

State Munitions Resource Guide



ASTSWMO
Base Closure
Focus Group

State Munitions Resource Guide

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State Munitions Resource Guide

Introduction

The investigation and cleanup of abandoned military munitions at closed, transferring and transferred ranges is a high priority within the Department of Defense (DoD). This is partly due to DoD's historical transfer of these ranges to the public domain, where exposure (both actual and potential) to live munitions by unsuspecting residents recently has become more apparent.

In 2001, DoD developed the Military Munitions Response Program (MMRP). It was intended to "enhance understanding of the nature of munitions response sites, and to manage response activities more effectively." Congress expanded MMRP by enacting Sections 311 through 313 of the 2002 National Defense Authorization Act.

Important elements of MMRP include:

- Requiring DoD to establish and maintain an inventory of non-operational ranges that contain or are suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM) or munitions constituents (MC);
- Establishing the requirement to identify, characterize, track, and report data on MMRP sites and response actions;
- Requiring a sequencing process to prioritize site cleanup and site-specific cost estimates to complete the response; and
- Requiring installations to program and budget for MMRP response actions.¹

As identified above, in 2001, DoD initiated an effort to collect data associated with those closed, transferring and transferred ranges where residual UXO, DMM, and MC may remain. This "inventory" is being used by DoD as a basis for cost estimates associated with the cleanup of UXO, DMM and MC. This initial effort was completed in 2003, but remains a living document as new sites are discovered.

Currently, DoD is implementing Preliminary Assessment/Site Investigations (PA/SIs) at many of those ranges identified in the inventory. Data collected from the PA/SI will be used by DoD in setting a relative priority to each site requiring remediation. This effort is done using DoD's Munitions Response Site Prioritization Protocol (MRSP). States should actively participate with DoD in these endeavors (both the PA/SI and the MRSP), ensuring there is consensus as to adequate site characterizations and estimated risks associated with the public's potential exposure to UXO.

¹ U.S. Army Environmental Command "Military Munitions Response Program" website
<http://aec.army.mil/usace/cleanup/mmrp00.html>

ASTSWMO's Base Closure Focus Group (BCFG) has developed this "State Munitions Resource Guide" as a tool to assist State regulators faced with overseeing all aspects of UXO remediation. The Guide describes the activities and challenges associated with all phases of UXO remediation. In addition, it provides the proposed responsibilities of State and U.S. EPA, DoD, and Federal Land Managers throughout the remediation process. Finally, the Guide includes references to known State and Federal regulations, policies, and guidance; all of which are currently available on the internet.

The Guide does not assume that munitions cleanup at a site is being governed under RCRA or CERCLA; it maintains flexibility between both sets of environmental regulations. It should be used only as a tool as differing State authorities and regulations and/or site-specific issues may alter the process and responsibilities described below. In addition, the Guide does not provide proposed roles and responsibilities of tribes, local governments, or the public. These too will likely be based on site-specific conditions. Finally, while the Guide describes the role of "DoD," this term is meant to apply to all military components.

Identification/Inventory of MMRP Sites

Although the initial inventory has been completed, challenges to States, U.S. EPA, DoD and Federal Land Managers remain, including determining responsibility to identify the potential for contaminated media, and updating and reconciling the inventory through collaboration with DoD. The inventory is available for review via the following webpage: https://www.denix.osd.mil/portal/page/portal/content/environment/cleanup/LA/MMRP/MRSPP_PRIMER.PDF

Activities include, but are not limited to: a) developing and maintaining a central inventory database; b) formalizing an agreement of the inventory process; c) training and educating DoD staff on the process/use of the inventory tools; d) consolidating and forwarding to the inventory manager available information regarding all former military use areas now under the Federal Land Manager's (FLM's) management and incident reports involving Munitions and Explosives of Concern (MEC); e) working with local land use agencies to assure access; f) accessing properties not controlled by DoD; g) instituting interim security and/or interim land use control criteria; and h) assisting the inventory manager with reconciliation of databases. The following outlines the responsibilities of each party involved in the process.

State and U.S. EPA Responsibilities

- Assist DoD and others in the identification of available information regarding potential Munitions Response Sites (MRS)
- Assist in Right of Entry Agreements with property owners
- Participate in DoD field visits to potential MRSs
- Work with DoD to resolve any concerns with the inventory
- Assist with public outreach and education
- Seek federal funds for required actions

DOD Responsibilities

- Consolidate available information regarding potential MRSs.
- Ensure information is available to U.S. EPA, States, Tribes, FLMs, and the public.
- Coordinate any required field visits with appropriate stakeholders.
- Obtain access authorization to FLM lands or Right of Entry to private lands, may be applicable at any point in the process.
- Determine whether DoD has responsibility and notify stakeholders.
- Work with the States, American Indians and Alaska Natives, FLMs and U.S. EPA to resolve any inventory differences.
- Conduct public outreach.
- Seek funds for required response actions, notify appropriate regulators through management action plans and DSMOAs as to which MRSs are in plan of action budget.

Federal Land Manager's Responsibilities

- Assist DoD and others in the identification of available information regarding potential MRSs.

- Provide access to DoD for lands under FLM management.
- Participate in DoD field visits to potential MRSs.
- Work with DoD to resolve any concerns with the inventory.
- Assist with public outreach and education.
- As identified in Department of Interior appropriations and within resource constraints, seek Non-Military FLM funds for required actions.

Resources to Assist States with the Identification/Inventory of MMRP Sites

1. Inventory Reconciliation White Paper, dated September 23, 2004.
www.astswmo.org/files/meetings/2006FFSymposium/23Sep04MRCInventoryFinal.pdf and
www.denix.osd.mil/portal/page/portal/content/environment/cleanup/LA/MMRP/MRSPP_PRIMER.PDF
2. Management Guidance for the Defense Environmental Restoration Program (DERP), dated September 2001.
<http://www.afcee.brooks.af.mil/products/techtrans/pbm/PBMguidance.asp>
3. Munitions Response Site Prioritization Protocol.
<https://www.denix.osd.mil/portal/page/portal/content/environment/cleanup/LA/MMRP/FINALPROTOCOLRULE.PDF>
4. Environmental Quality, Formerly Used Defense Sites Program Policy, Engineering Regulation 200-3-1. www.usace.army.mil/publications/eng-regs/er200-3-1/entire.pdf
5. State Management Action Plans.
6. Military Munitions Response Program Inventory. <http://deparc.xservices.com/do/mmrp>
7. Defense Environmental Report Program Annual Report to Congress.
<http://www.denix.osd.mil/portal/page/portal/denix/environment/cleanup/ARC>
8. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005. http://www.epa.gov/fedfac/pdf/mra_hbook_5_05.pdf

Preliminary Assessment (PA)/Site Investigation (SI) at MMRP Sites

Activities include, but are not limited to: a) reviewing historical records/archive search reports; b) identifying boundaries of MRS, including type of ordnance; c) identifying contaminated media; d) determining accelerated actions and long-term activities; e) prioritizing site specific activities; f) providing interim site security; and g) documenting determination of extent of action to be taken.

