



Restoration | Appendix J: Active Installations Environmental Restoration Progress

Through Fiscal Year (FY) 2007, the Department of Defense (DoD) has conducted environmental activities at 21,388 sites on active installations across all Components—Army, Navy, Marine Corps, Air Force, and the Defense Logistics Agency (DLA). DoD has achieved remedy in place (RIP) or response complete (RC) at 17,951 sites, or approximately 84 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 included in the IRP site counts.

Site Status and Progress Towards Program Goals

The Department's goals to address IRP sites are based on the site's potential risk to human health and the environment. Ninety-two percent of the high relative-risk sites at active installations achieved RIP/RC by the end of FY2007. Ninety-one percent of medium relative-risk sites are projected to achieve RIP/RC by the end of FY2011, and 100

percent of low relative-risk sites are projected to meet this milestone by the end of FY2014.

By the end of FY2007, DoD had identified 1,550 MRSs to be addressed under the MMRP at active installations, an increase of 240 sites from FY2006. 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 sites and Formerly Used Defense Sites, 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. The MMRP goals for MRSs are to have preliminary assessments completed for all sites by the end of FY2007 and site inspections completed by the end of FY2010. DoD completed nearly all preliminary assessments at active installations by the end of FY2007 and is projected to complete 98 percent of all site inspections by the end of FY2010.

As evidence of a continually maturing MMRP, the Components began to report results from the application of the Munitions Response Site Prioritization Protocol (MRSPP) in FY2007. The MRSPP assigns a relative priority for cleanup to each MRS.

With FY2007 serving as a transition year, Components had the opportunity to report relative priorities for sites prioritized under the MRSPP or Risk Assessment Code (RAC) scores for those sites awaiting prioritization in accordance with the new requirements. MRSs characterized as MRSPP-1 or RAC-1 represent the greatest potential hazard. In cases where an MRS is reported with both scores, the MRSPP priority took precedence over the RAC score. Beginning in FY2008, the Components will report the relative priorities determined by application of the MRSPP for all MRSs.

Funding and Cost-to-Complete Estimates

In FY2007, DoD obligated \$1.4 billion in Environmental Restoration (ER) funding at active installations, which includes program management costs. Of this amount, 56 percent of the funds were obligated for cleanup activities and 23 percent went toward investigation activities. DoD used the remaining funds for long-term management and program management. Funding for cleanup efforts at active installations are discussed in detail in Appendix D: Restoration Budget Overview.

The site-level cost-to-complete (CTC) for environmental restoration at all active installations decreased from \$12.6 billion in FY2006 to \$12.2 billion in FY2007. The IRP site-level CTC decreased from \$7.5 billion to \$6.9 billion, and the MMRP site-level CTC increased from \$5.1 billion to \$5.3 billion.

DoD continues to seek the most efficient and cost-effective strategies for achieving RC at active installations. Figures J-1, J-2, and J-3 provide a site status of active installations by relative risk, by cleanup phase, and CTC estimates.

Figure J-1 DoD Active Installations Site Status by Relative Risk

Sites by Classification			
IRP Sites		MMRP Sites	
Response Complete	15,097	Response Complete	337
High	346	MRSPP-1	1
Medium	823	MRSPP-2	16
Low	1,014	MRSPP-3	26
Not Evaluated	38	MRSPP-4	40
Not Required	2,520	MRSPP-5	43
Total IRP Sites	19,838	MRSPP-6	17
RAC-1	5	MRSPP-7	14
RAC-2	43	MRSPP-8	64
RAC-3	65	Evaluation Pending	597
RAC-4	43	Not Known/Suspected	3
RAC-5	115	No Longer Required	18
Evaluation Pending	103	Total MMRP Sites	1,550
Total Number of IRP Installations with Sites			1,563
Total Number of MMRP Installations with Sites			299

Figure J-2 DoD Active Installations Site Status by Cleanup Phase

Phase	Completed		Underway		Future	
	IRP	MMRP	IRP	MMRP	IRP	MMRP
	Sites (Actions)					
Study	18,232	352	1,408	1,167	198	31
IRA	3,008 (4,145)	6 (6)	285 (331)	9 (9)	--	--
Design	1,987	0	249	3	582	628
RA-C	3,225	4	454	8	905	764
RA-O	555	0	1,015	0	636	112
LTM	697	1	824	5	1,414	550

