

## Appendix K: MMRP Comprehensive Plan Update

The Department of Defense's (DoD's) Military Munitions Response Program (MMRP) manages environmental responses at sites (other than operational ranges) where unexploded ordnance (UXO), discarded military munitions (DMM), and munitions constituents (MC) are known or suspected to be present. By understanding the different hazards posed at Munitions Response Sites (MRSs), DoD is better able to protect human health and the environment.

The MMRP was established under the Defense Environmental Restoration Program (DERP) in September 2001. Prior to this date, ordnance and explosives activities were addressed together under the Installation Restoration Program (IRP). Some MRSs potentially containing small quantities of UXO, DMM, or MC may remain under the IRP for programmatic, planning, and budgeting purposes.

DoD established the MMRP as a new DERP program element with objectives similar to the IRP to improve its overall approach for protecting human health and the environment, as well as to attain a better understanding for response requirements at locations other than operational ranges known or suspected of containing UXO, DMM, or MC. Environmental restoration at MRSs known or suspected of containing UXO, DMM, or MC must be addressed differently than restoration activities for hazardous substances and pollutants because they present a unique explosive hazard. The MMRP increases effectiveness and transparency of the cleanup process through thoughtful planning, programming, budgeting, and execution processes that allow DoD to set priorities and effectively resource MMRP requirements.

### Applicable Requirements

Section 313 of the John Warner National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2007, Public Law 109-364, requires the Secretary of Defense to submit DoD's plan for addressing remediation of UXO, DMM, and MC at current and former MRSs. The FY2007 NDAA specifically highlights MMRP performance goals, response plans, reuse standards, and principles. The MMRP Comprehensive Plan was submitted to congressional defense committees in March 2007. An annual update to the plan—including restoration progress updates and adjustments to the program's goals, response plans, and funding estimates—is required through FY2010. This update satisfies the Section 313 requirement.

In addition to Section 313 of Public Law 109-364, various external federal laws and requirements apply to the MMRP, including 10 U.S.C. §2710, which directs DoD to develop an inventory of MRSs known or suspected of containing UXO, DMM, or MC, and establish a ranking methodology for remediation and funding. DoD published the initial MMRP inventory in FY2002 to determine the scope and extent of effort required for the program. Since its initial publication, DoD has collaborated with regulators, Native American tribes, and federal land managers to update, reconcile, and revise the MMRP inventory. The inventory is updated annually and released as part of the Defense Environmental Programs Annual Report to Congress. It is publicly available at <http://deparc.xservices.com/do/mmrp>.

By the end of FY2008, DoD identified 3,674 MRSs at active and Base Realignment and Closure (BRAC) installations and Formerly Used Defense Site (FUDS) properties. Figure K-1 illustrates the total number of MRSs at active installations and FUDS properties by component. Defense Logistics Agency (DLA) has identified no MRSs. Figure K-2 illustrates the total number of MRSs at BRAC installations by Component.

DoD applies the environmental restoration process set forth by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and its implementing regulation, the National Oil and Hazardous Substance Pollution Contingency Plan, to address cleanup at MRSs identified in its inventory. CERCLA was enacted on December 11, 1980, providing federal authority for short- and long-term remedial actions in response to hazardous releases that may negatively impact human health and the environment. In some instances, DoD applies the Resource Conservation and Recovery Act to address environmental restoration at MRSs.

To meet these external requirements, the following DoD issuances apply to the MMRP: DoD Directive 4715.1, Environment, Safety, and Occupational Health; DoD

Instruction 4715.7, Environmental Restoration; and the 2001 Management Guidance for the DERP.