Challenges to States, U.S. EPA, DoD, and Federal Land Managers include, but are not limited to: 1) having comprehensive historical information available; 2) ensuring that DoD consistently follows the outlined PA processes; 3) the lack of ability to identify hotspots/modeling potential areas of concern; 4) how to investigate MRA/MRS to reach No Further Action (NFA) conclusion; and 5) better understanding of the toxicity fate and transport of munitions constituents. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Review and comment on the Inventory Project Report (INPR)
- Review, comment, and mutually agree to Historical Records Review (HRR), Archive Search Report (ASR), and/or PA/SI work plans
- Participate in development of HRR/ASR/PA/SI
- Assist in the development of community/stakeholder involvement strategy
- Participate in PA as necessary
- Achieve mutual agreement on sampling and analysis plan (SAP)
- Participate in SI as necessary
- Achieve mutual agreement of HRR/ASR/PA/SI final reports
- Achieve mutual agreement that no further action is required or further response action is required
- Participate in determining appropriate MRS priority for response
- Recommend MRS for inclusion in DSMOA program (States only)
- Complete evaluation for Docket (U.S. EPA only)
- Assist in identifying and ensuring compliance of applicable or relevant and appropriate requirements (ARARs)

DoD Responsibilities

- Ensure appropriate notifications
- Initiate early coordination with regulators associated with the HRR, ASR and/or PA/SI work plans. On-site inspections of potential MRS may be required
- Develop community/stakeholder involvement strategy
- Achieve mutual agreement on SAP
- Complete HRR/ASR/PA/SI
- Achieve mutual agreement of HRR/ASR/PA/SI findings
- Achieve mutual agreement that no further action is required or further response action is required
- Determine relative MRS priority for further response in collaboration with U.S. EPA, State, tribes, community, and non-military FLM

- Determine appropriate MRS for incorporation into DSMOA program
- Initiate ARAR identification

Federal Land Manager's Responsibilities

- Provide assistance for site access and site control
- Achieve mutual agreement on HRR/ASR/PA/SI work plans
- Assist in the development of community/stakeholder involvement strategy
- Achieve mutual agreement of HRR/ASR/PA/SI findings
- Achieve mutual agreement that no further action is required or further response action is required
- Participate in determining appropriate MRS priority for response
- Achieve mutual agreement that any on-the-ground activities on non-military FLM lands are compatible with land and resource management plans
- Participate in meetings with DOD, U.S. EPA, FLM, tribes, and States
- Achieve mutual agreement on whether removal and/or remedial action is required
- Assist in the identification of ARARs

Resources To Assist States With The PA/SI Process At MMRP Sites

1. Inventory Reconciliation White Paper, dated September 23, 2004.
www.astswmo.org/files/meetings/2006FFSymposium/23Sep04MRCInventoryFinal.pdf and
www.denix.osd.mil/portal/page/portal/content/environment/cleanup/LA/MMRP/MRSPP_PRIMER.PDF
2. Management Guidance for the Defense Environmental Restoration Program (DERP), dated September 2001.
<http://www.afcee.brooks.af.mil/products/techtrans/pbm/PBMguidance.asp>
3. Munitions Response Site Prioritization Protocol.
<https://www.denix.osd.mil/portal/page/portal/content/environment/cleanup/LA/MMRP/FINALPROTOCOLRULE.PDF>
4. Destruction in Place *Blow-in-Place (BIP)* White Paper.
www.denix.osd.mil/portal/page/portal/content/environment/cleanup/CIFA/Docs/BIP_PAPER.PDF
5. Environmental Quality, Formerly Used Defense Sites, Program Policy, Engineering Regulation 200-3-1. www.usace.army.mil/publications/eng-regs/er200-3-1/entire.pdf
6. DoD Munitions Rule Implementation Policy, Department of Defense Munitions Action Plan.
www.denix.osd.mil/portal/page/portal/content/environment/Munitions/1JULY98MRIP.HTML
7. ITRC Historical Records Review document www.itrcweb.org/Documents/UXO-2.pdf
8. State RCRA Rules. This web site may have links to other individual States' web sites. www.astswmo.org
9. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005. http://www.epa.gov/fedfac/pdf/mra_hbook_5_05.pdf
10. Munitions Response Site Prioritization Protocol Rule, October 5, 2005.
<https://www.denix.osd.mil/portal/page/portal/content/environment/cleanup/LA/MMRP/FINALPROTOCOLRULE.PDF>
11. Munitions Response Committee Charter.
https://www.denix.osd.mil/portal/page/portal/content/environment/cleanup/CIFA/Docs/MRC_CHARTER.PDF

Emergency Response/RCRA Emergency Permits at MMRP Sites

These activities can take place anytime during the response process. State and local officials may request DoD support of an explosives or munitions emergency response expert when military munitions are discovered outside DoD installations.

Challenges to States, U.S. EPA, DoD and Federal Land Managers include, but are not limited to: 1) developing criteria for determining whether a situation involving military munitions merits an explosives or munitions emergency response; and 2) DoD has concerns on how to address issues raised by environmental regulators and local safety officials. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Authorized officials may request DoD support of an explosive or munitions emergency response
- Issue RCRA Emergency Permits, if required
- Work with local government, if site security is necessary
- If situation allows, achieve mutual agreement with affected parties on need for emergency response
- If situation allows, achieve mutual agreement with affected parties on need for protective measures to ensure minimal impacts to human health and the environment
- If situation allows, achieve mutual agreement with affected parties on appropriate emergency response actions
- Achieve mutual agreement with affected parties that emergency response met its objective/should be terminated
- Achieve mutual agreement with affected parties on whether further investigation or a planned munitions response action is needed

DoD Responsibilities

- Make appropriate notifications
- If applicable, coordinate with local law enforcement and governments
- Work with local government/agencies/emergency services as necessary
- Discuss emergency response requirements with States; DoD must be cognizant of applicable, independent state requirements
- The lead on-site Explosive Ordnance Disposal (EOD) specialist will determine whether an emergency exists
- If situation allows, achieve mutual agreement with affected parties on need for emergency response
- If situation allows, achieve mutual agreement with affected parties on need for protective measures to ensure minimal impacts to human health and the environment
- If situation allows, achieve mutual agreement with affected parties on appropriate emergency response
- Obtain emergency permits when required

- Conduct response
- Achieve mutual agreement with affected parties that emergency response met its objective/should be terminated
- Achieve mutual agreement with affected parties on whether further investigation or a planned munitions response action is needed
- Establish administrative record and provide EOD incident reports when requested

Federal Land Manager's Responsibilities

- Authorized officials may request DoD support of an explosive or munitions emergency response
- Provide site security as necessary
- If situation allows, achieve mutual agreement with affected parties on need for emergency response
- Provide assistance for site access and site control
- If situation allows, achieve mutual agreement with affected parties on need for protective measures to ensure minimal impacts to human health and the environment
- If situation allows, achieve mutual agreement with affected parties on appropriate emergency response actions
- Achieve mutual agreement with affected parties that emergency response met its objective/should be terminated
- Achieve mutual agreement with affected parties on whether further investigation or a planned munitions response action is needed

Resources To Assist States With Emergency Response/RCRA Emergency Permits At MMRP Sites

1. Interstate Technology Regulatory Council (ITRC) training courses. <http://www.itrcweb.org/ibt.asp>
2. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
3. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005. http://www.epa.gov/fedfac/pdf/mra_hbook_5_05.pdf

Time Critical Removal Actions at MMRP Sites

Activities include, but are not limited to: a) development of an Action Memorandum; b) development of an Explosives Safety Plan; c) development of a Time Critical Removal Action (TCRA) work plan; and d) implementation of a removal action.

