FPM Remediations, Inc. Construction and Remediation Services

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MEMORANDUM

DATE: 14 May 2010

TO: See Distribution List

FROM: FPM Remediations, Inc.

RE: **FINAL**
WORK PLAN
COMPREHENSIVE SITE EVALUATION CSE PHASE 1
MILITARY MUNITIONS RESPONSE PROGRAM
SCHENECTADY COUNTY AIRPORT/STRATTON AIR NATIONAL GUARD BASE (ANGB), NEW YORK
CONTRACT NO. W9128F-09-D-0058-0001

On behalf of the U.S. Army Corps of Engineers (USACE), U.S. Air Force National Guard (AF ANG), FPM Remediations, Inc. is pleased to submit for your files the Final CSE Phase 1 Work Plan for Schenectady County Airport/Stratton Air National Guard Base, New York.

If you have any questions or require additional information, please call myself at 315-336-7721, ext. 216 (email: m.whalen@FPM-group.com) or Gaby Atik at 315-336-7721, ext. 202 (email: g.atik@FPM-group.com).

Very truly yours,

Maureen S. Whalen, CG (Maine), CPG, PMP
Project Manager

Gaby A. Atik, P.E.
Program Manager

Encl.

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FINAL WORK PLAN

COMPREHENSIVE SITE EVALUATION PHASE I MILITARY MUNITIONS RESPONSE PROGRAM

SCHENECTADY COUNTY AIRPORT/ STRATTON AIR NATIONAL GUARD BASE NEW YORK

May 2010

Prepared for

Air National Guard

F I N A L W O R K P L A N

COMPREHENSIVE SITE EVALUATION PHASE I MILITARY MUNITIONS RESPONSE PROGRAM

SCHENECTADY COUNTY AIRPORT/ STRATTON AIR NATIONAL GUARD BASE NEW YORK

May 2010

Prepared for

Air National Guard

Under contract to

USACE
Omaha District

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FINAL WORK PLAN
COMPREHENSIVE SITE EVALUATION PHASE I

SCHENECTADY COUNTY AIRPORT/
STRATTON AIR NATIONAL GUARD BASE
MILITARY MUNITIONS RESPONSE PROGRAM

May 2010

Prepared for:

Air National Guard

Prepared by:

United States Army Corps of Engineers
Omaha District

and

FPM Remediations, Inc.
153 Brooks Road
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In association with:

URS Group, Inc.
12120 Shamrock Plaza
Omaha, Nebraska 68154

Contract Number W9128F-09-D-0058
DO 0001

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Acronyms and Abbreviations

AFCEE	Air Force Center for Engineering and the Environment
AFCEE/CMSE	Air Force Center for Engineering and the Environment / Air Force Restoration Program Management Office-East Region
AFRIMS	Air Force Restoration Information Management System
ANG	Air National Guard
ANGB	Air National Guard Base
ASSHP	Abbreviated Site Safety and Health Plan
CAD	Computer-Aided Drafting
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSE	Comprehensive Site Evaluation
CSM	Conceptual Site Model
CTT	Closed, Transferring, and Transferred
CWM	Chemical Warfare Materiel
DERP	Defense Environmental Restoration Program
DMM	Discarded Military Munitions
DMT	Data Management Tool
DoD	Department of Defense
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DQO	Data Quality Objective
EESOH-MIS	Enterprise, Environmental, Safety and Occupational Health Management Information System
EM	Engineering Manual
EOD	Explosives Ordnance Disposal
EPA	Environmental Protection Agency
ERP	Environmental Restoration Program
ERPIMS	Environmental Restoration Program Information Management System
FPM	FPM Remediations, Inc.
FUDS	Formerly Used Defense Sites
FY	Fiscal Year
GIS	Geographic Information System
GPS	Global Positioning System
HQ	Headquarters

HRR	Historical Records Review
MAJCOM	Major Command
MC	Munitions Constituents
MEC	Munitions and Explosives of Concern
MGDERP	Management Guidance for the Defense Environmental Restoration Program
MMRP	Military Munitions Response Program
MRA	Munitions Response Area
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
NA	Not Applicable
NARA	National Archives and Records Administration
NYSDEC	New York State Department of Environmental Conservation
OB/OD	Open Burn/Open Detonation
OE	Ordnance and Explosives
PA	Preliminary Assessment
PCSM	Preliminary Conceptual Site Model
P.L.	Public Law
POC	Point of Contact
RACER	Remedial Action Cost Engineering and Requirements
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SI	Site Inspection
SOO	Statement of Objectives
TBD	To Be Determined
TLI	TLI Solutions, Inc.
URS	URS Group, Inc.
U.S.	United States
USACE	United States Army Corps of Engineers
USAF	United States Air Force
USC	United States Code
UTM	Universal Transverse Mercator
UXO	Unexploded Ordnance
WGS84	World Geodetic System of 1984
WP	Work Plan

1.1 INTRODUCTION

This Comprehensive Site Evaluation (CSE) Phase I Work Plan addresses the Military Munitions Response Program (MMRP) munitions response areas (MRAs) associated with the Schenectady County Airport/Stratton Air National Guard Base (ANGB), Scotia, NY. From this point forward the installation will be referred to as the Stratton ANGB. This work plan compiles the CSE Phase I planning documents described in the *Air Force Guide for Conducting the Comprehensive Site Evaluation Phase I at Air Force Munitions Response Areas (Version 10.0)* [United States Air Force (USAF) 2006], hereafter referred to as the CSE Phase I Guide.

This CSE Phase I Work Plan may be modified as necessary in order to best achieve the goals and objectives stated within. Based on field observations, site conditions, and other unforeseen circumstances or conditions, the approach described in this document may be modified in order to best achieve the objectives of the CSE Phase I. Any changes will be coordinated through the USACE for approval by the MMRP Team (please refer to **Section 2** for Team members). The MMRP Team members will be immediately notified by email.

1.2 PROJECT AUTHORIZATION

This CSE Phase I project for the Stratton ANGB is being completed by FPM Remediations, Inc (FPM) (Prime Contractor), in association with URS Group, Inc. (URS) (Subcontractor to FPM), under United States Army Corps of Engineers (USACE) Omaha District Contract W9128F-09-D-0058, Delivery Order 0001 to support the USAF MMRP munitions response actions at the Stratton ANGB.

1.2.1 Historical Development of the United States Department of Defense Environmental Restoration Program

The United States (U.S.) Department of Defense (DoD) Defense Environmental Restoration Program (DERP) was established by Section 211 of the Superfund Amendments and Reauthorization Act (SARA) of 1986. SARA §211 was codified in Title 10 of the United States Code (USC) §2701. The Management Guidance for the Defense Environmental Restoration Program (MGDERP) (DoD 2001) required the creation of an inventory of military munitions response sites. The fiscal year 2002 National Defense Authorization Act affirmed the requirement for an inventory of munitions response sites and required the development of an approach for assigning a relative priority to each munitions response site. This prioritization was finalized in October 2005 as the Munitions Response Prioritization Protocol. The MGDERP is a companion to DoD Directive (DoDD) 4715.1, Environmental Security, and DoD Instruction (DoDI) 4715.7, Environmental Restoration Program (ERP). It provides additional guidance on implementation of the DERP, consistent with Public Law (P.L.) 107-107, DoDD 4715.1, and DoDI 4715.7. The MGDERP confirms applicability set forth by DoDD 4715.1 and further defines the application to environmental restoration response activities and actions undertaken by the USAF that address military munitions or waste military munitions [i.e., munitions and explosives of concern (MEC)] or the chemical residues of munitions [i.e., munitions constituents (MC)].

1.2.2 The Military Munitions Response Program

The U.S. DoD designed the MMRP to follow the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process to address the remediation of MC and MEC, which includes unexploded ordnance (UXO), discarded military munitions (DMM), and MC in concentrations high enough to pose an explosive hazard, located on defense sites. "Defense sites" are defined in 10 USC Section 2710 as "locations that are or were owned by, leased to, or otherwise possessed or used by the DoD. The term does not include any operational range, operating storage or manufacturing facility, or facility that is used for or was permitted for the treatment or disposal of military munitions." **Appendix A** provides additional definitions associated with the MMRP.

1.3 PURPOSE AND SCOPE

A CSE Phase I is analogous to a CERCLA Preliminary Assessment (PA). The goal of the CSE Phase I is to obtain sufficient data to serve as the basis for USAF decision-making regarding further munitions response actions or investigations. The specific tasks and objectives required for this CSE Phase I are as follows:

- Prepare a CSE Phase I Work Plan for submission to the DoD project team.
- Prepare a Preliminary Conceptual Site Model (PCSM) in graphical and tabular form.
- Obtain information on the historical, physical, and environmental setting of the installation and known or suspected MRAs at the installation through on- and off-site historical records reviews and personnel interviews.
- Conduct the CSE Phase I installation entrance briefing and exit briefing.
- Conduct historical records review at Schenectady County Airport/Stratton ANGB and other local repositories to supplement the offsite historical records review [TLI Solutions, Inc. (TLI) 2009]. All operational and non-operational sites on the installation since its inception will be acquired and all non-operational sites will be evaluated to determine eligibility for the MMRP.
- Conduct visual survey to identify physical evidence and site data to supplement record and interview data.
- Support public participation
- Prepare CSE Phase I Report in accordance with the government-furnished CSE Phase I report outline (see **Appendix B**).
- Complete the CSE Phase I Checklist, Remedial Action Cost Engineering and Requirements (RACER) Worksheet, Munitions Response Site Prioritization Protocol (MRSPP) Worksheets, and Air Force Restoration Information Management System (AFRIMS) Worksheet; which is being replaced by the Enterprise, Environmental, Safety and Occupational Health Management Information System (EESOH-MIS). The data for these is entered into the Air Force Data Management Tool (DMT) which is an

Access database. The database is currently set up for AFRIMS and will require changes to reference the EESOH-MIS corresponding data fields. That change will occur in the future; however, to maintain consistency, current references will be to AFRIMS/EESOH-MIS

- Prepare updated maps to meet the requirements of the Fiscal Year (FY)02 National Defense Authorization Act, Section 311§2710(A)-(D)
- Update Administrative Record and Information Repository

Appendix C presents a copy of the basic Statement of Objectives (SOO), without appendices, applicable to this project.

1.4 CSE PHASE I WORK PLAN ORGANIZATION

This CSE Phase I Work Plan is organized as follows:

Section 1 – Introduction provides background information about the regulatory framework and authority associated with the USAF MMRP, describes the purpose of the project, presents this outline of work plan organization, describes the project locations and introduces the MRAs.

Section 2 – Technical Management Plan describes the overall project organization, identifies key personnel and their roles for the project, presents the project schedule and deliverables, and describes the public relations support component.

Section 3 – CSE Phase I Overview describes the historical records review, personnel interviews, visual surveys, off-site reconnaissance, and data management tasks that will be completed as part of the CSE Phase I.

Section 4 – Reporting describes the reporting activities that will be completed for the CSE Phase I at the Stratton ANGB.

Section 5 – References provides a list of the references used to develop this document.

Appendix A – MMRP Definitions

Appendix B – CSE Phase I Report Format Outline

Appendix C – Statement of Objectives

Appendix D – CSE Phase I Checklist

Appendix E – USAF MMRP Cohort Types

Appendix F – Abbreviated Site Safety and Health Plan (ASSHP)

Appendix G – Contractor Forms

Appendix H – Documentation of Public Participation Support

1.5 ABBREVIATED SITE SAFETY AND HEALTH PLAN

The ASSHP for the CSE Phase I investigations is provided in **Appendix F** of this Work Plan, and was developed to address non-intrusive site visits at various MRAs with potential explosive safety hazards and potential hazards associated with chemical releases. The ASSHP follows USACE Engineering Manual (EM) 385-1-97 Explosives Safety and Health Requirements Manual, 15 September 2008. The ASSHP is only valid for CSE Phase I investigation activities of a non-intrusive nature at potential MEC project sites.

1.6 PROJECT LOCATION

The Stratton ANGB and the associated MRAs are located approximately three miles north of the city of Schenectady, NY on the eastern portion of the Schenectady County Airport (**Figure 1-1**). **Figure 1-2** presents the location of the Pistol Range MRA. The locations of the remaining MRAs (i.e. the Ordnance Storage Area and Rifle, Pistol and Machine Gun Range) are not currently known and therefore the locations are not presented on the figure.