### Current Management Practices

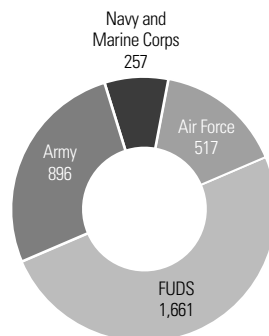
DoD uses a risk-based approach to implement the MMRP cleanup strategy, focusing on three main elements: (1) implementing a systematic process for prioritizing sites for execution; (2) developing program goals and performance metrics to drive environmental restoration activities, secure funding, and track program progress; and (3) working with regulators, stakeholders, and community members to address concerns. MMRP activities are funded by either the Environmental Restoration (ER) account or the BRAC account. There are five specific ER accounts, one for the Army, the Navy, the Air Force, and FUDS, and a Defense-Wide account that includes funding for DLA, Defense Threat Reduction Agency, and Office of the Secretary of Defense Environmental Management Office. The Navy ER account includes the Marine Corps. The ER accounts fund restoration activities at active installations and FUDS properties. The BRAC account funds closure-related activities, and environmental compliance and planning activities at closed or realigned sites.

Appendix G: Restoration Budget Overview provides additional information on the obligation of MMRP funds.

In FY2008, DoD obligated \$327.8 million to MRSs, as shown in Figure K-3. MMRP funding obligated at all installations has more than doubled in the past four years, enabling more sites to efficiently move through the cleanup phases. Funding amounts for FY2008 include program management costs. These totals also reflect the transfer of funds from the ER account to provide funding for MRSs at installations closed in the BRAC 2005 Round.

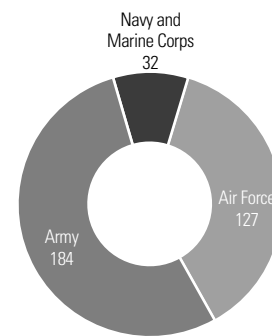
With over 3,600 MRSs in its inventory, DoD does not have the resources to address all contamination at once. In accordance with Section 311(B) of the FY2002 NDAA, DoD was required to develop a protocol for assigning a relative priority to all MRSs, establishing precedence for completing response actions. DoD developed the Munitions Response Site Prioritization Protocol (MRSP) in consultation with stakeholder representatives from states, Native American tribes, and federal agencies. The MRSP was codified in the Code of Federal Regulations, Title 32 Part 179 (October 5, 2005). DoD provided classroom training on the MRSP to over 250 regulators and stakeholders at six locations throughout the country in 2005

**Figure K-1** Number of MRSs at Active Installations and FUDS Properties by Component



**Total Sites: 3,331**

**Figure K-2** Number of MRSs at BRAC Installations by Component



**Total Sites: 343**

and 2006. Currently, DoD is developing an online training program that will be released in FY2009. Components have begun to apply the MRSPP at all MRSs in the inventory. Appendix M: Installation Restoration Program and Military Munitions Response Program Status Tables provides additional information on the application of the MRSPP.

DoD believes technology is an important aspect of the MMRP because the development and application of effective and innovative environmental technologies can improve cleanup efficiency and reduce associated costs. DoD strives to advance the state of the technologies used to conduct munitions responses to enhance the overall effectiveness of munitions responses, improve safety for response personnel, increase overall protection of human health and the environment, and reduce costs associated with the MMRP.

The Department actively engages regulators and the community through stakeholder participation, required by the MRSPP. Through the application of the MRSPP, DoD increases stakeholders' understanding of the challenges associated with military munitions response activities.