Challenges to States, U.S. EPA, DoD, and Federal Land Managers include, but are not limited to: 1) the lack of agreed upon criteria to define TCRA; 2) mutual agreement regarding site security; 3) developing consistent public protection criteria (e.g., engineering controls, safety zones); 4) developing standardized notification procedures; 5) training State and local response agencies; 6) developing a protocol for unanticipated events/items; 7) providing meaningful and substantial community relations and public involvement; 8) consistency nationwide and within DoD; 9) documenting decisions and notifications to State/Local/Federal authorities; and 10) defining when RCRA permits are required. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Achieve mutual agreement on additional data needs through work plans prior to response
- Achieve mutual agreement of appropriate TCRA through review of action memorandum
- Assist with public outreach and education
- Achieve mutual agreement of work plans
- Request final Explosive Safety Submission (ESS)
- Achieve mutual agreement that TCRA met its objective
- Review TCRA Completion Report
- Achieve mutual agreement on whether additional munitions response is required

DoD Responsibilities

- Notify State and Federal Emergency Management Agencies
- Achieve mutual agreement on additional data needs through work plans prior to response
- Advise regulators and other stakeholders of safety, particularly explosives safety, concerns
- Achieve mutual agreement of appropriate TCRA through development and review of action memorandum
- Conduct public outreach
- Achieve mutual agreement of work plan
- Provide, upon request, final ESS
- Conduct appropriate response based on mutually agreed upon criteria
- Achieve mutual agreement that TCRA met its objective
- Develop TCRA Completion Report and recommend follow-up actions, if necessary
- Achieve mutual agreement on whether additional munitions response is required
- Establish administrative record

Federal Land Manager's Responsibilities

- Achieve mutual agreement that proposed actions on non-military FLM lands are compatible with land and resource management plans, and collaborate with involved agencies to determine impacts to natural and cultural resources and historic properties (i.e., Trust Resources)
- Achieve mutual agreement on additional data needs through work plans prior to response
- Achieve mutual agreement of appropriate TCRA through review of action memorandum
- Assist w/ public outreach and education
- Achieve mutual agreement of work plans
- Request final ESS
- Achieve mutual agreement that TCRA met its objective
- Review TCRA Completion Report
- Achieve mutual agreement on whether additional munitions response is required
- Provide assistance for site access and site control

Resources to Assist States with Time Critical Removal Actions MMRP sites

1. Environmental Quality, Formerly Used Defense Sites, Program Policy, Engineering Regulation 200-3-1. www.usace.army.mil/publications/eng-regs/er200-3-1/entire.pdf
2. ASTSWMO Removal Document. www.astswmo.org
3. DoD Ammunition and Explosives Safety Standards, October 2004. <http://www.ddesb.pentagon.mil/DoD6055.9-STD%205%20Oct%202004.pdf>
4. Department of Defense Explosive Safety Board Technical Papers 15 & 16. <http://www.ddesb.pentagon.mil/techpapers.html>
5. Interstate Technology Regulatory Council (ITRC) training courses (identify specific course). <http://www.itrcweb.org/ibt.asp>
6. DoD Munitions Rule Implementation Policy, Department of Defense Munitions Action Plan. www.denix.osd.mil/portal/page/portal/content/environment/Munitions/1JULY98MRIP.HTML
7. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
8. Strategic Environmental Research and Development Program /Environmental Security Technology Certification Program Work Products. <http://www.serdp.org> and <http://www.estcp.org>
9. Geophysical Prove-outs for Munitions Response Projects, <http://www.itrcweb.org/Documents/UXO-3.pdf>
10. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005. http://www.epa.gov/fedfac/pdf/mra_hbook_5_05.pdf
11. Munitions Response Site Prioritization Protocol. <https://www.denix.osd.mil/portal/page/portal/content/environment/cleanup/LA/MMRP/FINALPROTOCOLRULE.PDF>

Non-Time Critical Removal Actions at MMRP Sites

Activities include, but are not limited to: a) development of a Non-Time Critical Work Plan; b) development of an Action Memorandum; c) development of a CERCLA EE/CA; and d) development of a RCRA Closure Plan or CERCLA Decision Document.

Challenges to States, U.S. EPA, DoD, and Federal Land Managers include, but are not limited to: 1) over reliance on interim actions in lieu of long term activities; 2) determining the best available and appropriate detection and treatment technologies; 3) understanding the toxicity and fate and transport of munitions constituents; 4) implementing the Data Quality Objectives (DQO) process and Quality Assurance/Quality Control (QA/QC) requirements for geophysical investigations; 5) developing efficient, effective detection technologies; and 6) determining when ICs/LUCs are appropriate. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Participate in appropriate systematic planning process (e.g., TPP/SPP)
- Achieve mutual agreement on EE/CA or RCRA equivalent work plans
- Achieve mutual agreement of final removal action work plans
- Request final ESS
- Assist with public outreach and education
- Achieve mutual agreement of final Action Memorandum/Decision Document/Closure Plan that is protective of human health and the environment

DoD Responsibilities

- Conduct appropriate systematic planning process (e.g., TPP/SPP) with appropriate stakeholders
- Achieve mutual agreement on EE/CA or RCRA equivalent work plans
- Develop and achieve mutual agreement on final removal action work plans and ensure site security
- Provide, upon request, final ESS
- Initiate public/stakeholder outreach, education, and conduct appropriate comment periods
- Establish administrative record
- Achieve mutual agreement of Action Memorandum/Decision Document/Closure Plan that is protective of human health and the environment

Federal Land Manager's Responsibilities

- Participate in appropriate systematic planning process (e.g., TPP/SPP)
- Provide assistance for site access and site control
- Achieve mutual agreement on EE/CA or RCRA equivalent work plans
- Achieve mutual agreement on final removal action work plans
- Achieve mutual agreement on ARARs
- Achieve mutual agreement that proposed actions on non-military FLM lands are compatible with land and resource management plans and collaborate with

involved agencies to determine impacts to natural and cultural resources and historic properties (i.e., Trust Resources)