Figure J-3 DoD Active Installations Budget and CTC Estimates*

Phase	Costs Through FY2007 (\$000)		FY2007 Funds Obligated (\$000)		FY2008 Execution Planned (\$000)		FY2009 Planning Estimate (\$000)		Estimated Costs (\$000)		
	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP
Study	\$6,062,105	\$160,406	\$154,712	\$55,731	\$177,167	\$91,366	\$100,000	\$164,123	FY2010	\$744,809	\$332,132
IRA	\$3,042,831	\$7,645	\$132,675	\$4,053	\$91,044	\$17,070	\$61,505	\$1,386	FY2011	\$669,482	\$471,829
Design	\$737,381	\$1,000	\$10,633	\$0	\$9,472	\$2,305	\$21,245	\$1,509	FY2012	\$539,134	\$630,675
RA-C	\$5,123,688	\$38,797	\$279,889	\$19,895	\$300,452	\$25,902	\$394,511	\$27,202	FY2013	\$500,216	\$686,387
RA-O	\$1,537,822	\$0	\$234,762	\$0	\$235,089	\$0	\$240,689	\$0	FY2008-Complete IRP		\$6,914,317
LTM	\$616,411	\$1,581	\$77,146	\$334	\$94,364	\$200	\$82,649	\$315	FY2008-Complete MMRP		\$5,255,062
Total	\$17,120,238	\$209,429	\$889,817	\$80,013	\$907,588	\$136,843	\$900,599	\$194,535	FY2008-Complete		\$12,169,379

* Totals reflect installation project funding allocated to individual sites and do not include program management and other support costs.

Army

The Army continues to identify the most efficient and cost-effective strategies for achieving program completion, while making progress in successfully cleaning up sites and ensuring land is ready for reuse.

Site Status and Progress Towards Program Goals

The Army had 10,487 IRP sites at active installations in FY2007, an increase of 36 sites from FY2006. To date, 9,874 IRP sites have achieved RIP/RC status. Under the MMRP, the Army has identified 826 MRSs through FY2007, an increase of 41 MRSs from FY2006.

The Army projects meeting DoD's FY2014 IRP goal of having all MRSs 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 Estimates

In FY2007, the Army obligated \$402.8 million in ER funding, which includes program management costs, for sites addressed under the IRP and MMRP at active installations.

The site-level CTC for environmental restoration at Army's active installations, including IRP and MMRP, decreased from \$5.2 billion in FY2006 to \$4.8 billion in FY2007. The estimated CTC for IRP sites is \$1.9 billion and the estimated CTC for the MMRP MRSs is \$2.9 billion.

Figures J-4, J-5, and J-6 show FY2007 Army active installation site status by relative risk, by cleanup phase, and CTC estimates.

Figure J-4 Army Active Installations
Site Status by Relative Risk

Sites by Classification			
IRP Sites		MMRP Sites	
Response Complete	9,704	Response Complete	195
High	114	MRSPP-1	0
Medium	278	MRSPP-2	9
Low	216	MRSPP-3	7
Not Evaluated	5	MRSPP-4	15
Not Required	170	MRSPP-5	11
Total IRP Sites	10,487	MRSPP-6	1
RAC-1	0	MRSPP-7	1
RAC-2	0	MRSPP-8	1
RAC-3	0	Evaluation Pending	584
RAC-4	0	Not Known/ Suspected	2
RAC-5	0	No Longer Required	0
Evaluation Pending	0	Total MMRP Sites	826
Total Number of IRP Installations with Sites			1,083
Total Number of MMRP Installations with Sites			158

Figure J-5 Army Active Installations
Site Status by Cleanup Phase

Phase	Completed		Underway		Future	
	IRP	MMRP	IRP	MMRP	IRP	MMRP
	Sites (Actions)					
Study	9,990	195	497	631	0	0
	799					
IRA	(1,200)	0 (0)	31 (31)	7 (7)	--	--
Design	833	0	138	1	137	378
RA-C	1,441	2	243	4	179	392
RA-O	93	0	268	0	88	20
LTM	185	0	268	2	296	242