### Performance Evaluation Criteria

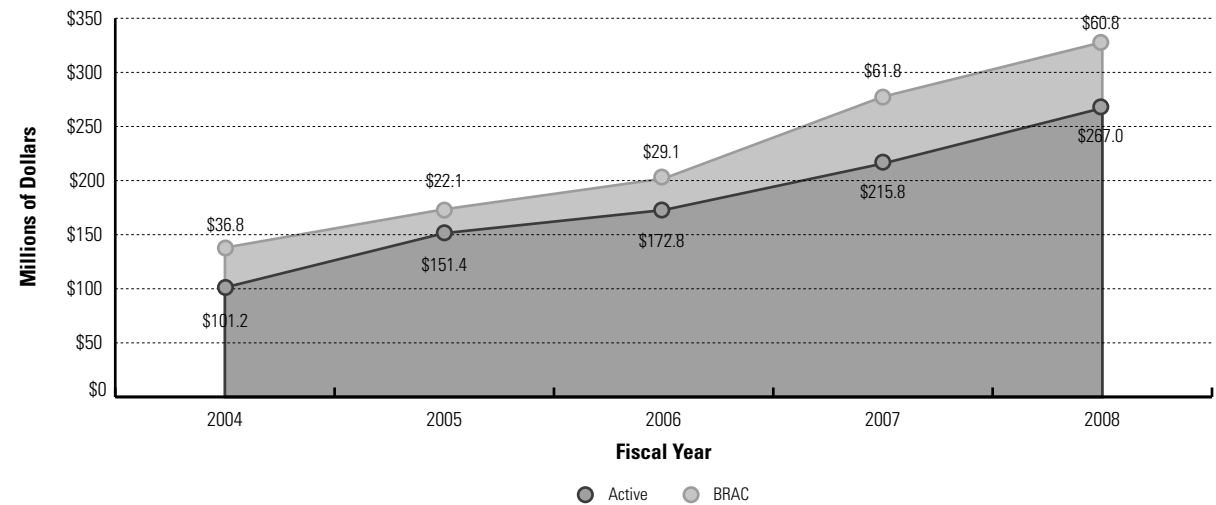
DoD establishes work groups to assist in the development of reasonable and challenging metrics. Under this process in FY2008, DoD established new program goals for the MMRP at active and BRAC installations. Figure K-4 displays the Department's progress toward reaching its short- and long-term performance goals under the MMRP.

Below is an overview of DoD's short- and long-term MMRP progress goals.

Short-term goals include:

- ▶ Achieve remedy in place (RIP) or response complete (RC) at all MRSs identified in the first four BRAC rounds by the end of FY2009
- ▶ Complete site inspections (SIs) for all MRSs at active installations and FUDS properties by the end of FY2010.

**Figure K-3** DoD MMRP Funding Obligations at Active\* and BRAC Installations



\* Active installations include FUDS properties.

**Figure K-4** DoD Progress Toward MMRP Performance Goals

	FY2006	FY2007	FY2008
<b>Active Installations</b>			
Complete PAs at all MRSs by the end of FY2007	81%	96%	95%
Complete SIs at all MRSs by the end of FY2010	13%	29%	51%
Achieve RIP/RC at all MRSs by the end of FY2020	---	23%	34%
<b>FUDS Properties</b>			
Complete PAs at all MRSs by the end of FY2007	99%	99%	99%
Complete SIs at all MRSs by the end of FY2010	33%	37%	58%
<b>BRAC Rounds Installations</b>			
Achieve RIP/RC at all MRSs identified in the first four rounds of BRAC by the end of FY2009	38%	63%	67%
Achieve RIP/RC at all MRSs identified in BRAC 2005 by the end of FY2017	0%	20%	27%

Long-term goals include:

- ▶ Achieve RIP/RC at all MRSs identified in the 2005 BRAC Round by the end of FY2017
- ▶ Achieve RIP/RC at all MRSs at active installations by the end of FY2020.