- Request final ESS
- Assist w/ public outreach and education
- Achieve mutual agreement on final Action Memorandum/Decision Document/Closure Plan that is protective of human health and the environment

Resources to Assist States with Non-Time Critical Removal Actions at MMRP Sites

1. Management Guidance for the Defense Environmental Restoration Program (DERP), dated September 2001.
<http://www.afcee.brooks.af.mil/products/techtrans/pbm/PBMguidance.asp>
2. Destruction in Place *Blow-in-Place (BIP)* White Paper.
www.denix.osd.mil/portal/page/portal/content/environment/cleanup/CIFA/Docs/BIP_PAPER.PDF
3. Environmental Quality, Formerly Used Defense Sites Program Policy, Engineering Regulation 200-3-1. www.usace.army.mil/publications/eng-regs/er200-3-1/entire.pdf
4. DoD Ammunition and Explosives Safety Standards, October 2004.
<http://www0.dtic.mil/whs/directives/corres/pdf/471512p.pdf>
5. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
6. Geophysical Prove-outs for Munitions Response Projects.
<http://www.itrcweb.org/Documents/UXO-3.pdf>
7. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005. http://www.epa.gov/fedfac/pdf/mra_hbook_5_05.pdf
8. Munitions Response Committee Charter.
https://www.denix.osd.mil/portal/page/portal/content/environment/cleanup/CIFA/Docs/MRC_CHARTER.PDF
9. Intergovernmental Data Quality Task Force (IDQTF) QAPP template.
<http://www.triadcentral.org/ref/ref/index.cfm>
10. Hazard Assessment for Munitions and Explosives of Concern Workgroup.
http://www.epa.gov/fedfac/documents/hazard_assess_wrkgrp.htm
11. Standardized UXO Technology Demonstration Site Program.
<http://aec.army.mil/usaec/technology/uxo03a.html>

Implementing Removal Action at MMRP Sites

Challenges to States, U.S. EPA, DoD, and FLM include, but are not limited to: 1) adequately overseeing contractor, 2) consistent funding to complete action without demobilizing/remobilizing, and 3) development of efficient and effective removal technologies. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Participate in team meetings with DoD, U.S. EPA, and FLM
- Participate in public/stakeholder outreach and education activities
- Participate in field oversight as necessary
- Review removal action work plans and reports
- Achieve mutual agreement that response action meets objective established in Closure Plan/Decision Document/Action Memorandum, and determine whether future remedial response is required

DoD Responsibilities

- Conduct team meetings with U.S. EPA, FLM, and States
- Ensure site security
- Initiate public/stakeholder outreach, education and input regarding response activities
- Initiate and complete fieldwork
- Develop removal report
- Achieve mutual agreement that response action meets objective established in Closure Plan/Decision Document/Action Memorandum, and determine whether future remedial response

Federal Land Manager's Responsibilities

- Provide assistance for site access and site control
- Participate in team meetings with DOD, U.S. EPA, FLM, and States
- Participate in public/stakeholder outreach, education activities
- Review removal report
- Achieve mutual agreement that response action meets objective established in Closure Plan/Decision Document/Action Memorandum and determine whether future remedial response is required

Resources to Assist States with Implementing Removal Actions at MMRP sites

1. Destruction in Place *Blow-in-Place (BIP)* White Paper. www.denix.osd.mil/portal/page/portal/content/environment/cleanup/CIFA/Docs/BIP_PAPER.PDF
2. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
3. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005. www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prg_id=10960&pge_id=1946
4. Federal Acquisitions Regulations (FAR). <http://www.acqnet.gov/far>

National Priorities List (NPL) Listing at MMRP Sites

Challenges to States, U.S. EPA, DoD, and Federal Land Managers include, but are not limited to: 1) U.S. EPA's development of hazard ranking system (HRS) criteria for MMRP sites; and 2) State concurrence of NPL listing. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Coordinate with stakeholders
- Score HRS (U.S. EPA only)
- State participation in ranking with Governor's concurrence
- Prepare and publish NPL proposal (U.S. EPA only)
- Comment on proposed NPL listing (States only)
- Finalize NPL listing (U.S. EPA only)

DoD Responsibilities

- Coordinate with stakeholders
- Submit data to U.S. EPA for HRS scoring

Federal Land Manager's Responsibilities

- Coordinate with stakeholders

Developing Interagency Agreements (for NPL Sites) at MMRP Sites

Types of interagency agreements (IAGs) that are available for use include: Federal Facility Agreements (FFAs), memorandum of understanding/agreement (MOU/MOA), consent agreements, cooperative agreements and other documents. Achieving agreement on model language poses a challenge to States, U.S. EPA, DoD and FLMs. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Coordinate with stakeholders
- Negotiate IAG with appropriate parties
- For NPL, negotiate with DoD and other stakeholders (U.S. EPA only)

DoD Responsibilities

- Coordinate with stakeholders
- Negotiate IAG with appropriate parties

Federal Land Manager's Responsibilities

- Coordinate with stakeholders
- Negotiate IAG with appropriate parties

Resources to Assist States with the PA/SI Process at MMRP sites

- U.S. EPA IAG Guidance

Performing Remedial Investigations (RI)/RCRA Facility Inspections (RFI) at MMRP Sites

Activities include, but are not limited to: a) performing a geophysical prove-out; b) developing a project work plan; c) developing a health and safety plan; d) developing a sampling and analysis plan; and e) developing a Community Relations Plan (CRP).

Challenges to States, U.S. EPA, DoD and FLMs include, but are not limited to: 1) developing a comprehensive Conceptual Site Model (CSM), DQO, and SAP; 2) determining the best available and appropriate technologies; 3) accurately delineating contaminated areas; 4) understanding the toxicity, fate and transport of MEC chemical constituents; 5) developing QA/QC criteria for the investigation technology selected; 6) determining ARARs; and 7) determining Natural Resource Damage (NRD) and/or what injury will remain upon completion of the response action. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Assist in development of CRP. Review and comment will be conducted throughout the process
- Participate in systematic planning process (e.g., TPP/SPP) with appropriate stakeholders
- State trustees identify natural resource issues (States only)
- Achieve mutual agreement of final RI/RFI work plan
- Review and reach agreement with DoD on SAP, including DQO's
- Achieve mutual agreement on ARARs
- Achieve mutual agreement on No Further Action (NFA) for areas with no DoD responsibility or where no detectable MEC & MC have been identified
- Participate in RI/RFI field work as necessary
- Achieve mutual agreement on final RI/RFI report

DoD Responsibilities

- Develop CRP. Stakeholder review and comment will be conducted throughout process
- Initiate appropriate systematic planning process (e.g., TPP/SPP) with appropriate stakeholders
- Develop RI/RFI work plan
- Achieve mutual agreement on SAP, including DQOs
- Achieve mutual agreement of final RI/RFI work plan
- Achieve mutual agreement on ARARs
- Achieve mutual agreement on NFA for areas with no DoD responsibility or where no detectable MEC & MC have been identified
- Develop and implement RI/RFI
- Achieve mutual agreement on final RI/RFI report

