a successful environmental restoration program until cleanup actions at all DLA sites are completed. In FY2006, DLA demonstrated restoration program progress, thereby decreasing the overall risk to human health and the environment.

Site Status and Progress Towards Program Goals

In FY2006, DLA continued to make excellent progress toward reaching DoD's management goals for completing environmental restoration actions on active installations. DLA has 345 IRP sites at active installations; 334 sites, or 97 percent, have achieved RIP/RC status. DLA is conducting investigations on the final three sites and conducting cleanup activities on 18 sites. To date, DLA has not identified any MMRP sites.

Funding and Cost-to-Complete

During FY2006, the DLA obligated \$14.6 million for environmental restoration at active installations. An allocation of \$9.5 million in FY2006 for cleanup activities at active installations, excluding management and investigation, compared to \$9.4 million in FY2005, demonstrates that DLA is working towards meeting environmental restoration goals and reducing the amount of cleanup necessary.

DLA has an estimated CTC for active installation restoration of \$164.1 million.

Figure J-6 shows FY2006 DLA active installation site status and cost-to-complete data.

Figure J-6

DLA Active Installations Summary Table

Sites by Classification				Completed		Underway		Future		Costs Through FY2006 (\$000)		FY2006 Funds Obligated (\$000)		FY2007 Execution Planned (\$000)		FY2008 Planning Estimate (\$000)		Estimated Costs (\$000)					
				IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP			
IRP Sites				MMRP Sites																			
RC	324	RC	0																				
High	4	RAC-1	0																				
Medium	1	RAC-2	0																				
Low	4	RAC-3	0																				
Not Evaluated	2	RAC-4	0																				
Not Required	10	RAC-5	0																				
			Not Evaluated	0																			
Total Sites			345	Total Number of IRP Installations with Sites			5																
			Total Sites	0	Total Number of MMRP Installations with Sites			0															
Phase				Sites (Actions)				IRP		MMRP		IRP		MMRP		IRP		MMRP					
Study				342	0	3	0	0	0	\$89,493	\$0	\$5,084	\$0	\$1,223	\$0	\$0	\$0	FY2009		\$9,036	\$0		
IRA				64 (82)	0 (0)	1 (1)	0 (0)			\$14,099	\$0	\$0	\$0	\$0	\$0	\$0	FY2010		\$7,443	\$0			
Design				92	0	3	0	5	0	\$21,143	\$0	\$1,343	\$0	\$79	\$0	\$1,347	\$0	FY2011		\$6,194	\$0		
RA-C				148	0	4	0	7	0	\$147,622	\$0	\$60	\$0	\$473	\$0	\$2,285	\$0	FY2012		\$5,595	\$0		
RA-O				30	0	12	0	6	0	\$65,014	\$0	\$8,108	\$0	\$5,026	\$0	\$4,462	\$0	FY2013		\$4,916	\$0		
LTM				20	0	11	0	20	0	\$1,380	\$0	\$40	\$0	\$638	\$0	\$804	\$0	FY2007-Comp. IRP		\$164,125			
				Total				\$338,751	\$0	\$14,635	\$0	\$7,439	\$0	\$8,898	\$0	FY2007-Comp. MMRP		\$0					
																FY2007-Complete		\$164,125					