1.7 MUNITIONS RESPONSE AREAS

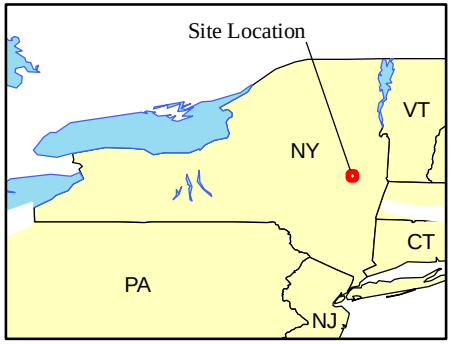
Table 1-1 summarizes some of the relevant information for the MRAs relative to the visual survey. This information was provided in the government-furnished Final Historical Records Research Sources Contacted for Schenectady County Airport, Schenectady, NY (TLI 2009). If additional potential MRAs are identified during the CSE Phase I activities, they will be added to the list, reviewed and communicated to the MMRP Team.

TABLE 1-1
MRA SUMMARY INFORMATION

MRA ID	Name	Suspected Ordnance Types	Acreage
To Be Determined (TBD)	**Ordnance Area**: Inspection reports from 1953 indicate ammunition storage facilities consisted of an armament vault at the end of the Squadron Supply Warehouse. A small safe inside the storage vault was used to store MK 13 Distress Flares. The exact location of the ordnance storage area is unknown.	MK 13 Distress Signals and Flares; .30-, .45-, and .50-caliber ammunition; and 12 gauge and No. 8 Skeet shotgun shells	TBD
TBD	**Pistol Range**: This range was identified from a 1982 document. Buildings in the general area of the site can be seen on the 1973, and 1990 aerial photographs, and current proprietary sources, such as Google Earth.	Small Arms ammunition	224
TBD	**Rifle, Pistol, and Machine Gun Range**: The location of the Rifle, Pistol, and Machine Gun Range, referenced in documents from the 1960s is unknown.	Small Arms ammunition	TBD

Note: Acreage estimates are from Historical Records Research Sources Contacted (TLI 2009)

The USAF anticipates similar MRAs with similar characteristics will utilize similar remedies. The USAF subdivides MRAs into seven cohort types for this program (**Table 1-2**) in order to support streamlining of the restoration process. **Appendix E** presents an excerpt from the CSE Phase I Guide (USAF 2006), which provides additional information regarding each cohort type.



Legend

- Freeway System (State)
- Highway
- Road
- Stratton ANGB Boundary
- Water Feature

N

0 0.5 1 Miles

FPM

FIGURE 1-1
Stratton Air National Guard Base Location

Designed By: MF	**Military Munitions Response Program Work Plan**
Drawn By: MF	Stratton ANGB, Schenectady County Airport
Checked By: JD	Scotia, New York
Submitted By: JD	Projection: WGS 84 Meters
	Source: ESRI Data & Maps 2008

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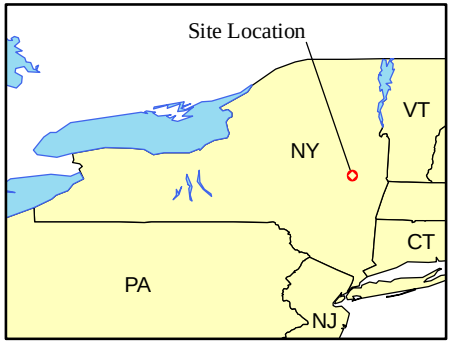

Legend

- Potential MRA Site
- Stratton ANGB Boundary

0 300 600 1,200 Feet

N

FPM

FIGURE 1-2
MRA Location Map

Designed By: MF	**Military Munitions Response Program Work Plan**	
Drawn By: MF	Stratton ANGB, Schenectady County Airport Scotia, New York	
Checked By: JD	Projection:	Projection: WGS 84 Meters
Submitted By: JD	Source:	Source: ESRI Data & Maps 2008

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TABLE 1-2
USAF MMRP COHORT TYPES

Cohort Type	Cohort Description
A	Small Arms Ranges
B	Bore-sight Ranges
C	Explosive Ordnance Disposal (EOD) Ranges and Open Burn/Open Detonation (OB/OD) Sites
D	Chemical Warfare Materiel (CWM) Sites
E	Pyrotechnic/Practice Sites
F	All Other Sites
G	Munitions Constituents

Categorizing MRAs by cohorts is intended to use experience with similar sites to streamline site investigations and remedy selection, improve consistency and predictability, reduce costs, and accelerate remediation.

The Stratton ANGB MMRP MRAs have each been assigned an initial cohort type based on historical munitions activities, which has been used to develop the PCSM for each MRA. Initial cohort types assigned to the potential MRAs are presented on their respective PCSM figures. A PCSM in graphical and tabular form is presented for each MRA based on a review of the cohort type, readily available data, release and physical transport processes, and the potential receptors associated with each MRA at the Stratton ANGB. The conceptual site model (CSM) approach provides the framework for the identification and analysis of each MRA. Based on the existing knowledge, the CSM describes sources and receptors and the interactions that link them together. The goal of the CSM is to confirm these pathways or links. If there is evidence these pathways do not exist, the CSM will be updated to reflect the new model. The data collected during the CSE Phase I archives research as well as the visual site survey will be assessed and a revised CSM constructed.

Due to the differences in the interaction of the receptor to the sources at a MRA, there are different PCSM for MEC and MC. The MEC PCSM in graphical form is presented in **Figures 1-3** through **Figure 1-5**, and the MC PCSM in graphical form is presented in **Figure 1-6**. The lines (representing the pathways) in these figures reflect the current hypothesis, and the goal is to confirm these pathways (keep the lines) or to disprove the pathways (remove the lines). The PCSM for the MRAs is also presented in tabular form in **Table 1-3**. Based on a review of the Historical Records Review (HRR), MEC is not anticipated to be encountered at Stratton ANGB. However, if information collected during the site visit indicates the potential for MEC to be present, then the MEC PCSM, as depicted in **Figure 1-3** through **Figure 1-5**, will be utilized.

Although the defense sites currently being addressed in the USAF MMRP are referred to as MRAs, the CSE Phase I Report and subsequent phases of response may refer to and manage the sites as munitions response sites (MRSs). Currently, each MRA in the USAF MMRP equates to a single MRS of the same name and attributes. As a result of this CSE Phase I or subsequent data collection, MRAs may be subdivided into multiple MRSs. MRSs associated with the original MRA must address the entire acreage of that MRA. If multiple MRSs are created, cohort types will also be developed for each individual MRS.

FIGURE 1-3
MEC PRELIMINARY CONCEPTUAL SITE MODEL (GRAPHICAL) FOR STRATTON AIR NATIONAL GUARD BASE – ORDNANCE STORAGE AREA MRA