Figure J-6 Army Active Installations Budget and CTC Estimates*

Phase	Costs Through FY2007 (\$000)		FY2007 Funds Obligated (\$000)		FY2008 Execution Planned (\$000)		FY2009 Planning Estimate (\$000)		Estimated Costs (\$000)		
	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP
Study	\$2,007,363	\$47,874	\$44,419	\$17,356	\$67,114	\$19,763	\$42,040	\$88,144	FY2010	\$190,528	\$178,802
IRA	\$888,797	\$4,316	\$8,300	\$3,955	\$2,202	\$12,285	\$576	\$1,035	FY2011	\$112,948	\$300,249
Design	\$191,473	\$0	\$428	\$0	\$4,789	\$0	\$3,279	\$19	FY2012	\$84,312	\$338,261
RA-C	\$2,531,463	\$2	\$173,064	\$2	\$157,111	\$5,347	\$164,628	\$2,224	FY2013	\$76,428	\$355,453
RA-O	\$434,277	\$0	\$50,010	\$0	\$51,664	\$0	\$44,512	\$0	FY2008-Complete IRP		\$1,871,111
LTM	\$284,006	\$1	\$48,955	\$1	\$52,367	\$0	\$48,564	\$29	FY2008-Complete MMRP		\$2,943,199
Total	\$6,337,379	\$52,193	\$325,176	\$21,314	\$335,247	\$37,395	\$303,599	\$91,451	FY2008-Complete		\$4,814,310

* Totals reflect installation project funding allocated to individual sites and do not include program management and other support costs.

Navy

The Department of the Navy's (DON's) Environmental Restoration Program, which addresses cleanup activities at 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 3,716 active IRP sites, approximately 83 percent of which have achieved RIP/RC. DON has identified a total of 239 sites on active installations potentially requiring a military munitions response. In FY2007, DON continued to make progress toward reaching DoD's management goal of achieving RIP/RC at its IRP sites by FY2014. Many of DON's IRP sites have progressed to the final cleanup phases of the program, while the majority of its MRSs are in the investigation process.

Funding and Cost-to-Complete Estimates

In FY2007, DON obligated \$301.7 million for environmental restoration work at active installations, which includes program management costs. IRP activities were obligated \$252.9 million and MMRP activities were obligated \$48.8 million.

The site-level CTC for environmental restoration at DON's active installations, including IRP and MMRP, remained steady from FY2006 to FY2007 at \$2.6 billion and the estimated CTC for IRP sites is \$1.9 billion and the estimated CTC for MRSs is \$713.3 million.

Figures J-7, J-8, and J-9 show FY2007 DON active installation site status by relative risk, by cleanup phase, and CTC estimates.

Figure J-7 Navy Active Installations
Site Status by Relative Risk[†]

Sites by Classification			
IRP Sites		MMRP Sites	
Response Complete	1,217	Response Complete	31
High	205	MRSPP-1	1
Medium	182	MRSPP-2	7
Low	257	MRSPP-3	19
Not Evaluated	2	MRSPP-4	25
Not Required	1,853	MRSPP-5	32
Total IRP Sites	3,716	MRSPP-6	16
RAC-1	0	MRSPP-7	13
RAC-2	0	MRSPP-8	63
RAC-3	0	Evaluation Pending	13
RAC-4	0	Not Known/Suspected	1
RAC-5	0	No Longer Required	18
Evaluation Pending	0	Total MMRP Sites	239
Total Number of IRP Installations with Sites			203
Total Number of MMRP Installations with Sites			62

Figure J-8 Navy Active Installations
Site Status by Cleanup Phase[†]

Phase	Completed		Underway		Future	
	IRP	MMRP	IRP	MMRP	IRP	MMRP
	Sites (Actions)					
Study	3,175	45	365	194	176	0
IRA	841 (1,028)	5 (5)	40 (41)	2 (2)	--	--
Design	488	0	29	2	246	19
RA-C	752	1	52	4	338	106
RA-O	192	0	282	0	195	8
LTM	185	1	180	3	432	66

Figure J-9 Navy Active Installations Budget and CTC Estimates*[†]