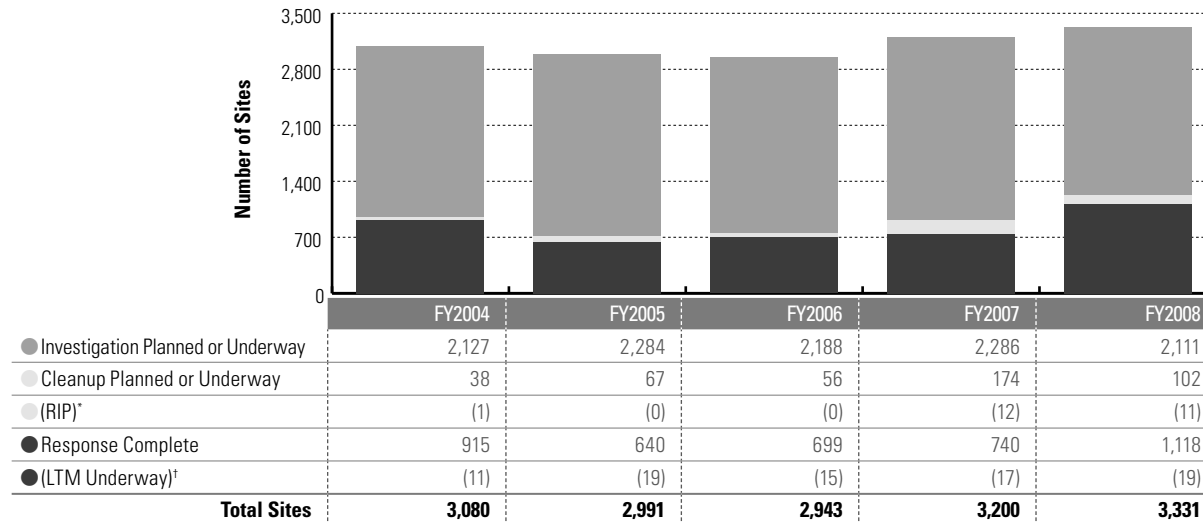
By the end of FY2008, DoD had completed preliminary assessments (PAs) at 95 percent of MRSs at active installations and at 99 percent of MRSs at FUDS properties, with only a few sites not meeting the FY2007 goal to complete PAs at all MRSs. DoD is working aggressively to complete required cleanup actions at these sites, which generally pose significant challenges due to their complexity.

DoD also measures MMRP progress by developing cost-to-complete (CTC) estimates, which are estimations of anticipated funds necessary to complete restoration requirements. The CTC estimates are derived from site-level funding information prepared during the budgeting process. The estimates provide the most accurate picture of anticipated cost trends for addressing MMRP requirements. The length of time required for cleanup is largely dependent on available funding. DoD anticipates that as installations complete responses at IRP sites, more funding will shift toward completing response actions at MRSs.

### Performance Summary

Since the MMRP is in the early stages of implementation, the majority of sites remain in the investigation phase. Figure K-5 displays site status by cleanup phase at active installations and FUDS properties. Figure K-6 displays site status by cleanup phase at BRAC installations. DoD is working toward its next goals—achieving RIP/RC at all MRSs at Legacy BRAC installations by FY2009 and completing SIs for all MRSs at active installations and FUDS properties by the end of FY2010. Currently, DoD is projecting 72 percent of MRSs at Legacy BRAC installations will achieve RIP/RC by FY2009. DoD is projecting that 98 percent of SIs at active installations and 77 percent of SIs at FUDS properties will be complete by FY2010.

**Figure K-5** DoD MRS Status at Active Installations<sup>‡</sup> by Cleanup Phase

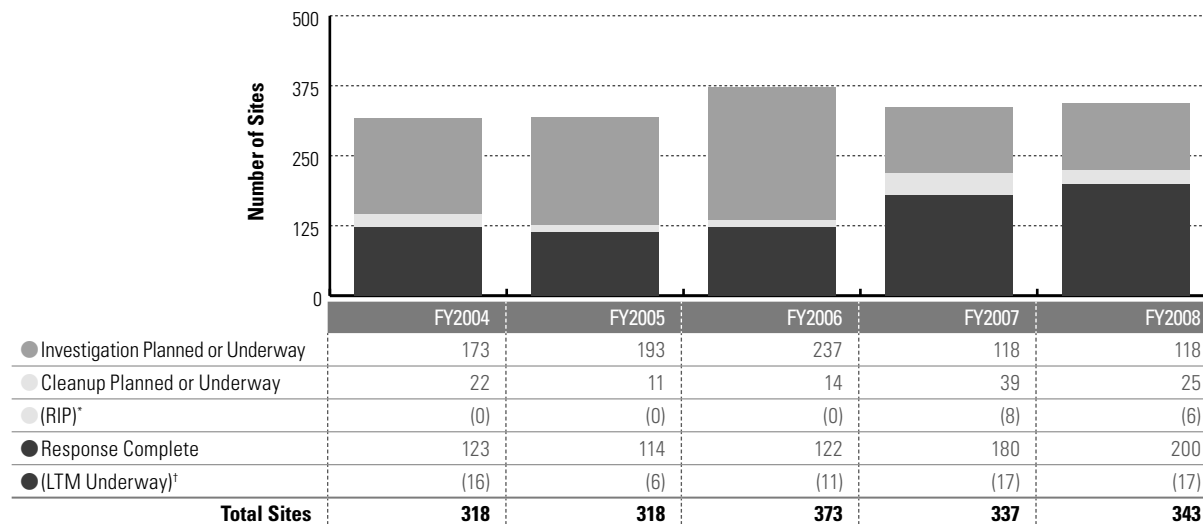


\* RIP is a subset of Cleanup Planned or Underway.