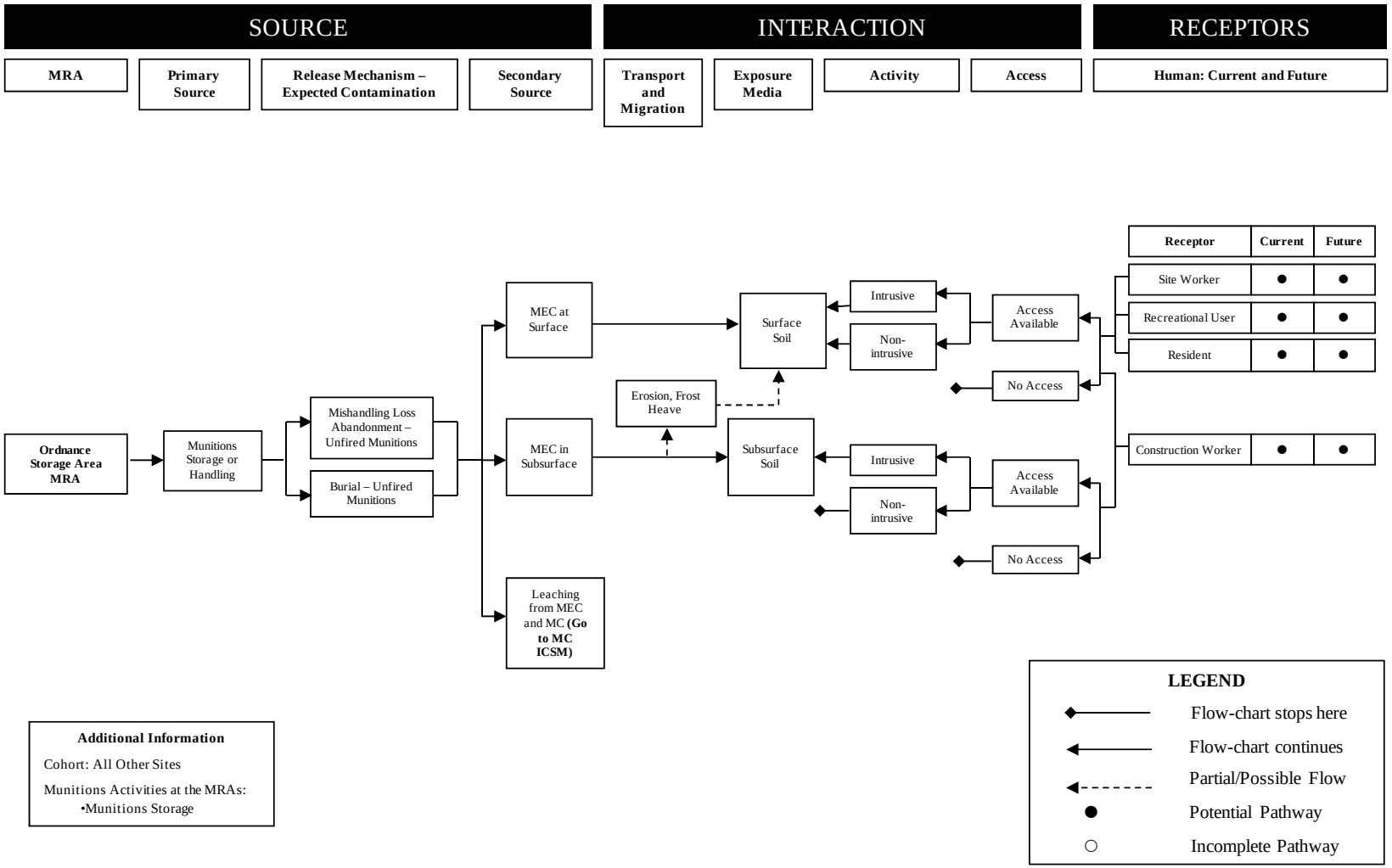


FIGURE 1-4
MEC PRELIMINARY CONCEPTUAL SITE MODEL (GRAPHICAL) FOR STRATTON AIR NATIONAL GUARD BASE – PISTOL RANGE MRA

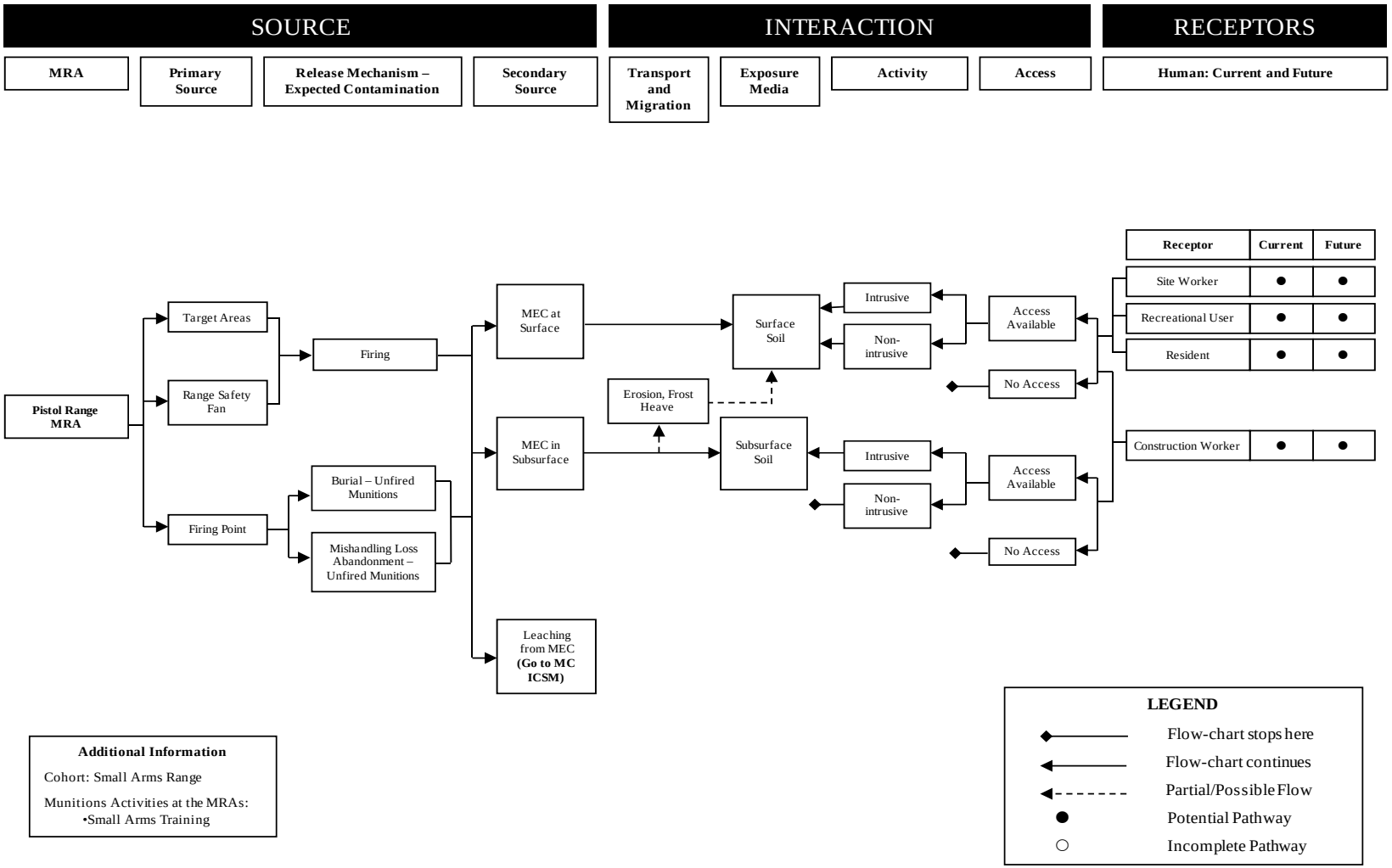


FIGURE 1-5
MEC PRELIMINARY CONCEPTUAL SITE MODEL (GRAPHICAL) FOR STRATTON AIR NATIONAL GUARD BASE – RIFLE, PISTOL AND MACHINE GUN RANGE MRA

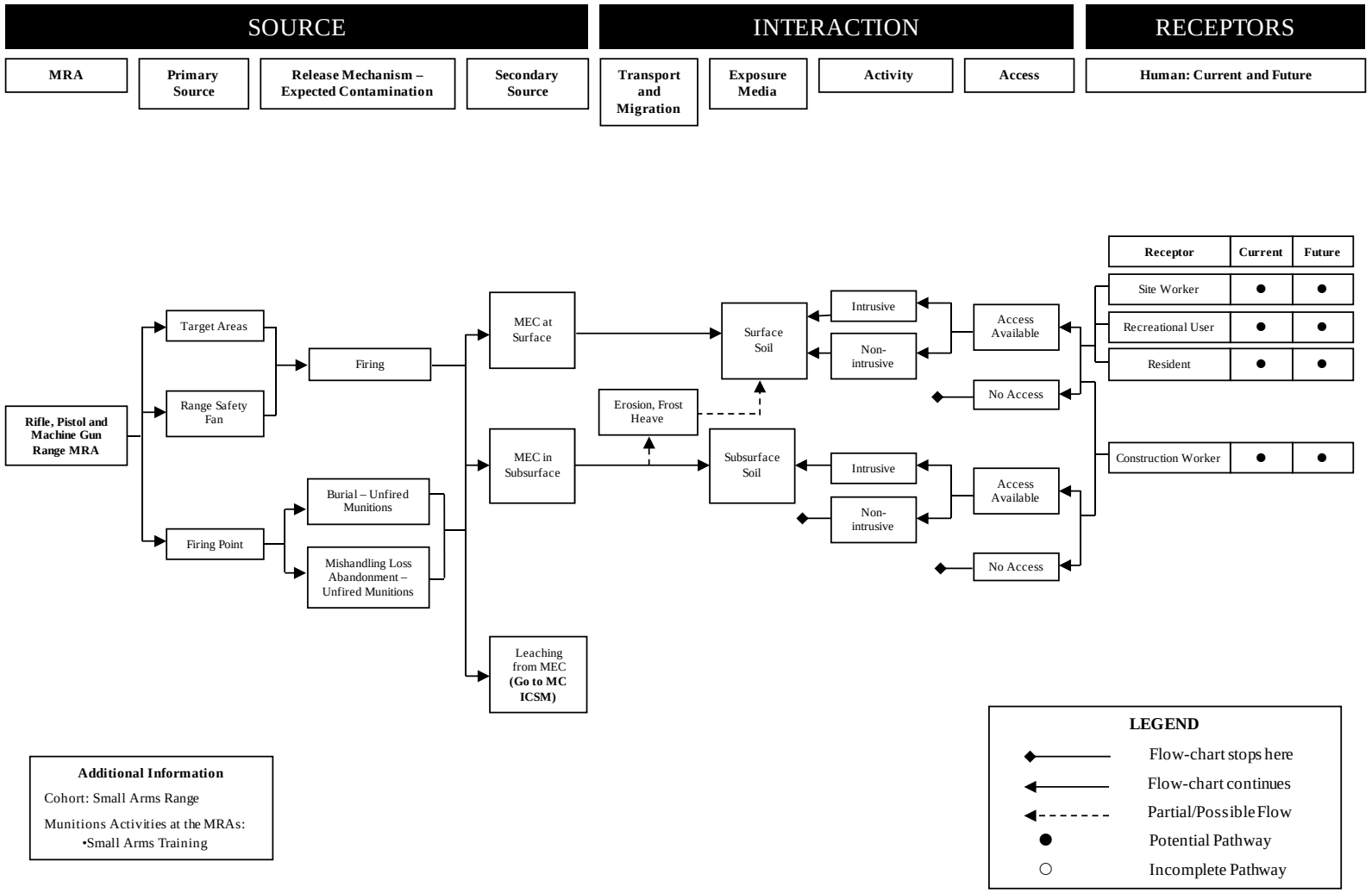


FIGURE 1-6
MC PRELIMINARY CONCEPTUAL SITE MODEL (GRAPHICAL) FOR STRATTON AIR NATIONAL GUARD BASE – MUNITIONS RESPONSE AREAS

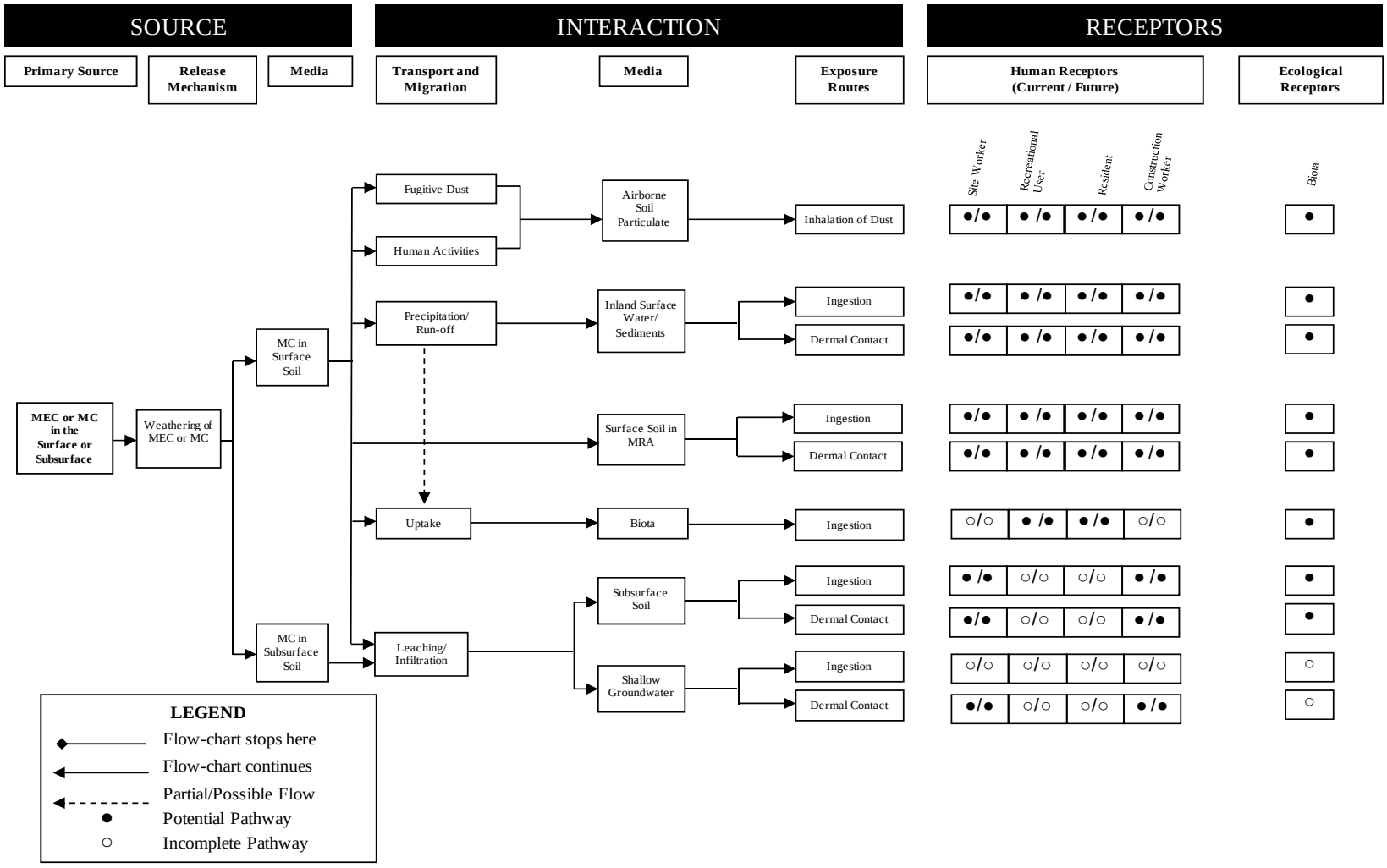


TABLE 1-3
PRELIMINARY CONCEPTUAL SITE MODEL (TABULAR) FOR STRATTON AIR NATIONAL GUARD BASE MUNITION RESPONSE AREAS

MRA Name	Cohort Designation	Source			Interaction		Potential Receptors		
							Human		
		Primary Source	Release Mechanism - Potential Contamination	Secondary Source	Transport and Migration	Exposure Media / Route	Current	Future	Ecological
Pistol Range MRA and Rifle, Pistol and Machine Gun Range MRA	Small Arms Ranges (Cohort Category A)	Firing Point	Mishandling Loss Abandonment-Unfired Munitions; Burial - Unfired Munitions	MEC in Surface Soil	NA	Access: Intrusive / Non-Intrusive	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	NA
				MEC in Subsurface Soil	Erosion, Frost Heave	Access: Intrusive / Non-Intrusive	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	
				MEC in Subsurface Soil	NA	Access: Intrusive	Construction Worker	Construction Worker	
		MEC or MC in the Surface and Subsurface	Weathering of MEC or MC	MC in Surface Soil	Fugitive Dust, Human Activities	Airborne Soil Particulate / Inhalation of Dust	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	Biota
				MC in Surface Soil	NA	Surface Soil / Ingestion or Dermal Contact	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	Biota
				MC in Surface Soil	Precipitation and Run-Off	Inland Surface Water and Sediments / Ingestion or Dermal Contact	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	Biota
				MC in Surface Soil	Uptake	Biota / Ingestion	Recreational User, Resident	Recreational User, Resident	Biota
				MC in Surface and Subsurface Soil	Leaching/Infiltration	Subsurface Soil / Ingestion or Dermal Contact	Site Worker, Construction Worker	Site Worker, Construction Worker	None
				MC in Surface and Subsurface Soil	Leaching/Infiltration	Shallow Groundwater / Ingestion or Dermal Contact	Site Worker (Dermal Contact only), Construction Worker (Dermal Contact only)	Site Worker (Dermal Contact only), Construction Worker (Dermal Contact only)	None
Ordnance Storage Area MRA	All Other Sites (Cohort Category F)	Munitions Storage or Handling	Mishandling Loss Abandonment-Unfired Munitions; Burial - Unfired Munitions	MEC in Surface Soil	NA	Access: Intrusive / Non-Intrusive	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	NA
				MEC in Subsurface Soil	Erosion, Frost Heave	Access: Intrusive / Non-Intrusive	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	
				MEC in Subsurface Soil	NA	Access: Intrusive	Construction Worker	Construction Worker	
		MEC and MC in the Surface and Subsurface	Weathering of MEC or MC	MC in Surface Soil	Fugitive Dust, Human Activities	Airborne Soil Particulate / Inhalation of Dust	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	Biota
				MC in Surface Soil	NA	Surface Soil / Ingestion or Dermal Contact	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	Biota
				MC in Surface Soil	Precipitation and Run-Off	Inland Surface Water and Sediments / Ingestion or Dermal Contact	Site Worker, Recreational User, Resident, Construction Worker	Site Worker, Recreational User, Resident, Construction Worker	Biota
				MC in Surface Soil	Uptake	Biota / Ingestion	Recreational User, Resident	Recreational User, Resident	Biota
				MC in Surface and Subsurface Soil	Leaching/Infiltration	Subsurface Soil / Ingestion or Dermal Contact	Site Worker, Construction Worker	Site Worker, Construction Worker	None
				MC in Surface and Subsurface Soil	Leaching/Infiltration	Shallow Groundwater / Ingestion or Dermal Contact	Site Worker (Dermal Contact only), Construction Worker (Dermal Contact only)	Site Worker (Dermal Contact only), Construction Worker (Dermal Contact only)	None