Phase	Costs Through FY2007 (\$000)		FY2007 Funds Obligated (\$000)		FY2008 Execution Planned (\$000)		FY2009 Planning Estimate (\$000)		Estimated Costs (\$000)		
	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP
Study	\$1,593,015	\$70,235	\$43,540	\$19,776	\$49,214	\$20,900	\$39,535	\$15,627	FY2010	\$205,628	\$39,000
IRA	\$994,933	\$3,265	\$57,220	\$98	\$39,267	\$222	\$35,669	\$351	FY2011	\$204,989	\$53,644
Design	\$115,095	\$1,000	\$5,975	\$0	\$3,758	\$2,305	\$3,943	\$1,490	FY2012	\$210,659	\$54,029
RA-C	\$1,186,620	\$38,795	\$44,901	\$19,893	\$48,776	\$20,555	\$68,589	\$24,978	FY2013	\$215,021	\$54,627
RA-O	\$333,641	\$0	\$49,372	\$0	\$42,694	\$0	\$40,476	\$0	FY2008-Complete IRP	\$1,865,153	
LTM	\$88,028	\$1,580	\$11,749	\$333	\$23,855	\$200	\$12,368	\$286	FY2008-Complete MMRP	\$713,295	
Total	\$4,311,332	\$114,875	\$212,757	\$40,100	\$207,564	\$44,182	\$200,580	\$42,732	FY2008-Complete	\$2,578,448	

* Totals reflect installation project funding allocated to individual sites and do not include program management and other support costs.

† Department of the Navy includes the Navy and the Marine Corps.

Air Force

The Air Force continued to make progress toward accomplishing program goals under the IRP and MMRP in FY2007.

Site Status and Progress Towards Program Goals

The Air Force manages cleanup activities for 5,290 IRP and BD/DR sites at active installations and has achieved RIP/RC status at 4,323 of those sites. As of the end of FY2007, investigation and cleanup actions were planned or underway at 565 and 871 IRP sites, respectively.

Through FY2007, the Air Force has identified 485 MRSs at active installations. Of these sites, 111, or 23 percent, had reached the RIP/RC milestone.

Funding and Cost-to-Complete Estimates

In FY2007, the Air Force obligated \$401.5 million in ER funding, which includes program management costs, for sites addressed under the IRP and MMRP at active installations.

The site-level CTC for environmental restoration at Air Force's active installations, including IRP and MMRP, decreased from \$4.7 billion in FY2006 to \$4.6 billion in FY2007. The estimated CTC for IRP sites is \$3.0 billion and the estimated CTC for the MMRP MRSs is \$1.6 billion.

Figures J-10, J-11, and J-12 show FY2007 Air Force active installation site status by relative risk, by cleanup phase, and CTC estimates.

Figure J-10 Air Force Active Installations
Site Status by Relative Risk

Sites by Classification			
IRP Sites		MMRP Sites	
Response Complete	3,854	Response Complete	111
High	23	MRSPP-1	0
Medium	363	MRSPP-2	0
Low	538	MRSPP-3	0
Not Evaluated	28	MRSPP-4	0
Not Required	484	MRSPP-5	0
Total IRP Sites	5,290	MRSPP-6	0
RAC-1	5	MRSPP-7	0
RAC-2	43	MRSPP-8	0
RAC-3	65	Evaluation Pending	0
RAC-4	43	Not Known/Suspected	0
RAC-5	115	No Longer Required	0
Evaluation Pending	103	Total MMRP Sites	485
Total Number of IRP Installations with Sites			272
Total Number of MMRP Installations with Sites			80

Figure J-11 Air Force Active Installations
Site Status by Cleanup Phase

Phase	Completed		Underway		Future	
	IRP	MMRP	IRP	MMRP	IRP	MMRP
	Sites (Actions)					
Study	4,725	112	543	342	22	31
IRA	1,304 (1,835)	1 (1)	213 (258)	0 (0)	--	--
Design	574	0	76	0	197	231
RA-C	882	1	158	0	380	266
RA-O	241	0	452	0	349	84
LTM	310	0	357	0	661	242

Figure J-12 Air Force Active Installations Budget and CTC Estimates*

Phase	Costs Through FY2007 (\$000)		FY2007 Funds Obligated (\$000)		FY2008 Execution Planned (\$000)		FY2009 Planning Estimate (\$000)		Estimated Costs (\$000)		
	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP
Study	\$2,367,227	\$42,297	\$65,603	\$18,599	\$59,378	\$50,703	\$17,456	\$60,352	FY2010	\$343,714	\$114,330
IRA	\$1,145,002	\$64	\$67,155	\$0	\$49,575	\$4,563	\$25,260	\$0	FY2011	\$346,656	\$117,936
Design	\$409,595	\$0	\$4,155	\$0	\$841	\$0	\$14,023	\$0	FY2012	\$238,597	\$238,385
RA-C	\$1,246,802	\$0	\$60,664	\$0	\$94,066	\$0	\$160,622	\$0	FY2013	\$204,186	\$276,307
RA-O	\$686,850	\$0	\$129,380	\$0	\$136,442	\$0	\$150,433	\$0	FY2008-Complete IRP	\$3,004,106	
LTM	\$242,807	\$0	\$16,252	\$0	\$17,672	\$0	\$21,461	\$0	FY2008-Complete MMRP	\$1,598,568	
Total	\$6,098,283	\$42,361	\$343,209	\$18,599	\$357,974	\$55,266	\$389,255	\$60,352	FY2008-Complete	\$4,602,674	