† LTM is a subset of Response Complete.

‡ Active installations include FUDS properties.

**Figure K-6** DoD MRS Status at BRAC Installations by Cleanup Phase



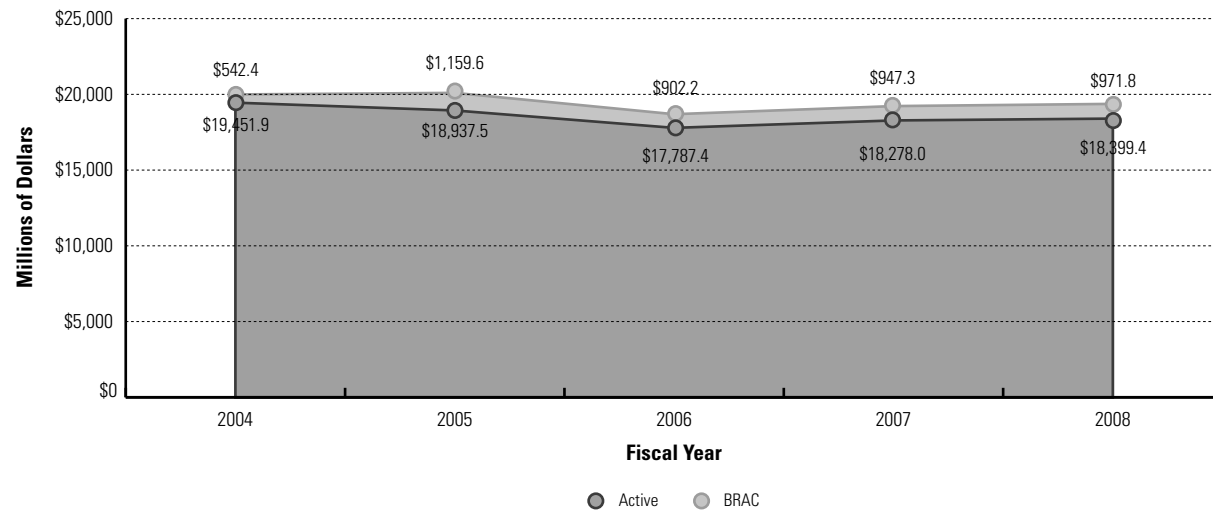
\* RIP is a subset of Cleanup Planned or Underway.

† LTM is a subset of Response Complete.

Munitions response actions were part of the DERP for many years prior to the MMRP—primarily at BRAC installations and FUDS properties—providing DoD with solid experience in addressing the environmental and explosive hazards associated with past use of military munitions. As of FY2008, DoD has achieved RC at 1,118 MRSs (34 percent) at active installations and FUDS properties, and at 200 MRSs (58 percent) at BRAC installations. This represents an increase of 378 sites (51 percent) at active installations and FUDS properties since FY2007. At BRAC installations, this represents an increase of 77 sites (63 percent) and 20 sites (11 percent) since FY2004 and FY2007, respectively.

Figure K-7 displays CTC estimates at active and BRAC installations and FUDS properties. CTC estimates across the MMRP increased this year, a trend that is expected to continue into future years, as the Components continue to assess the risks associated with MRSs. DoD demonstrates its commitment to addressing MMRP concerns by continuing to increase the resources available for reducing risks at these sites. DoD expects that as installations complete responses at IRP sites, more funding will shift towards completing response actions at MRSs.

**Figure K-7** DoD MMRP CTC Estimates at Active\* and BRAC Installations†



\* Active installations include FUDS properties.

† Funding represents site-level data and does not include management and support costs not directly attributable to specific sites.