This section provides an introduction to the personnel that will perform the Stratton ANGB CSE Phase I. This section also includes an installation-specific schedule, project status reporting, and public relations support requirements.

2.1 PROJECT ORGANIZATION

Table 2-1 identifies key personnel for this project and their responsibility.

2.2 PROJECT PERSONNEL

A list of key personnel for the Stratton ANGB CSE Phase I and their contact information is provided in **Table 2-1**.

- The **Headquarters (HQ) Air National Guard** (**ANG**) **MMRP Program Manager** is responsible for oversight of the CSE activities across the Major Command (MAJCOM) to ensure program consistency at each installation.
- The **Stratton ANGB MMRP Resident Project Manager** will serve as the main installation point of contact, act as a liaison between the installation and other project personnel, and provide on-site coordination for issues including base passes and range access.
- The **USACE MMRP Project Manager** is responsible for managing the FPM personnel contracted services as well as review and coordination of project plans and other project documentation. The USACE MMRP Project Manager or a designated alternate will participate in site visits and will also provide additional technical expertise for the CSE Phase I activities.
- The **FPM Program Manager** oversees the FPM CSE Phase I program and reports directly to the USACE, Omaha District Project Manager. Any issues or problems the USACE, Omaha District may experience with the FPM project team may be addressed to the FPM Program Manager. The FPM Program Manager has full authority over the performance of the program and can direct changes in project implementation to attain consistent quality deliverables across the program.
- The **FPM Project Manager** will provide progress reviews; oversee preparation of reports; and maintain schedule control. The FPM Project Manager will also be responsible for project cost tracking, quality control, project communications, regulatory compliance, work results, and overall personnel management.
- The **FPM Site Team Leader** will oversee preparation for the site visit; ensure implementation of this work plan, including the ASSHP (see **Appendix F**), oversee FPM technical resources, coordinate with installation personnel to prepare for the site visit, including arrangements for records access, personnel meetings, and a visual survey of the MRAs. The FPM Site Team Leader will also conduct research and interviews and participate in the visual surveys.

TABLE 2-1

KEY PROJECT PERSONNEL

Technical Area	Organization	Name	Phone Number	Cell Phone Number	E-mail Address
AFCEE MMRP Program Manager	AFCEE/CMSE	Jon Ussery	210-536-9538	--	jon.ussery@brooks.af.mil
HQ ANG MMRP Program Manager	ANG NGB/A7OR	Mark Dickerson	301-836-8445	--	mark.dickerson@ang.af.mil
HQ Stewart ANG MMRP Project Manager	ANG NGB/A7OR	Jody Murata	301-836-8120	--	jody.murata@ang.af.mil
Stratton ANGB MMRP Resident Project Manager	109 AW	Lieutenant Colonel Ronald Leadley	518-344-2341	--	ronald.leadley@ang.af.mil
EOD	NA	NA	NA	NA	NA
Civil Engineering	109 AW	Major Ty Randall	518-344-2568	--	ty.randall@ang.af.mil
Environmental Management	109 AW	Lieutenant Colonel Ronald Leadley	518-344-2341	--	ronald.leadley@ang.af.mil
Environmental Compliance	109 AW	Lieutenant Colonel Ronald Leadley	518-344-2341	--	ronald.leadley@ang.af.mil
Natural Resources	109 AW	Lieutenant Colonel Ronald Leadley	518-344-2341	--	ronald.leadley@ang.af.mil
Cultural Resources	109 AW	Lieutenant Colonel Ronald Leadley	518-344-2341	--	ronald.leadley@ang.af.mil
History Office	109 AW	Senior Master Sergeant William Gizara	518-344-2423	--	william.gizara@ang.af.mil
Real Property	109 AW	Cindy Lawyer	518-344-2445	--	lucinda.lawyer@ang.af.mil
Public Affairs	109 AW	Chief Master Sergeant Gary Mackey	518-344-2605	--	gary.mackey@ang.af.mil
Range Operations	109 AW	Master Sergeant Joshua Walters	518-344-2070	--	joshua.walters@ang.af.mil

KEY PROJECT PERSONNEL

Technical Area	Organization	Name	Phone Number	Cell Phone Number	E-mail Address
Safety Office	109 AW	Senior Master Sergeant Richard Rueda	518-344-2438	--	richard.rueda@ang.af.mil
USACE MMRP Program Manager	USACE, Omaha	Jerry Hodgson	402-995-2727	--	jerry.l.hodgson@usace.army.mil
USACE MMRP Project Manager	USACE, Omaha	David Johansen	402-995-2729	402-290-5743	david.r.johansen@usace.army.mil
USACE UXO Safety Specialist	USACE, Omaha	Chris Bryant	402-995-2279	402-740-4954	christopher.a.bryant@usace.army.mil
FPM Program Manager	FPM	Gaby Atik	315-336-7721 ext. 202	315-725-4497	g.atik@fpm-group.com
FPM Project Manager	FPM	Maureen Whalen	315-336-7721 ext. 216	315-440-2416	m.whalen@fpm-group.com
FPM Site Team Leader	FPM	Peter Corigliano III	315-336-7721 ext. 211	TBD	p.corigliano@fpm-group.com
Other Offices/Agencies	BB&E, LLC - MMRP	Tom Barzyk	248-489-9636 ext 302	248-766-4143	tbarzyk@bbande.com
Other Offices/Agencies	BB&E, LLC - Environmental Restoration Program	Veronica Allen	248-489-9636 ext. 304	--	vallen@bbande.com
Other Offices/Agencies	New York State Department of Environmental Conservation (NYSDEC) Region IV	John R. Strang	518-357-2390	--	jrstrang@gw.dec.state.ny.us
Other Offices/Agencies	U.S. Environmental Protection Agency (EPA)	TBD	TBD	TBD	TBD
Other Offices/Agencies	Schenectady County Airport	Michael Scadewald	518-399-0111	--	TBD

Notes:
AFCEE = Air Force Center for Engineering and the Environment
AFCEE/CMSE = Air Force Center for Engineering and the Environment / Air Force Restoration Program Management Office-East Region

- The **UXO Escort** will conduct research and interviews and provide UXO escort during the visual surveys to ensure personnel safety. The UXO Technician will conduct a safety briefing before the team visits the MRAs.

2.3 PROJECT SCHEDULE

The following schedule provides proposed completion dates for activities associated with the CSE Phase I at the Stratton ANGB MRAs:

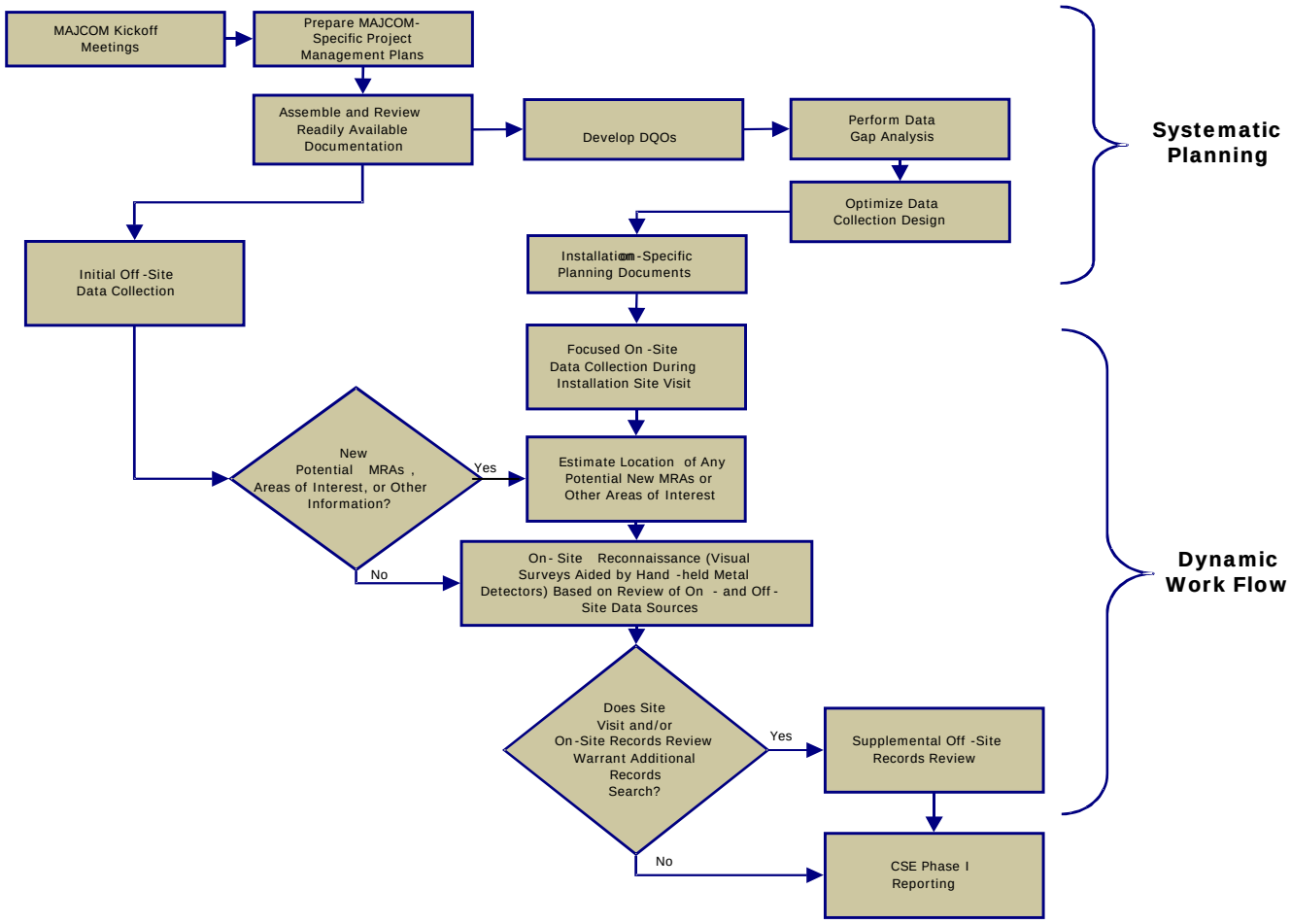
- MAJCOM Kickoff Meeting was completed on April 16, 2010.
- The Draft CSE Phase I Work Plan (WP) was issued to USACE and USAF for review on April 1, 2010.
- The Final CSE Phase I WP will be issued in May 2010.
- Installation Entrance Briefing will be on June 1, 2010.
- The CSE Phase I fieldwork will be completed by June 4, 2010.
- Installation Exit Briefing will be completed on June 4, 2010.
- The Draft CSE Phase I Report will be issued in September 2010.
- The Draft Final CSE Phase I Report will be issued in January 2011.
- The Final CSE Phase I Report will be issued in February 2011.