Federal Land Manager's Responsibilities

- Participate in public/stakeholder outreach, education activities, review and comment will be conducted throughout process
- Participate in systematic planning process (e.g., TPP/SPP) with appropriate stakeholders
- Assist with site access and control
- Achieve mutual agreement that proposed actions on non-military FLM lands are compatible with land and resource management plans and collaborate with involved agencies to determine impacts to natural and cultural resources and historic properties (i.e., Trust Resources)
- Achieve mutual agreement of RI/RFI work plan
- Review and reach agreement with DoD on SAP, including DQO's
- Achieve mutual agreement on ARARs
- Achieve mutual agreement on NFA for areas with no DoD responsibility or where no detectable MEC & MC have been identified
- Participate in RI/RFI field work as necessary
- Achieve mutual agreement on RI/RFI report

Resources to Assist States with Performing Remedial Investigations (RI)/RCRA Facility Inspections (RFI) at MMRP Sites at MMRP sites

1. DoD Ammunition and Explosives Safety Standards, October 2004.
<http://www.ddesb.pentagon.mil/DoD6055.9-STD%205%20Oct%202004.pdf>
2. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
3. Strategic Environmental Research and Development Program /Environmental Security Technology Certification Program Work Products. <http://www.serdp.org> and <http://www.estcp.org>
4. Geophysical Prove-outs for Munitions Response Projects.
<http://www.itrcweb.org/Documents/UXO-3.pdf>
5. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005.
www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prg_id=10960&pge_id=1946
6. Hazard Assessment for Munitions and Explosives of Concern Workgroup.
http://www.epa.gov/fedfac/documents/hazard_assess_wrkgrp.htm
7. Standardized UXO Technology Demonstration Site Program.
<http://stinet.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA422665>
8. U.S. EPA RI/FS Guidance. <http://www.epa.gov/superfund/policy/remedy/sfremedy/rifs/overview.htm>
9. Conceptual Site Models for Ordnance and Explosives and Hazardous, Toxic, and Radioactive Waste Projects (03 Feb 2003). <http://www.usace.army.mil/publications/eng-manuals/em1110-1-1200/toc.htm>

Performing Risk Assessment/Hazard Assessment or Relative Hazard Reduction at MMRP Sites

Prior to conducting a risk or hazard assessment, a baseline risk assessment should be conducted. The baseline risk assessment will determine the need for further assessment and remedial or removal action.

Challenges to States, U.S. EPA, DoD and Federal Land Managers include, but are not limited to: 1) developing a qualitative risk assessment methodology that can be applied consistently nationally and in site-specific scenarios; 2) applying uncertainty associated with data gaps; and 3) defining future land use and implications to land use changes. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Review and approve the qualitative risk assessment methodology
- Achieve mutual agreement of future land use
- Achieve mutual agreement of final MEC hazard assessments and munitions constituents for protection of human health and environment
- Participate in regularly scheduled public/stakeholder outreach and education meetings

DoD Responsibilities

- Achieve mutual agreement of future land use
- Achieve mutual agreement of final MEC hazard assessments and munitions constituents for protection of human health and environment
- Participate in regularly scheduled public/stakeholder outreach and education meetings

Federal Land Manager's Responsibilities

- Provide land manager's goals for hazard reduction compatible with land and resource management plans
- Achieve mutual agreement of future land use
- Achieve mutual agreement of final MEC hazard assessments and munitions constituents for protection of human health and environment
- Participate in regularly scheduled public/stakeholder outreach and education meetings (RABs/TRCs)

Resources to Assist States with Risk Assessment/Hazard Assessment or Relative Hazard Reduction at MMRP Sites at MMRP Sites

1. State RCRA Rules. This web site may have links to other individual States' web sites. www.astswmo.org
2. Hazard Assessment for Munitions and Explosives of Concern Workgroup. http://www.epa.gov/fedfac/documents/hazard_assess_wrkgrp.htm

Performing Feasibility Studies (FS)/Corrective Measures Studies (CMS) at MMRP Sites

Activities include, but are not limited to: a) conducting treatability studies; b) identifying ARARs or other pertinent standards; c) screening alternatives; d) analyzing alternatives; and e) developing a proposed plan/closure plan.

Challenges to States, U.S. EPA, DoD and FLMs include, but are not limited to: 1) achieving ARARs and 2) determining how clean is clean for various land uses.

The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Assist in identifying ARARs
- Review and reach agreement with DoD on SAP
- Participate in proposed site-specific studies for removal alternatives for MEC and treatability studies for MC
- Achieve mutual agreement when screening alternatives
- Achieve mutual agreement when analyzing alternatives
- Achieve mutual agreement on Final FS/CMS
- Achieve mutual agreement on Final Proposed Plan/Closure Plan
- Request final ESS
- Ensure compliance of ARARS

DoD Responsibilities

- Request U.S. EPA and States identify ARARs or other pertinent standards
- Achieve mutual agreement on SAP
- Conduct site specific studies for removal alternatives for MEC and treatability studies for MC
- Achieve mutual agreement when screening alternatives
- Achieve mutual agreement when analyzing alternatives
- Develop draft Feasibility/CMS
- Coordinate necessary assessments, evaluations, investigations and planning with regulators
- Achieve mutual agreement on Final FS/CMS
- Develop and publish Proposed Plan/draft Closure Plan
- Achieve mutual agreement on Final Proposed Plan or Closure Plan
- Upon request, provide final ESS
- Ensure compliance with ARARs

Federal Land Manager's Responsibilities

- Assist in identifying ARARs
- Review and reach agreement with DoD on SAP
- Participate in proposed site-specific studies for removal alternatives for MEC and treatability studies for MC

- Achieve mutual agreement that proposed actions and on-the-ground activities on non-military FLM lands are compatible with land and resource management plans and collaborate with involved agencies to determine impacts to natural and cultural resources and historic properties (i.e., Trust Resources)
- Achieve mutual agreement when screening alternatives
- Achieve mutual agreement when analyzing alternatives
- Achieve mutual agreement on Final FS/CMS
- Achieve mutual agreement on Final Proposed Plan/Closure Plan
- Request final ESS

Resources to Assist States with Performing Feasibility Studies/Corrective Measures Studies at MMRP Sites at MMRP Sites

1. U.S. EPA “Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA” Interim Final, October 1988.
<http://www.epa.gov/superfund/policy/remedy/pdfs/540g-89004-s.pdf>
2. State RCRA Rules. This web site may have links to other individual States’ web sites. www.astswmo.org

Developing Records of Decision (ROD), Closure Plans/Corrective Action Decisions (CADs) at MMRP Sites

Challenges to States, U.S. EPA, DoD, and FLMs include, but are not limited to: 1) determining how clean is clean enough for various land uses; 2) determining comeback criteria due to a change in land use, development of new technologies, anomaly support, etc.; and 3) documenting appropriate ICs/LUCs.