* Totals reflect installation project funding allocated to individual sites and do not include program management and other support costs.

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 FY2007, DLA demonstrated restoration program progress, thereby decreasing the overall risk to human health and the environment.

Site Status and Progress Towards Program Goals

In FY2007, DLA continued to make excellent progress toward reaching DoD's management goals for completing environmental restoration actions on active installations. DLA had 345 IRP sites at active installations; 322 sites, or 97 percent, had achieved RC status. Three DLA sites were in investigation stages, while 20 sites had cleanup planned or underway. To date, DLA has not identified any MRSs.

Funding and Cost-to-Complete Estimates

In FY2007, DLA obligated \$11.0 million in ER funding for IRP sites at active installations, which includes program management costs. DLA has an estimated CTC for active installations restoration of \$174.0 million.

Figures J-13, J-14, and J-15 display FY2007 DLA active installation site status by relative risk, by cleanup phase, and budget information.

Figure J-13 DLA Active Installations
Site Status by Relative Risk

Sites by Classification			
IRP Sites		MMRP Sites	
Response Complete	322	Response Complete	0
High	4	MRSPP-1	0
Medium	0	MRSPP-2	0
Low	3	MRSPP-3	0
Not Evaluated	3	MRSPP-4	0
Not Required	13	MRSPP-5	0
Total IRP Sites	345	MRSPP-6	0
RAC-1	0	MRSPP-7	0
RAC-2	0	MRSPP-8	0
RAC-3	0	Evaluation Pending	0
RAC-4	0	Not Known/Suspected	0
RAC-5	0	No Longer Required	0
Evaluation Pending	0	Total MMRP Sites	0
Total Number of IRP Installations with Sites			5
Total Number of MMRP Installations with Sites			0

Figure J-14 DLA Active Installations
Site Status by Cleanup Phase

Phase	Completed		Underway		Future	
	IRP	MMRP	IRP	MMRP	IRP	MMRP
	Sites (Actions)					
Study	342	0	3	0	0	0
IRA	64 (82)	0 (0)	1 (1)	0 (0)	--	--
Design	92	0	6	0	2	0
RA-C	150	0	1	0	8	0
RA-O	29	0	13	0	4	0
LTM	17	0	19	0	25	0

Figure J-15 DLA Active Installations Budget and CTC Estimates*

Phase	Costs Through FY2007 (\$000)		FY2007 Funds Obligated (\$000)		FY2008 Execution Planned (\$000)		FY2009 Planning Estimate (\$000)		Estimated Costs (\$000)		
	IRP	MMRP	IRP	MMRP	IRP	MMRP	IRP	MMRP	Fiscal Year	IRP	MMRP
Study	\$90,643	\$0	\$1,150	\$0	\$1,461	\$0	\$969	\$0	FY2010	\$4,939	\$0
IRA	\$14,099	\$0	\$0	\$0	\$0	\$0	\$0	\$0	FY2011	\$4,889	\$0
Design	\$21,218	\$0	\$75	\$0	\$84	\$0	\$0	\$0	FY2012	\$5,566	\$0
RA-C	\$148,882	\$0	\$1,260	\$0	\$499	\$0	\$672	\$0	FY2013	\$4,581	\$0
RA-O	\$71,014	\$0	\$6,000	\$0	\$4,289	\$0	\$5,268	\$0	FY2008-Complete IRP		\$173,947
LTM	\$1,570	\$0	\$190	\$0	\$470	\$0	\$256	\$0	FY2008-Complete MMRP		\$0
Total	\$347,426	\$0	\$8,675	\$0	\$6,803	\$0	\$7,165	\$0	FY2008-Complete		\$173,947

* Totals reflect installation project funding allocated to individual sites and do not include program management and other support costs.