To ensure the CSE Phase I follows a process that will successfully achieve the project and performance requirements of the SOO, a technical approach will be implemented that follows the EPA's Triad process for identifying and managing decision-making uncertainty and leveraging innovative tools and strategies (USEPA 2004). The three key components of the Triad approach, systematic planning, dynamic work strategy, and real-time measurement, are incorporated into this detailed technical approach as described below.

- **Systematic planning** for the CSE Phase I begins with collaboration among stakeholders (USAF, state, federal, and local authorities) to promote an up-front buy-in on the proposed approaches for the project. In addition, systematic planning ties program objectives to data collection tasks by identifying information gaps. This CSE Phase I Work Plan presents the project-level data quality objectives (DQOs), which are based on the SOO requirements (**Appendix C**), the CSE Phase I Checklist (**Appendix D**), currently available data, and data needs identified from review of this information. This CSE Phase I Work Plan describes the necessary activities to be performed in order to accomplish the required data needs, which will be identified and tracked utilizing the checklist tool provided in **Appendix D**. The result is a data collection plan tailored in consideration to the installation/site-specific parameters and data gaps identified to satisfy the CSE Phase I and SOO requirements. Once the CSE Phase I tasks have been completed, the information will be used to create MRA-specific interim CSMs during the CSE Phase II planning phase in order to ensure sufficient data are collected to meet the project objectives consistent with a CERCLA PA/Site Inspection (SI).
- A **dynamic work strategy** relies on flexibility that allows experienced team leaders and field technicians to adapt to information generated by real-time measurement, new information, and on-site observations. Although typically utilized during the SI or subsequent investigative phases, a dynamic work strategy has been established to guide the CSE Phase I data collection activities while achieving the SOO requirements for this project. **Figure 3-1** presents a summary of the CSE Phase I dynamic work flow, which highlights key points during implementation of the data collection effort where the project team can make real-time decisions based on new data discovered and reviewed after completion of the CSE Phase I Work Plan.
- **Real-time measurements**, which will be used to support decisions presented in the dynamic work flow, include immediate review of the initial on- and off-site data collection results and the on-site visual and detector-aided surveys. To facilitate expeditious distribution and review of data collection activities by the project team, an innovative data management scheme will be utilized that involves converting historical data to electronic format, where feasible.

Figure 3-1 depicts the major elements of the CSE Phase I technical approach. The following sections discuss each major element of the data collection strategy and dynamic work flow.

FIGURE 3-1
OVERVIEW OF THE CSE PHASE I TECHNICAL APPROACH



3.1 HISTORICAL RECORDS REVIEW

All operational and non-operational sites on the installation since its inception will be acquired and all non-operational sites will be evaluated to determine eligibility for the MMRP. The HRR for the Stratton ANGB (TLI 2009) included a comprehensive archival search and data collection from repositories at the national and regional level. The HRR identified three potential MRAs that are not associated with the Formerly Used Defense Sites (FUDS) Program. As a result, a CSE Phase I was recommended to determine if these potential MRAs are present at the Stratton ANGB. Based on the HRR, PCSMs were developed (see **Section 1.7**).

3.1.1 On-Site Data Repositories

On-site records research and data collection activities will be conducted and shall include, but not be limited to, review of aerial photos, review of installation environmental management office records with emphasis on restoration, compliance, and natural and cultural resources records; history office records; real estate office records; EOD unit records; security forces records; and range operations records; safety office records for munitions related incidents; as well as maps and aerial photographs for evidence of historical munitions activities. In cases where these records are housed at the HQ rather than the installation level, the HQ repositories will be reviewed for relevant data.

The following bullets identify the organizations (if available) that will be contacted to conduct the on-site records reviews, interviews, and visual surveys. These organizations will be contacted prior to arriving at the installation to pre-arrange access to files, for initial personnel interviews, and for access requirements for the MRAs. Additional organizations may require consultation based on records reviews and personnel interviews. **Appendix G** provides a worksheet that will be used to document contact information for these organizations.

- **Range Operations** — Historical information will be collected on munitions expenditures, storage, and treatment operations by complex [inclusive of target area(s) where appropriate] to get an assessment of the magnitude of each activity as well as for use in determining the cohort type for existing or newly identified MRAs. Potential overlap of historical and operational ranges will be evaluated for program eligibility.
- **EOD Operations** — Information will be collected for historical and current MEC clearance operations and/or EOD incidents and on the coordinates of areas known or suspected of containing MEC (from historical records). Information will also be collected for any historical demilitarization activities (e.g., OB/OD).
- **Safety Office** — Information will be collected for historical and current ordnance related injuries or damages from military munitions. Locations of any incident shall be cross referenced to verify existing or newly identified MRAs.
- **Civil Engineering** — Information will be collected on the structures, fencing, roadways, and utilities present on the MRAs. Copies of historical paper maps as well as computer-aided drafting (CAD) and geographic information system (GIS) files will be obtained. Current/historical boundaries, natural/cultural resources, land use, former and current range areas, safety zones, impact limit lines, weapon safety footprints, surrounding land use, etc., will also be collected.
- **Environmental Management** — Information will be collected on historical, current, and planned waste management and/or restoration activities by MRA and the potential for releases of MC will be assessed. A description of the authority for restoration activities (Resource Conservation and Recovery Act [RCRA], CERCLA, etc.) will be obtained.

- **Natural Resources** — Information will be collected on the locations, types, and extent of sensitive ecosystems and endangered species, as well as any other significant areas that may place constraints on investigation and cleanup activities.
- **Cultural Resources** — Information will be collected on the locations, types, and extent of cultural resources that may place constraints on investigation and cleanup activities.
- **Real Property** — Information will be collected for the MRAs to include existing or planned land use controls and existing or future deed restrictions associated with transferring or transferred property.
- **History Office** — Information will be collected on the history of the installation with emphasis on the operational history of the MRAs.
- **Public Affairs** — Information regarding interaction with the public, the regulatory environment, and any outside interest in range areas will be obtained.
- **Other offices/agencies** — Access to portions of the MRAs that are no longer under DoD control will be arranged with owners or agencies as appropriate. In addition, other local, state, or federal agencies that have interacted with the installation and may have information regarding activities on an MRA may be contacted.

3.1.2 Off-Site Data Repositories

An HRR (TLI 2009) was conducted at off-site and non-local information repositories for the Stratton ANGB. The HRR included a review of documents at the following off-site repositories:

- National Archives and Records Administration (NARA) Archives I
- NARA Archives II
- NARA Northeast Region
- National Personnel Records Center
- USACE Topographic Engineering Center and Image Office
- USACE Office of History
- U.S. Army Research, Development and Engineering Command
- U.S. Army Center of Military History
- U.S. Army Institute of Military History
- Air Force Historical Research Agency
- Air Force History Support Office
- Air Force Safety Center
- Air Force Civil Engineer Support Agency

- DoD Defense Technical Information Center
- Defense Environmental Programs Annual Report to Congress
- Library of Congress

3.2 PERSONNEL INTERVIEWS

Information on all operational and non-operational sites on the installation since its inception will be acquired and all non-operational sites will be evaluated to determine eligibility for the MMRP. Interviews of on-site and off-site personnel will be conducted as necessary to validate and/or supplement written documentation. Interviews will be documented electronically. A standard set of interview questions will be asked and relevant information about each interviewee, their responses, and any supplemental information provided by the interviewee will be recorded. This will enable interview data to be combined quickly and easily for review and assessment. Correlation of the interview information may identify data gaps or conflicting data that require additional data gathering. Examples of the information that will be collected during the interview process are provided in **Appendix G** on the Sample Interview Questions form and the Contact/Interview Report form.

3.3 VISUAL SURVEYS

Information on all operational and non-operational sites on the installation since its inception will be acquired and all non-operational sites will be evaluated to determine eligibility for the MMRP. Visual surveys of the MRAs will be conducted to document any physical evidence to support the data collected during the records research and personnel interviews. Data to be collected include photographs of any evidence supporting the range-related activities such as target debris, surface MEC or munitions debris, craters, depressions associated with suspected burial sites, distressed vegetation, berms, firing points, as well as global positioning system (GPS) coordinates of items photographed. If GPS coverage is not available at a location, positioning will be estimated using landmarks, terrain features, and existing maps. Geo-referenced data will be collected and submitted in a format compatible with the installation GIS using the World Geodetic System of 1984 (WGS84), Universal Transverse Mercator (UTM) survey feet or other designated geographic projection as required.

In addition, hand-held metal detectors (e.g., Schonstedt Model 52) will be used while conducting visual surveys in areas where the ground cover inhibits the visual survey. No intrusive activities will be performed as part of this project. If MEC items are encountered during the visual surveys, the safety procedures provided in the ASSHP will be followed.

GPS units will be used in the field to collect and enter new data/information. These units will also be used to retrieve previously gathered information for field verification or modification as appropriate.

3.4 OFF-SITE RECONNAISSANCE

If the records research or interviews indicate munitions-related activities associated with a MRA extended beyond the installation boundary, limited off-site reconnaissance may be conducted in coordination with the current property owner. Decisions regarding off-site reconnaissance will be coordinated with the USACE Project Manager, Installation Point of Contact (POC) and FPM Project Manager.

3.5 PROJECT PUBLIC RELATIONS SUPPORT

In accordance with the SOO for this project, the FPM Team will support the installation's existing public relations activities, including the Restoration Advisory Board (as applicable), and by providing project support, materials, and information for presentation to the public regarding CSE Phase I activities. The distribution of the First Fact Sheet (programmatic approach) shall be during the planning phase of the CSE Phase I and the Second Fact Sheet (CSE Phase I findings) shall follow during the reporting phase. The fact sheets will be distributed at the installation's discretion to stakeholders.

The purpose of this section is to outline the management of data generated during the CSE Phase I investigation including the initial generation of data, data reporting, review, evaluation, and the final presentation of data. Types of data that will be generated during this investigation will include on- and off-site historical records documentation, personnel interview documentation, and visual survey data utilizing GPS and GIS technologies.

4.1 PERIODIC REPORTING

This project is being conducted as a performance-based contract, so there are no formal reporting requirements. To facilitate communication and the management of activities for this project, scheduling and tracking of tasks, exchange of information including documents, and maintaining contact information among project team members, Secure Sharepoint/Folders, a file transfer tools, will be used. Periodic teleconferences will be held to discuss and exchange information among project team members, including USAF, USACE, and FPM. Other stakeholders may also participate as necessary to achieve project objectives.

4.2 GENERATION OF DATA

Data will be generated at different stages of the investigation and by different parties. The data types are as follows:

- Visual survey data along with interview and records research data will be generated. GPS coordinates from the visual survey and other reconnaissance activities will be recorded and uploaded in a CSE Phase I GIS database.
- Project cost tracking, quality control, project communications, regulatory compliance, work results, and personnel management data will be developed and maintained by FPM.

4.3 DATA MANAGEMENT

MRA data will be managed electronically by FPM. Throughout the fieldwork and data collection efforts, electronic data will be uploaded to a Secure Sharepoint/Folders website to provide remote access to this information for authorized team members. The Secure Sharepoint/Folders System provides secure, self-managed folders that can be used to transfer large files via the internet.

A Folder Manager will be assigned who will be responsible for managing content as well as the list of users who have access to the folders. The Folder Manager will invite team members to access the folders via email and, if requested, notify team members when folder contents have been updated.

4.4 DATA REPORTING, REVIEW, AND EVALUATION

All field survey and site reconnaissance data generated during the investigation will be reviewed for accuracy and completeness, and compiled into the CSE Phase I Report. Field data will be evaluated by the FPM project staff in preparation of the CSE Phase I Report.

Each person who generates data will be responsible for completing an initial data review. The FPM Project Manager, who will ultimately prepare the CSE Phase I Report, along with input from the other scientist/engineering staff, will provide a second level of review as materials are sorted and organized for the report.

All CSE Phase I data will be stored in a single database. This database will represent the official repository for project generated data. It will be maintained by the FPM Team data management staff and will be available for future data additions or to transfer data to USAF or USACE at the conclusion of CSE Phase I activities.