The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Participate in review and comment on draft ROD/Closure Plan/CAD/Decision Document
- Achieve mutual agreement that final ROD/Closure Plan/CAD/Decision Document is protective of human health and the environment
- Achieve mutual agreement on ICs/LUCs

DoD Responsibilities

- Issue ROD/Closure Plan/CAD/Decision Document
- Achieve mutual agreement that final ROD/Closure Plan/CAD/Decision Document is protective of human health and the environment
- Achieve mutual agreement on ICs/LUCs

Federal Land Manager's Responsibilities

- Provide land manager's goals for risk reduction compatible with land and resource management plans
- Achieve mutual agreement that proposed actions on non-military FLM lands are compatible with land and resource management plans, and collaborate with involved agencies to determine impacts to natural and cultural resources and historic properties (i.e., Trust Resources)
- Participate in review and comment on draft ROD/ Closure Plan/CAD/Decision Document
- Achieve mutual agreement that final ROD/Closure Plan/CAD/Decision Document is protective of human health and the environment
- Achieve mutual agreement on ICs/LUCs

Resources to Assist States with Developing Records of Decision (ROD), Closure Plans/Corrective Action Decision (CAD) at MMRP Sites

1. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
2. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005.
www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prg_id=10960&pge_id=1946

Developing Remedial Designs (RD) Closure Plans/Corrective Measures Plans at MMRP Sites

Challenges to States, U.S. EPA, DoD, and FLMs include, but are not limited to: 1) developing sampling and analysis plans; 2) ensuring that implementation plans/designs achieve cleanup objectives; and 3) defining how and what DQO's will be considered in remedial design. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Participate in the development and implementation of the RD/ Closure Plan/Corrective Measures Plan and engineering design
- Achieve mutual agreement on RD/Closure Plan/Corrective Measures Plan and engineering design/field management of removal and storage of MEC removed from field, pending final destruction
- Ensure all ARARs and ARAR waiver conditions are met
- Achieve mutual agreement on revised CRP

DoD Responsibilities

- Initiate RD/Closure Plan/Corrective Measures Plan. Include specifics associated with the design, construction, operation, maintenance, monitoring and decommissioning of the chosen alternative, along with DQO's for each phase of the clearance/site closure
- Develop RD/Closure Plan/Corrective Measures Plan
- Prepare engineering design
- Achieve mutual agreement on RD/Closure Plan/Corrective Measures Plan and engineering design/field management of removal and storage of MEC removed from field, pending final destruction
- Ensure all ARARs and ARAR waiver conditions are met
- Revise CRP

Federal Land Manager's Responsibilities

- Provide assistance for site access and site control
- Provide land manager's goals for hazard reduction compatible with land and resource management plans
- Achieve mutual agreement that proposed actions and any on-the-ground activities on non-military FLM lands are compatible with land and resource management plans, and collaborate with involved agencies to determine impacts on natural and cultural resources and historic properties (i.e., Trust Resources)
- Participate in the development and implementation of the RD/Closure Plan/Corrective Measures Plan and engineering design
- Achieve mutual agreement on RD/Closure Plan/Corrective Measures Plan, engineering design/field management of removal, and storage of MEC removed from field, pending final destruction
- Ensure all ARARs and ARAR waiver conditions are met

Resources to Assist States with Developing RD/Closure Plans/Corrective Measure Plans at MMRP Sites

1. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
2. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005.
www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prg_id=10960&pge_id=1946

Remedial Action Implementation, Closure Plan Implementation, Corrective Measures Plan Implementation at MMRP Sites

Ensuring that DoD obtains a reliable and adequate funding mechanism poses a challenge to States, U.S. EPA, DoD, and FLMs. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Participate in team meetings with DoD, contractors, State, FLM, and U.S. EPA to monitor the progress and success of the Remedial Action/ Closure Plan Implementation/Corrective Measures Plan Implementation
- Achieve mutual agreement on any necessary modifications to the ROD/ Closure Plan Remedial Action/ Closure Plan/Corrective Measure Plan Implementation based on unexpected events
- Achieve mutual agreement on significant field variances prior to implementation in the field

DoD Responsibilities

- Conduct team meetings with DoD contractors, state, FLM, and U.S. EPA to monitor the progress and success of the Remedial Action/Closure Plan Implementation/Corrective Measures Plan implementation
- Consult with regulators and obtain necessary approvals on any significant modifications to the ROD/Closure Plan Design or Remedial Action/Closure Plan/Corrective Measures Plan Implementation Plan based on unexpected events
- Consult with regulators and obtain necessary approvals on significant field variances prior to implementation in the field

Federal Land Manager's Responsibilities

- Provide assistance for site access and site control
- Participate in team meetings with DoD, contractors, state, FLM, and U.S. EPA to monitor the progress and success of the Remedial Action/Closure Plan Implementation/Corrective Measures Plan Implementation
- Ensure integration of natural resource injury restoration to degree possible
- Consult with regulators and obtain necessary approvals on any necessary modifications to the ROD/ Closure Plan Remedial Action/ Closure Plan/Corrective Measure Plan Implementation based on unexpected events
- Consult with regulators and obtain necessary approvals on significant field variances prior to implementation in the field

Resources to Assist States with Remedial Action Implementation, Closure Plan Implementation, Corrective Measures Plan Implementation at MMRP Sites

1. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
2. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005.
www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prg_id=10960&pge_id=1946

Remedial Action Completion, Preliminary Closeout Report, Closure Certification, Certification of Remedy Complete/Construction Complete, Remedy In Place (RIP) at MMRP Sites

Challenges to States, U.S. EPA, DoD, and FLMs include, but are not limited to: 1) documenting that cleanup goals were achieved; 2) complying with approved documents (DQOs and QA/QC requirements); and 3) a lack of MMRP close-out guidance. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Participate in team meetings
- Achieve mutual agreement that the remedial actions met objectives outlined in the ROD/Decision Document/Closure Plan/CAD
- Achieve mutual agreement on site close-out reports

DoD Responsibilities

- Conduct team meetings with DoD contractors, state, FLM, and U.S. EPA
- Achieve mutual agreement that the remedial actions met objectives outlined in the ROD/ Decision Document/Closure Plan/CAD
- Develop site close out reports and achieve mutual agreement

Federal Land Manager's Responsibilities

- Participate in team meetings
- Achieve mutual agreement that the remedial actions met objectives outlined in the ROD/ Decision Document/Closure Plan/CAD
- Achieve mutual agreement on site close-out reports

Resources to Assist States with the PA/SI Process at MMRP Sites

1. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
2. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final May 2005. www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prg_id=10960&pge_id=1946

Long Term Stewardship, Operations and Maintenance (O&M), Long Term Monitoring, and ICs/LUCs at MMRP Sites