4.5 FINAL REPORT

In the CSE Phase I Report, the field investigations will be summarized and collected data will be displayed in a series of text sections, maps, figures, and tables. In the report appendices, copies of required field documentation, electronic data, and raw data backup will be included to support the information presented in the report. The CSE Phase I Report will be organized in accordance with the outline presented in **Appendix B**.

The originals of completed field paperwork and logbooks, electronically stored field data files, and other forms of completed documentation will be stored and maintained at FPM's branch office in Rome, NY until ultimate transfer to USACE and associated installation representatives.

4.6 USAF DATA MANAGEMENT DELIVERABLES

The Environmental Restoration Program Information Management System (ERPIMS) data will not be completed using the information gathered during the CSE Phase I investigation. ERPIMS activities have been deferred until the CSE Phase II.

The DMT input data sheets will be completed using the information gathered during the CSE Phase I activities. The DMT is a Microsoft Access® database that houses all of the data required for each information system: AFRIMS/EESOH-MIS, RACER, and MRSPP. The database specifies the type of data required, the specific entries required or allowed (using pick lists), and requires a reference to the location in the report where the information is obtained.

DoD 2001. *Management Guidance for the Defense Environmental Restoration Program*, Office of the Under Secretary of Defense (Installations and Environment), September.

DoD 2000. *Management Principles for Implementing Response Actions at Closed, Transferring, and Transferred (CTT) Ranges, Interim Final*, Office of the Deputy Under Secretary of Defense (Environmental Security), Department of Defense and Office of Solid Waste and Emergency Response, Environmental Protection Agency, 7 March.

DoD 1996a. *Environmental Security*, DoDD 4715.1, February 24.

DoD 1996b. *Environmental Restoration Program*, DoDI 4715.7, April 22.

EPA 2003. *Using Dynamic Field Activities for On-Site Decision Making: A Guide for Project Managers*, EPA Office of Solid Waste and Emergency Response, OSWER No. 9200.1-40, EPA/540/R-03/002, May.

EPA 2001. Improving Sampling, Analysis, and Data Management for Site Investigation and Cleanup (Fact Sheet, 2003 update), EPA-542-F-04-001a, April.

EPA 2000. *Data Quality Objectives Process for Hazardous Waste Site Investigations*, EPA Office of Environmental Information, EPA/600/R-00/007 (EPA QA/G-4HW), January.

EPA 1999. *Improving Site Assessment: Combined PA/SI Assessments*, EPA Office of Solid Waste and Emergency Response, EPA-540-98-038, October.

EPA 1991. *Guidance for Performing Preliminary Assessments under CERCLA*, Office of Emergency and Remedial Response, EPA/540/G-91/013, September.

Interstate Technology & Regulatory Council 2003. *Technical and Regulatory Guidance for the Triad Approach: A New Paradigm for Environmental Project Management*, December.

TLI 2009. *Final Historical Records Research Sources Contacted: Schenectady County Airport, Schenectady, NY.,* August.

USACE 2006. Abbreviated Accident Prevention Plans for Sites with Suspected or Confirmed Munitions and Explosives of Concern, Military Munitions Center of Expertise Interim Guidance Document 06-06, April.

USACE 2003. *Conceptual Site Models for Ordnance and Explosives (OE) and Hazardous, Toxic, and Radioactive Waste (HTRW) Projects*, Engineer Manual 1110-1200, February.

USACE 2008. *Safety and Health Requirements Manual*, EM 385-1-1, September

USAF 2006. Air Force Guide for *Conducting the Comprehensive Site Evaluation Phase I at Air Force Munitions Response Areas (Version 10.0)*, Restoration Branch, Environmental Division, Office of the Civil Engineer, Headquarters-United States Air Force, October.

USAF 2003. *U.S. Air Force Management Guidance for the Environmental Restoration Program*, Restoration Branch, Environmental Division, Office of the Civil Engineer, Headquarters-United States Air Force, March.

USEPA 2004. Summary of Triad Approach, Office of Superfund Remediation and Technology Innovation, March.

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The following definitions are excerpted from the CSE Phase I Guide (USAF 2006):

Applicable or Relevant and Appropriate Requirements (ARARs) – Applicable requirements are cleanup standards, standards of control, and other substantive environmental protection requirements promulgated under Federal or state environmental law that specifically address a hazardous substance, pollutant, contaminant, remedial action, location or other circumstance found at a CERCLA site. Relevant and appropriate requirements are cleanup standards that, while not "applicable," address situations sufficiently similar to those encountered at a CERCLA site where their use is well suited to the particular site. (NCP, 40 CFR Part 300, July 2005)

Chemical Agent – An agent that, through its chemical properties, produces lethal or other damaging effects on human beings, except that such term does not include riot control agents, chemical herbicides, smoke, and other obscuration materials. This definition is based on the definition of "chemical agent and munition" in 50 U.S.C. 1521(j)(1).

Chemical Warfare Materiel (CWM) – Items generally configured as a munition containing a chemical compound that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. CWM includes V- and G-series nerve agents or H-series (mustard) and L-series (lewisite) blister agents in other-than-munition configurations; and certain industrial chemicals (e.g., hydrogen cyanide (HCN), cyanogen chloride (CK), or carbonyl dichloride (called phosgene or CG)) configured as a military munition. CWM does not include riot control devices; chemical defoliants and herbicides; industrial chemicals (e.g., AC, CK, or CG) not configured as a munition; smoke and other obscuration producing items; flame and incendiary producing items; or soil, water, debris or other media contaminated with low concentrations of chemical agents where no chemical agent hazards exist. (MRSPP, 32 CFR Part 179, October 2005)

CWM contains the following four subcategories:

1) CWM, explosively configured – All unexploded ordnance (UXO) or Discarded Military Munitions (DMM) that contain a chemical agent fill and any explosive component. Examples are M55 rockets with CA, the M23 VX mine, and the M360 105-mm GB artillery cartridge.
2) CWM, non-explosively configured – All UXO or DMM that contain a chemical agent fill but that do not contain any explosive components. Examples are any chemical munition that does not contain explosive components and VX or mustard agent spray canisters.
3) CWM, bulk container – All discarded (e.g., buried) non-munitions-configured containers of CA (e.g., a ton container) and CAIS K941, toxic gas set M-1 and K942, toxic gas set M-2/E11.
4) Chemical Agent Identification Sets (CAIS) – Military training aids containing small quantities of various CA and other chemicals. All forms of CAIS are scored the same in this rule, except CAIS K941, *toxic gas set M-1;* and CAIS K942, *toxic gas set M-2/E11,* which are considered forms of *CWM, bulk container*, due to the relatively large quantities of agent contained in those types of sets.

Closed Range – A military range that has been taken out of service as a range and that either has been put to new uses that are incompatible with range activities or is not considered by the military to be a potential range area. A closed range is still under the control of a Component. (MGDERP, September 2001)

Conceptual Site Model (CSM) – The CSM is a description of a site and its environment that is based on existing knowledge. It describes sources of MEC or hazardous, toxic and radioactive waste at a site; actual, potentially complete, or incomplete exposure pathways (sediment, surface water, and groundwater); current or reasonably anticipated future land use; and potential receptors. The source-receptor interaction is a descriptive output of a CSM. The CSM serves as a planning instrument, a modeling and data interpretation aid, and as a communication device among the Project Team. (FUDS Program Policy, ER 200 3-1, May 2004)

Defense Sites – Locations that are or were owned by, leased to, or otherwise possessed or used by the DoD. The term does not include any operational range, operating storage or manufacturing facility, or facility that is used for or was permitted for the treatment or disposal of military munitions. (10 U.S.C. 2710(e)(1))

Department of Defense Components – The Office of the Secretary of Defense (OSD), the Military Departments, the Defense Agencies, the Department Field Activities, and any other Department organizational entity or instrumentality established to perform a government function. (MRSPP, 32 CFR Part 179, October 2005)

Discarded Military Munitions (DMM) – Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations. (10 U.S.C. 2710(e)(2))

Explosive Ordnance Disposal (EOD) – The detection, identification, on-site evaluation, rendering safe, recovery, and final disposal of unexploded ordnance and of other munitions that have become an imposing danger, for example, by damage or deterioration. (Handbook on the Management of Munitions Response Actions, Interim Final, EPA, May 2005)

Facility – A building, structure, or other improvement to real property, in relation to work classification. (10 U.S.C. 2801)

Formerly Used Defense Sites (FUDS) – Facility or site (property) that was under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to the contamination by hazardous substances. By the DoD Environmental Restoration Program policy, the FUDS program is limited to those real properties that were transferred from DoD control prior to 17 October 1986. FUDS properties can be located within the 50 States, District of Columbia, Territories, Commonwealths, and possessions of the United States. (FUDS Program Policy, ER 200 3-1, May 2004)

Hazardous Substance – (A) Any substance designated pursuant to section 1321(b)(2)(A) of title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C. 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C. 6901 et seq.] has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act [42 U.S.C. 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 2606 of title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). (CERCLA, 42 U.S.C. § 9601 et seq.)

Installation (as defined by the RMIS Data Element Dictionary for a Federal Facility Identification [FFID]) – The FFID number is a unique identifier, assigned to an installation/property in RMIS. The 14-character aggregate string is used in RMIS as the key column for each data table and is used to track all associated records for each installation. An installation may have a single range or multiple ranges (and each range may have more than one site contained within its boundaries) and a single or multiple sites not associated with a range. (MGDERP, September 2001)

Materials That Potentially Present an Explosive Hazard (MPPEH) – Material potentially containing explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris); or material potentially containing a high enough concentration of explosives such that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, or ventilation ducts that were associated with munitions production, demilitarization or disposal operations). Excluded from MPPEH are munitions within DoD's established munitions management system and other hazardous items that may present explosion hazards (e.g., gasoline cans, compressed gas cylinders) that are not munitions and are not intended for use as munitions. (DoD Instruction 4140.62, MPPEH, December 2004)

Military Installation – A base, camp, post, station, yard, center, or other activity under the jurisdiction of the Secretary of a Military Department or, in the case of an activity in a foreign country, under the operational control of the Secretary of a military department or the Secretary of Defense, without regard to the duration of operational control. (10 U.S.C. 2801)

Military Munitions – All ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the Department of Defense, the Coast Guard, the Department of Energy, and the National Guard. The term includes confined gaseous, liquid, and solid propellants; explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives and chemical warfare agents; chemical munitions, rockets, guided and ballistic

missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, and demolition charges; and devices and components of any item thereof. The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, other than non-nuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed. (10 U.S.C. 101(e)(4))

Military Range – Designated land and water areas set aside, managed, and used to research, develop, test, and evaluate military munitions, other ordnance, or weapon systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas. (40 CFR 266.201)

Munitions and Explosives of Concern (MEC) – Military munitions that are 1) unexploded ordnance, as defined in 10 U.S.C. 101(e)(5); 2) abandoned or discarded, as defined in 10 U.S.C. 2710(e)(2); 3) munitions constituents (e.g., TNT, RDX) present in soil, facilities, equipment, or other materials in high enough concentrations so as to pose an explosive hazard. (MRSPP, 32 CFR Part 179, October 2005)

Munitions Constituents (MC) – Any materials that originate from UXO, DMM, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions. (10 U.S.C. 2710(e)(4))

Munitions Debris – Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal. (DoD 6055.9-STD)

Munitions Response – Response actions, including investigation, removal actions, and remedial actions, to address the explosives safety, human health, or environmental risks presented by UXO, DMM, or munitions constituents (MC) or to support a determination that no removal or remedial action is required. (MRSPP, 32 CFR Part 179, October 2005)

Munitions Response Area (MRA) – Any area on a defense site that is known or suspected to contain unexploded ordnance, discarded military munitions, or munitions constituents. Examples include former ranges and munitions burial areas. A munitions response area is comprised of one or more munitions response sites. (MRSPP, 32 CFR Part 179, October 2005)

Munitions Response Site (MRS) – A discrete location within an MRA that is known to require a munitions response. (MRSPP, 32 CFR Part 179, October 2005)

Operational Range – A range that is under the jurisdiction, custody, or control of the Secretary of Defense and that is used for range activities; or although not currently being used for range activities, that is still considered by the Secretary to be a range and has not been put to a new use that is incompatible with range activities. (10 U.S.C. 101(e)(3))

Other than Operational Range – A range that does not fall under the definition of "operational range," such as a closed, transferred, or transferring range. (General Dictionary Definition from Multiple Sources (i.e., globalsecurity.com, DENIX UXO safety glossary, UXOInfo.com)

Pollutant and Contaminant – These terms include, but are not be limited to, any element, substance, compound, or mixture, including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring; except that the term pollutant or contaminant shall not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of paragraph (14) and shall not include natural gas, liquefied natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas). (CERCLA, 42 U.S.C. § 9601 et seq.)

Range Activities – Research, development, testing, and evaluation of military munitions, other ordnance, and weapons systems; and the training of members of the armed forces in the use and handling of military munitions, other ordnance, and weapons systems. (10 U.S.C. 101(3)(2))

Range-Related Debris – Debris other than munitions debris collected from operational ranges or from former ranges (e.g., targets, military munitions packaging and crating materials). (DoD 6055.9-STD)

Range Residue – Material, including but not limited to, parts and sections of practice bombs, artillery, small arms, mortars, projectiles, bombs, missiles, rockets, rocket mortars, targets, grenades, incendiary devices, experimental items, demolition devices, and any other material fired on or discovered on a range. (AFI 13-212, Range Planning and Operations, August 2001)

Real Property – Real estate owned by the United States and under the control of the DoD. Includes lands, buildings, structures, utilities systems, improvements and appurtenances thereto. Includes equipment attached to and made part of buildings and structures (such as heating systems) but not moveable equipment (such as plant equipment). (MGDERP, September 2001)

Relative Risk – The evaluation of individual sites to determine high, medium, or low relative risk to human health and the environment, based on contaminant hazards, migration pathways and receptors, in accordance with DoD's *Risk-Based Site Evaluation Primer*. (MGDERP, September 2001)

Removal – The cleanup or removal of released hazardous substances from the environment. Such actions may be taken in the event of the threat of release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release.

The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under section 9604(b) of this title, and any emergency assistance which may be provided under the Disaster Relief and Emergency Assistance Act [42 U.S.C. 5121 et seq.]. (CERCLA, 42 U.S.C. § 9601 et seq.)

There are three types of removals:

1) Emergency – Emergency removal or response is performed when an immediate or imminent danger to public health or the environment is present and action is required within hours. Trained responders identify the explosive threat and make the decision as to whether the munitions and explosive of concern should be moved or blown in place and ensure the threat is removed safely and expeditiously.
2) Time-critical – A response to a release or threat of release that poses such a risk to public health (serious injury or death), or the environment, that cleanup or stabilization actions must be initiated within 6 months.
3) Non-time-critical – An action initiated in response to a release or threat of a release that poses a risk to human health and welfare, or the environment. Initiation of removal cleanup actions may be delayed for six months or more.

Risk Reduction – The movement of any site from a higher to lower relative risk category as a result of natural attenuation, interim remedial, remedial, or removal actions taken. (DoD Instruction 4715.7, Environmental Restoration Program, April 1996)

Site (as defined in the Restoration Management Information System Data Element Dictionary for a SITE ID) – A unique name given to a distinct area of an installation containing one or more releases or threatened releases of hazardous substances treated as a discreet entity or consolidated grouping for response purposes. Includes any building, structure, impoundment, landfill, storage container, or other site or area where a hazardous substance was or has come to be located, including formerly used sites eligible for building demolition/debris removal. Installations and ranges may have more than one site. (MGDERP, September 2001)

Transferred Range – A property formerly used as a military range that is no longer under military control and had been leased by the Department of Defense (DoD), transferred, or returned from the DoD to another entity, including federal entities. This includes a military range that is no longer under military control but was used under the terms of a withdrawal, executive order, special-use permit or authorization, right-of-way, public land order, or other instrument issued by the federal land manager. (MGDERP, September 2001)

Transferring Range – A military range that is proposed to be transferred or returned from the DoD to another entity, including federal entities. This includes a military range that is used under the terms of a withdrawal, executive order, act of Congress, public land order, special-use permit or authorization, right-of-way, or other instrument issued by the federal land manager or property owner. An operational or closed range will not be considered a "transferring range" until the transfer is imminent. (MGDERP, September 2001)

Unexploded Ordnance (UXO) – Military munitions that have been primed, fuzed, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material, and remain unexploded either by malfunction, design, or any other cause. (10 U.S.C. 101(e)(5))

UXO Technician – Personnel who are qualified for and filling Department of Labor, Service Contract Act, Directory of Occupations, contractor positions of UXO Technician I, UXO Technician II, and UXO Technician III. (Safety and Health Requirements for Ordnance and Explosives (OE) Operations, ER 385-1-95, 16 June 2003)

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The following outline was adapted from previously approved CSE Phase I reports:

1.0 Introduction

- 1.1 Purpose
- 1.2 Project Data Quality Objectives
- 1.3 Project Management
- 1.4 Project Scope
- 1.5 Report Organization

2.0 Installation Background

- 2.1 Location and Setting
- 2.2 Installation Mission and Operational History
- 2.3 Summary of Munitions and Explosives of Concern-Related Activities
- 2.4 Introduction of Munitions Response Areas
- 2.5 Previous Investigations

3.0 Physical Environmental Setting

- 3.1 Climate
- 3.2 Topography
- 3.3 Hydrology
- 3.4 Soil and Vegetation Types
- 3.5 Geology and Hydrogeology
- 3.6 Applicable or Relevant and Appropriate Requirements

4.0 Summary of Data Collection Activities

- 4.1 Historical Records Review
- 4.2 Personal Interviews
- 4.3 Visual Surveys
- 4.4 Off-Site Reconnaissance
- 4.5 Data Management
  - 4.5.1 Electronic Data
  - 4.5.2 Hardcopy Data
  - 4.5.3 Geographical Information System Data
- 4.6 Evaluation of Additional Investigation Areas

5.0 Site Characteristics

- 5.1 Site Description
- 5.2 History of Munitions and Explosives of Concern Activities
- 5.3 Current Land Use
- 5.4 Access Controls
- 5.5 Restrictions
- 5.6 Visual Survey Observations and Results
- 5.7 Off-Site Reconnaissance Observations
- 5.8 Receptors
  - 5.8.1 Near-by Population
  - 5.8.2 Buildings Near/Within Munitions Response Areas
  - 5.8.3 Utilities On/Near Munitions Response Areas
- 5.9 Cultural/Archaeological Resources
- 5.10 Natural Resources
  - 5.10.1 Threatened, Endangered, and Special Status Species
  - 5.10.2 Sensitive Ecological Settings
- 5.11 Appropriate Future Land Use Designation

6.0 Evaluation of Known/Suspected Munitions and Explosives of Concern

- 6.1 Munitions and Explosives of Concern Technical Data
- 6.2 Primary Sources and Release Mechanisms
- 6.3 Munitions and Explosives of Concern Locations (Secondary Sources)
- 6.4 Munitions and Explosives of Concern Penetration Estimates
- 6.5 Special Consideration Munitions and Explosives of Concern
- 6.6 Known/Suspected Munitions Constituents
- 6.7 Explosives Safety Submission Information
  - 6.7.1 Munitions with the Greatest Fragmentation Distance
  - 6.7.2 Maximum Credible Event
  - 6.7.3 Frost Line

7.0 Evaluation of Hazardous Waste Substances

- 7.1 Hazardous Waste Activities
- 7.2 Hazardous Waste Characteristics

7.3 Source Areas

7.4 Contaminants of Concern Known/Suspected Releases

7.5 Special Considerations

8.0 Exposure Pathway and Hazard Assessment

8.1 Munitions and Explosives of Concern Exposure Pathway

8.2 Groundwater Migration Pathyway Analysis

8.3 Surface Water Migration Pathway Analysis

8.4 Soil Exposure Pathway Analysis

9.0 Interim Conceptual Site Models

9.1 Munitions and Explosives of Concern

9.2 Munitions Constituents, Hazardous Substances, Pollutants, and Contaminants of Concern

10.0 Munitions Response Site Prioritization Protocol

10.1 Explosive Hazard Evaluation Module

10.2 Chemical Warfare Materiel Hazard Evaluation Module

10.3 Human Health Hazard Evaluation Module

10.4 Interim Munitions Response Site Priority

11.0 Summary and Recommendations

11.1 Summary and Recommendations

11.2 Summary of the CSE Phase I Findings

12.0 Cohort Assignment, Process Streamlining Opportunities, MRA Subdivision, and Newly Identified MRAs

12.1 Cohort Assignment

12.2 Process Streamlining Opportunities

12.3 Additional MRS (Splitting the MRA)

12.4 Newly Identified Munitions Response Areas

<u>CSE Phase I Report Appendices</u>

The following appendices will be included as supporting information to the report.

- A – Definitions
- B – Acronyms and Abbreviations

- C – References
- D – Photo-Documentation Log
- E – Project Source Data
- F – Ordnance Technical Data Sheets
- G – Munitions Response Site Prioritization Protocol Tables
- H – RACER Data Input Worksheet
- I – AFRIMS Data Input Worksheet
- J – Documentation of Public Participation Support (Fact Sheets)

Maps

Installation Location – Identify the location of the installation within the appropriate state, province, or territory.

Site Locations – Identify the locations of all MRAs within the boundaries of the installation.

Results of Visual Survey – Identify the areas investigated; note GPS locations where specific observations were made: firing points, target areas, berms and other MEC locations; identify possible hazardous substance source/release areas, such as waste piles, surface impoundments, or drum locations; identify site features, such as buildings and structures, on-site and nearby receptors, such as bodies of water and wells; identify boundaries abstracted from historical drawings/documents.

Results of Historical Records Review – Identify boundaries abstracted from historical drawings/documents; identify range fans, firing points, target areas, berms and other MEC usage locations; identify any other historical data gathered from historical records.

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UNITED STATES ARMY CORPS OF ENGINEERS
OMAHA DISTRICT

PERFORMANCE-BASED CONTRACT

STATEMENT OF OBJECTIVES (SOO)

FOR THE

AIR FORCE MILITARY MUNITIONS RESPONSE PROGRAM (MMRP)
MILITARY MUNITIONS RESPONSE ACTIONS

AT

Various Locations CONUS East

Contract Number: ***W9128F-09-D-0058***
Task Order: ***0001***

12 August 2009

LIST OF APPENDICES (Not Included)

Appendix A Government Furnished Information
Appendix B Air Force Cohort Types
Appendix C Definitions
Appendix D Acronyms
Appendix E References
Appendix F Cost Estimating Form
Appendix G CSE Phase I Training Module

INTRODUCTION

The goal of the AF MMRP is to make munitions response areas (MRAs) (see Appendix C for definition) safe for reuse and to protect human health and the environment in the process. The MMRP addresses the unique munitions and explosives of concern (MEC) and munitions constituents (MC) issues associated with MRAs, as well as hazardous substances, pollutants, and contaminants of concern (COC) on other than operational ranges.

The goal of this SOO is to perform military munitions response action for the installations and associated MRA identified in Appendix A-1. A key element in accomplishing this goal is the Comprehensive Site Evaluation (CSE). The CSE is performed in two phases and establishes the basis for determining follow-on military munitions response actions for each MRA: Phase I is analogous to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) preliminary assessment (PA) and Phase II is analogous to the CERCLA site inspection (SI).

General performance standards for CSE Phase I are contained in Table 3-1. Follow-on military munitions response actions, if necessary, will be based on the results of this effort and incorporated via modification of this task order as appropriate.

This Statement of Objectives (SOO) complies with the Department of Defense's (DoDs) requirements to use performance-based acquisitions.[1]

In conducting the CSE, the AF will employ a knowledge-driven, performance-based management (KD/PBM) approach that focuses more on end results and less on the process by which the results are obtained.

The key components of the AF's KD/PBM approach for the CSE Phase I include:

Identify stakeholders' objectives;

Use investigations and studies that incorporate the EPA Triad approach (or equivalent) to manage uncertainty;

Develop a Conceptual Site Models (CSMs);

Establish an exit strategy;

Develop and implement decision-making logic;

Identify and track of performance-based metrics;

Procure services through results-based contracting that provide best value to the AF; and

Capitalize on experiences gained from the AF Installation Restoration Program.

The AF will benefit from the application of the KD/PBM by obtaining data that:

[1] *Air Force Cleanup Program Performance-Based Management Policy* (SAF/IEE, 27 October 2004).