Challenges to States, U.S. EPA, DoD and FLM include, but are not limited to: 1) identifying what O&M is required; 2) determining comeback criteria such as change in land use, development of new technologies, anomaly support, etc.; 3) developing national long-term stewardship guidance for MMRP; 4) securing IC/LUCs at property DoD does not control; 5) defining authorities, roles, and responsibilities based upon State specific property laws and regulations; 6) enforcing and monitoring ICs/LUCs; 7) resolving legal issues related to state ICs/LUCs laws at Federal Facilities; and 8) States lack authority to place restrictions on deeds. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Participate in team meetings with DoD, contractors, State, FLM, and U.S. EPA regarding the monitoring and enforcement of O&M
- Achieve mutual agreement that response action objectives outlined in ROD/Closure Plan/Decision Document /CAD are being achieved
- Maintain communication between States, U.S. EPA, DoD, tribes, community, and other stakeholders, and FLM on issues such as proposed changes in zoning/land use
- Review and comment on quarterly or semi-annual monitoring data reports
- Achieve mutual agreement on proposed modifications to long-term monitoring
- Achieve mutual agreement on the need for additional response actions
- Development of an Interagency Agreement with parties responsible for monitoring and enforcing ICs/LUCs
- Enforce and monitor ICs/LUCs consistent with the ROD/Closure Plan/Decision Document /CAD
- Notify DoD or other responsible party if ICs/LUCs fail

DoD Responsibilities

- Conduct, team meetings with DoD contractors, State, FLM, and U.S. EPA regarding the monitoring and enforcement of O&M
- Achieve mutual agreement that response action objectives outlined in ROD/Closure Plan/Decision Document/CAD are being achieved
- Maintain administrative records or equivalent
- Maintain communication between States, U.S. EPA, DoD, tribes, community/stakeholders and FLM on issues such as proposed changes in zoning/land use
- If necessary, produce draft quarterly or semi-annual monitoring data reports
- Achieve mutual agreement to proposed modifications to long-term monitoring
- Achieve mutual agreement on the need for additional response actions
- Develop appropriate mechanisms for monitoring and enforcing ICs/LUCs consistent with the ROD/Closure Plan/ Decision Document /CAD

Federal Land Manager's Responsibilities

- Provide assistance for site access and site control
- Participate in team meetings with DoD, contractors, State, FLM, and U.S. EPA regarding the monitoring and enforcement of O&M
- Achieve mutual agreement that response action objectives outlined in ROD/ Closure Plan/Decision Document/CAD are being achieved
- Maintain communication between States, U.S. EPA, DoD, tribes, community and other stakeholders, and FLM on issues such as proposed changes in zoning/land use
- Achieve mutual agreement to proposed modifications to long-term monitoring
- Provide DoD the opportunity to comment on changes to land and resource management plans
- Achieve mutual agreement for new actions based on new site information/changes in site use
- Achieve mutual agreement on the need for additional response actions
- Achieve mutual agreement on an IAG with parties responsible for monitoring and enforcing ICs/LUCs on FLM lands
- Develop appropriate mechanisms for monitoring and enforcing ICs/LUCs consistent with the ROD/Closure Plan/ Decision Document /CAD
- Comply with ICs/LUCs
- Notify DoD or other responsible party if ICs/LUCs fail

Resources to Assist States with Long Term Stewardship O&M at MMRP Sites

1. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
2. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005.
www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prg_id=10960&pge_id=1946

Recurring Reviews and Post Closure Requirements at MMRP Sites

Challenges to States, U.S. EPA, DoD, and FLMs include, but are not limited to: 1) determining what constitutes remedy failure; and 2) lack of guidance on how to conduct recurring reviews specific to ordnance. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Achieve mutual agreement on 5-year review protectiveness determinations
- Achieve mutual agreement on recurring review protocols
- Achieve mutual agreement on recurring review findings and conclusions
- If additional response is required, achieve mutual agreement on proposals for further actions
- Achieve mutual agreement that additional actions met objectives outlined in ROD/Decision/Closure Plan/CAD

DoD Responsibilities

- Develop 5-year review protectiveness determinations for NPL sites
- Achieve mutual agreement on recurring review findings and conclusions
- If additional response is required, achieve mutual agreement on proposals for further actions
- Achieve mutual agreement that additional actions met objectives outlined in ROD/ Decision/Closure Plan/CAD
- Provide the public and other stakeholders with periodic updates on the status of the recurring reviews

Federal Land Managers Responsibilities

- Achieve mutual agreement on 5-year review protectiveness determinations
- Achieve mutual agreement on recurring review protocols
- Achieve mutual agreement on recurring review findings and conclusions
- If additional response is required, achieve mutual agreement on proposals for further actions
- Achieve mutual agreement that additional actions met objectives outlined in ROD/ Decision/Closure Plan/CAD

Resources to Assist States with Recurring Reviews, Post Closure Requirements at MMRP Sites

1. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org
2. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005.
www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prq_id=10960&pge_id=1946

Deletion from NPL at MMRP Sites

Certainty of achieving remedy objectives poses a challenge to States, U.S. EPA, DoD, and FLMs. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Publish Federal Register notice to delete or partially delete facility from NPL (U.S. EPA only)
- Concur with facilities deletion or partial deletion from NPL

DoD Responsibilities

- Request deletion or partial deletion of sites from NPL

Federal Land Manager's Responsibilities

- Comment on Federal Register notice to delist a facility

Resources to Assist States with Deletion from NPL at MMRP Sites

1. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005.
www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prg_id=10960&pge_id=1946

Early Transfer of Contaminated Property at MMRP Sites

Activities include, but are not limited to: a) determining the nature and extent of contamination; b) determining who will conduct the cleanup after transfer of property; c) determining and implementing ICs/LUCs; and d) obtaining a CERCLA 120(h)(3)(C) deferral.

Challenges to States, U.S. EPA, DoD, and FLMs include, but are not limited to: 1) difficulty of early dirty transfer of MMRP due to uncertainty of site characterization; 2) identifying one military Point of Contact (POC); 3) establishing a clear process for future owner to notify DoD if MEC is discovered post-transfer; 4) ensuring appropriate level of oversight at privatized UXO site; 5) ensuring funding for post transfer cleanup and implementation/maintenance of ICs/LUCs; and 6) securing Governor's approval of covenant deferral request. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Review and concur on draft deferral request and other required information (if non-NPL site, State concurrence, if NPL, State and U.S. EPA concurrence)
- Negotiate and concur with applicable transfer agreements
- Ensure adequate public outreach
- Secure Governor's approval of covenant deferral request.

DoD Responsibilities

- Seek U.S. EPA and State mutual agreement at NPL sites or State mutual agreement at non-NPL sites
- Publish notice in paper of proposed transfer; provide public 30-day comment period
- Enter into applicable transfer agreements
- If fed-to-fed transfer, provide required information to transferee
- Demonstrate that remedy is operating properly and successfully
- Department of Defense Explosives Safety Board (DDESB) must approve all explosives safety requirements
- Conduct public/stakeholder outreach, education and input

Federal Land Manager's Responsibilities

- Review DoD's information for completeness. Should be similar to CERCLA 120(h)(1) and (h)(3)(A) information
- Prepare environmental site assessments and ensure compliance with Habitat Management Plan requirements
- Enter into applicable transfer agreements
- Participate in public outreach

Resources to Assist States with Early Transfer of Contaminated Property at MMRP Sites

1. U.S. EPA Handbook on the Management of Munitions Response Actions, Interim Final, May 2005.
www.fedcenter.gov/Bookmarks/index.cfm?id=3717&pge_prg_id=10960&pge_id=1946
2. DOI Policy Letter from Assistant Secretary of the Interior Lynn Scarlett to Deputy Assistant Secretary of the Army Joseph Whitaker, dated May 9, 2003.
www.mrc.xservices.com
3. U.S. EPA Early Transfer Authority Guidance.
<http://www.epa.gov/fedfac/documents/hkfin.htm>

Uncontaminated Property Transfer at MMRP Sites

Challenges to States, U.S. EPA, DoD, and FLMs include, but are not limited to: 1) difficulty of transfer of MMRP due to uncertainty of site characterization; 2) identifying one military point of contact (POC); 3) establishing a clear process for future owner to notify DoD if MEC is discovered post-transfer; and 4) ensuring appropriate level of oversight at privatized UXO sites. The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Achieve mutual agreement on the identification of uncontaminated property
- Review and concur on the Findings of Suitability to Lease/Findings of Suitability to Transfer
- FOST/FOSL

DoD Responsibilities

- Achieve mutual agreement on the identification of uncontaminated property
- Prepare FOST/FOSL

Federal Land Manager's Responsibilities

- Review DoD's documentation and transmittal letter that the property is uncontaminated. Should be similar to CERCLA 120(h)(4)
- Prepare environmental site assessment to confirm DoD's conclusion that the property is uncontaminated, and ensure compliance with HMP requirements
- Achieve mutual agreement on the identification of uncontaminated property

Contaminated Property Transfer- Remedy Complete with ICs/LUCs at MMRP Sites

Activities include, but are not limited to: a) completion of remedial actions in accordance with ROD/Closure Plan/Corrective Measures Plan; b) ensuring that the final remedy is operating properly and successfully; and c) implementing and enforcing ICs/LUCs.

Challenges to States, U.S. EPA, DoD, and FLMs include, but are not limited to: 1) identifying one military POC; 2) establishing a clear process for future owner to identify MEC and notify if discovered post-transfer; 3) adequately characterizing residual contamination so appropriate ICs/LUCs can be implemented; 4) demonstrating the remedy to be operating properly and successfully; and 5) monitoring and enforcing ICs/LUCs.

The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Achieve mutual agreement that the remedy is operating properly and successfully
- Achieve mutual agreement that the ICs/LUCs are protective and capable of being adequately monitored and enforced

DoD Responsibilities

- Achieve mutual agreement that the remedy is operating properly and successfully
- Achieve mutual agreement that the ICs/LUCs are protective and capable of being adequately monitored and enforced

Federal Land Manager's Responsibilities

- Review DoD's information for completeness. Should be similar to CERCLA 120(h)(1) and (h)(3)(A) information
- Prepare environmental site assessment and a detailed estimate of any costs associated with cleanup including, but not limited to such costs as O&M. Prepare a detailed estimate of the book costs of this property in terms of financial liability to DOI, should the property be taken into DOI holdings
- Ensure compliance with Habitat Management Plan requirements
- Participate in public outreach
- Achieve mutual agreement that the remedy is operating properly and successfully
- Achieve mutual agreement that the ICs/LUCs are protective and capable on being adequately monitored and enforced

Resources to Assist States with the PA/SI Process at MMRP Sites

1. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org

Unrestricted Property Transfer at MMRP Sites

Activities include, but are not limited to: a) completing remedial actions in accordance with ROD/Closure Plan/Corrective Measures Plan; b) determining if a natural resource injury has occurred; and c) ensuring no ICs/LUCs are necessary.

Achieving a cleanup level where no MEC contamination remains can pose a challenge to States, U.S. EPA, DoD, and FLMs.

The following outlines the responsibilities of each party involved in the process.

State/U.S. EPA Responsibilities

- Achieve mutual agreement that property can be transferred via a FOST
- Determine the existence and extent of the natural resource injury and calculate damage
- Ensure adequate response to any unplanned discovery of MEC as required

DoD Responsibilities

- Achieve mutual agreement that property can be transferred via a FOST
- Respond to any unplanned discovery of MEC as required

Federal Land Manager's Responsibilities

- Prepare environmental site assessment to confirm DoD's conclusion that the property is uncontaminated, and ensure compliance with HMP requirements
- Achieve concurrence on the identification of uncontaminated property
- Achieve mutual agreement that property can be transferred via a FOST
- Characterization of the existence and extent of the natural resource injury/damage
- Respond to any unplanned discovery of MEC as required
- Review DoD's documentation and transmittal letter that the property is uncontaminated. Should be similar to CERCLA 120(h)(4)

Resources to Assist States with Post-Remedial Property Transfer at MMRP Sites

1. State RCRA Rules. This web site may have links to other individual states' web sites. www.astswmo.org

ACRONYMS

ARAR - Applicable or Relevant and Appropriate Regulation
ASR – Archive Search Report
ASTSWMO – Association of State and Territory Solid Waste Management Officials
CAD - Corrective Action Decision
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
CMS – Corrective Measures Study
CRP - Community Relations Plan
CSM - Conceptual Site Model
DoD – Department of Defense
DOI – Department of interior
DQO - Data Quality Objectives
DSMOA – Defense and State Memorandum of Agreement
EE/CA – Engineering Evaluation/Cost Analysis
EOD – Explosive Ordnance Disposal
EPA – Environmental Protection Agency
ESS - Explosive Safety Submission
FFA - Federal Facility Agreement
FLM – Federal Land Managers
FOSL – Findings of Suitability to Lease
FOST – Findings of Suitability to Transfer
HRR - Historical Records Review
HMP - Habitat Management Plan
HRS - Hazard Ranking System
IAG - Interagency Agreement
ICs – Institutional Controls
INPR – Inventory Progress Report
LUCs – Land Use Controls
MC – Munitions Constituents
MEC – Munitions and Explosives of Concern
MMRP – Military Munitions Response Program
MOU/MOA - Memorandum of Understanding/Agreement
MRS – Munitions Response Site
NFA - No Further Action
NPL - National Priorities List
NRD - Natural Resource Damage
O&M - Operations and Maintenance
PA – Preliminary Assessment
POC – Point of Contact
QA/QC – Quality Assurance/Quality Control
RCRA – Resource Conservations and Recovery Act
RD - Remedial Design

RFI – RCRA Facility Investigation
RI - Remedial Investigations
RIP - Remedy In Place
ROD - Record of Decision
SAP - Sampling and Analysis Plan
SI – Site Investigation
SPP - Systematic Planning Process
TCRA - Time Critical Removal Action
TPP – Technical Planning Process