Is consistent in quality and completeness;

Supports AF decision-making on whether further munitions response actions or investigations are required;

Supports the potential follow-up munitions response actions, if required (i.e., program management, relative risk prioritization, cost-estimating, etc.);

Supports the further definition of AF MMRP cohort types;

Supports the development of performance-based metrics (i.e., cost-to-complete and schedule-to-complete estimates by cohort type.);

Supports the streamlining of the restoration process, including the implementation of presumptive remedies for certain cohort types (Appendix B), and performance-based remedial objectives; and

Supports results-based contracting (i.e., CSE Phase I data supports CSE Phase II contracting).

Findings of the CSE shall support certain administrative actions that may be required of the AF prior to conducting munitions response actions. Administrative actions may include:

Partitioning of MRAs into multiple, discrete munitions response sites (MRSs);

Footprint reduction of actively managed acreage by administrative closure of discrete MRS, determined to pose no threat to human health or the environment, within a larger MRA or MRS that requires further munitions response;

Referral of MRAs or MRSs to another AF organization (i.e., for other programs, such as cultural or natural resources, pollution prevention or compliance) or other government agency (i.e., Department of Energy, Department of the Interior) for action as the lead or action in conjunction with HQ USAF/ILEVR;

Updating MMRP information in the AFRIMS for program management activities;

Development of cost estimates for further munitions response actions using the RACER MMRP module; and

Preparation of supporting documentation for further actions or investigations.

APPLICABILITY

The contractor shall initially conduct a CSE Phase I in accordance with this SOO at the installations that are contained in appendix A-1. A Historical Records Review (HRR) for each installation is in the final reporting phase and will be provided to the contractor after award of this task order.

A cost estimating form is included in Appendix F. This form WILL be utilized in developing the cost proposal for this effort. The contractor shall combine costs for all installations into the form, but still provide a summary page that shows the total cost per installation.

The Air Force has extensive experience in performing CSE Phase I's in the MMRP. As such, the CSE Phase I Training Module is included in Appendix G in order to provide the contractor

additional guidance in developing their technical approach to meet the performance requirements in Table 3-1.

The Air Force anticipates an approximate 18 month period of performance. The contractor shall demonstrate their capability to complete the requirements of this SOO within and/or close to this timeframe.

As discussed in paragraph 1.0, follow-on military munitions response actions will be incorporated via modification to this task order if warranted and appropriate.

A summary of information on the installation(s) and currently identified MRA(s) covered under this SOO is provided in Appendix A, Government-Furnished Information (GFI). The contractor is responsible for reconciling inconsistent data included in the GFI. GFI includes:

A-1 List of Installations and MRA's

A-2 Not Used

A-3 CSE Phase I checklist

A-4 CSE Phase I report format outline

A-5 AFRIMS data worksheet

A-6 RACER data worksheet

A-7 Data Management Tool (DMT) – will be provided separate from this SOO

PROJECT REQUIREMENTS

The specific tasks and objectives expected to be completed by this task order are described in Table 3-1.

Table 3-1: CSE Phase I Performance Requirements

Performance Tasks	Performance Standards	Submittals/Requirements	Objectives
Prepare and submit **CSE Phase I Planning Documents**.	Prior to initiating data collection activities: Prepare a Work Plan with schedule that includes a Critical Path Analysis (or equivalent) and a preliminary conceptual site model (PCSM) in graphical and tabular form. Prepare an abbreviated Site-Specific Health and Safety Plan (SSHSP).	Draft CSE Phase I Planning Documents for DoD Project Team member review Draft Final CSE Phase I Planning Documents for stakeholder project team member review Final CSE Phase I Planning Documents	Provide easily readable maps and figures in the CSE Phase I planning documents. Approval of Final CSE Phase I planning documents by authorities designated jointly by Major Command (MAJCOM) and/or Installation (DoD Project Team members)
Conduct **CSE Phase I**.	Ensure Performance Task #1 objectives were met prior to commencing Performance Task #2 Throughout the execution of this task, the contractor will utilize UXO qualified personnel as appropriate. In the event a live or potentially live military munitions is identified, the emergency procedures outlined in the Work Plans and/or SSHP will be followed. Assure necessary fieldwork is performed to determine with high degree of confidence that all MRAs have been identified. Assure that sufficient anecdotal, historical and physical information has been obtained to provide a defensible recommendation for future munitions response actions of no further action warranted. Incorporate a Systematic Planning Process (e.g., Triad, Technical Planning Process, or equivalent approach) into any CSE Phase I activities Document all activities; Complete appropriate portions of the CSE Phase I Checklist. (Appendix A)	Brief the Project Team on execution plan for conducting data collection activities at the entrance briefing (ref Table 5-1). Brief the Project Team on the conclusion of data collection activities at the Exit Briefing (ref Table 5-1). Coordinate fieldwork schedule, fieldwork efforts and entrance/exit briefings with USACE PM and RPM as directed. E-mail updates as warranted to USACE PM during fieldwork efforts.	Fully coordinated effort. Perform entrance briefing for DoD project team members. Verify on-site data collection has been completed and documented sufficient to meet performance standards. Perform Exit Briefing for DoD Project Team members.
Support **Public Participation** activities.	Support installation by providing materials and information for presentation to the identified stakeholders concerning the CSE Phase I efforts. Support of public meetings. Support may include such things as developing a briefing and providing materials.	Two fact sheets per installation, one introducing how the CSE Phase I will be implemented, and one at the conclusion of the CSE Phase I describing the findings.	Acceptance of fact sheets by DoD Project Team members

Performance Tasks	Performance Standards	Submittals/Requirements	Objectives
Prepare and submit a **CSE Phase I Report**.	Start of Performance Task #4 is based on meeting objective of Performance Task #2. Document all activities; compile data, present data analyses, and results of analyses. Complete the CSE Phase I Checklist. (Appendix A) Develop a comprehensive report that is in compliance of all reporting requirements in the CSE Phase I outline in Appendix A. If a specific section is not applicable, the contractor will discuss with the USACE Project Manager Provide recommendations whether or not further munitions response actions are required at each MRA based on the AFLU Provide a recommendation to update the AFLU determination based upon findings from the CSE Phase I	Draft CSE Phase I Report. Draft Final CSE Phase I Report. Final CSE Phase I Report Provide all supporting documentation in hardcopy and digital formats (format to be determined by Project Team). Provide updated 8.5"X11" map for Section 311 submittal requirement of the FY02 National Defense Authorization Act in *.pdf format (map minimum content shall meet requirements of FY02 NDAA section 311 §2710(A-D))	Final CSE Phase I Report and map acceptance by DoD Project Team members
5. Update and submit **the Data Management Tool (DMT) Database**	The information collected will be uploaded into the data management tool (DMT) for the Air Force MMRP.	An Access database containing all the appropriate data shall be submitted. The database shall include all the required data, along with specific references to the location in the accompanying report where the information on which the selection or entry was based can be found.	Approval of Access database by authorities designated jointly by MAJCOM and/or Installation (DoD Project Team members)
6. Update the **Administrative Record and Information Repository**.	Coordinate with the AF POCs responsible for maintaining the AR/IR to obtain the format and number of copies required	Provide AR/IR updates in the appropriate digital and hardcopy formats	Approval of the updates to the AR/IR by installation Remedial Project Manager or equivalent designee

Applicable Documents

Applicable definitions, acronyms, and a reference list are provided in Appendices C, D, and E. The GFI (Appendix A) provides worksheets and checklists for CSE Phase I-related tasks, required for submission with deliverables under this SOO.

GENERAL REQUIREMENTS

The following general requirements shall apply to this Task Order (TO):

The contractor shall function as an integral member of the Project Team in support of the AF mission. To facilitate this, the AF will rely on the contractor's expertise in munitions response and environmental restoration.

The contractor is expected to anticipate and address any technical or regulatory problems or issues, for successful fulfillment of SOO requirements.

The contractor is encouraged to use innovative technologies and management techniques to achieve project objectives and to promote these technologies and techniques to the appropriate stakeholders.

The contractor shall supply all labor, equipment, and materials necessary to achieve the performance objectives of this task order.

All work shall be completed in accordance with this SOO and in compliance with applicable Federal, State, and local statutes and regulations, and USAF and DOD Policies, regulations and instructions.

Documents shall be written using standard English and shall correctly use all technical and regulatory terminology, being clear, concise, and well written.

Contractors shall provide contract execution status reports to the Project Team as directed by the USACE Project Manager.

PERFORMANCE REQUIREMENTS

The contractor shall be responsible for meeting all performance objectives outlined in this SOO.

Payment Schedule

The contractor shall include an execution schedule and a milestone payment schedule that is based upon the execution schedule in their proposal. In addition, the contractor must structure its proposed milestone and payment schedule, so at least 10% of the value of the task order resulting from this SOO is included in the final milestone payment.

Proposed Meetings

Meetings shall be held to brief the Project Team on initiation of activities, coordination of activities, progress, and conclusion of activities. The contractor will coordinate with the service center representative(s) in conducting and participating in the meetings outlined below in Table 5-1. These meetings include a Stakeholder kickoff tel-con meeting and entrance and exit briefings for each installation listed in Appendix A-1 of this SOO. The contractor shall anticipate at least monthly status meetings with the service center representative(s) and other meetings as required by the Air Force.

Table 5-1: Schedule of Meetings

Meetings	Purpose	Participants
Stakeholder Kickoff (Tel-con)	Identify MAJCOM/Installation specific execution procedures Review goals and objectives Establish approval authority and Project Team members Establish lines of communication Pre-coordination for installation visits and access to installation and MRAs Coordinate document distribution lists Assign document distribution, comment consolidation and comment resolution responsibilities Determine MAJCOM/Installation-specific geo-spatial data format Designate AF personnel responsible for AR/IR update Coordination with installation personnel (e.g., natural/cultural resources, flight ops, safety, EOD, etc)	MAJCOM Representatives Service Center Representative(s) Contractor representatives Installation representatives (as directed by MAJCOM) Regulators (as directed by MAJCOM/Installation)
Installation Entrance Briefing	Identify all stakeholders. Ensure that all participants understand the CSE process. Present contractor's planned activities for conducting the CSE Phase I. Discuss specific details of the installation and known MRAs. Facilitate logistics/coordination between installation POCs and the contractor. Identify and address any anticipated obstacles. Secure access to MRAs and off-site areas (as needed). Review planning documents, as needed.	Contractor, Contract Service Center (CSC), installation RPM, installation Safety Officer, local Explosive Ordnance Disposal (EOD) personnel (optional), MAJCOM RPM (optional), MAJCOM Safety Officer (optional), HQ USAF/ILEVR (optional), State regulators, Federal regulators (optional), other stakeholders as identified.
Installation Exit Briefing	Present a summary of data collection activities conducted and preliminary findings. Discuss potential follow up actions. Discuss the deliverables schedule, reviews, and budgetary issues. Discuss any significant challenges encountered. Discuss and address any outstanding issues. Ensure that objectives are being met.	Contractor, CSC, installation RPM, installation Safety Officer, local EOD personnel (optional), MAJCOM RPM (optional), MAJCOM Safety Officer (optional), HQ USAF/ILEVR (optional), State regulators, Federal regulators (optional), other stakeholders as identified.

QUALITY ASSURANCE

To ensure the objectives in are met, the Government will employ quality assurance (QA) measures, as described in the following sections. The Government will utilize periodic assessments of the contractor's performance by the PM, CO, COR, and other technical experts, as deemed necessary. Ultimately, the contractor is responsible for its performance and achieving the stated objectives of this SOO.

Government Reviews

The Government will conduct reviews, as a part of the Project Team. A maximum of 30 calendar days is allowed for DoD review of deliverables. The contractor may request additional Government input or in-progress reviews; however, such requests must be coordinated with the Corps PM. The Government reserves the right to conduct additional reviews, as needed. Other stakeholders may be identified by MAJCOM/installation to review these deliverables, as deemed

necessary. After review, comments and suggested revisions will be forwarded to the contractor. The contractor shall address the comments from each entity and incorporate suggested revisions of the draft deliverables, as appropriate.

Corrective Measures

The Government will execute the following corrective measures, as needed, to insure that its legal, regulatory, and other guidance objectives are met in conducting the CSE.

If performance deficiencies are found, the contractor will be given the right to correct the deficiencies first.

Until deficiencies are corrected, the CO may stop milestone payments.

The Government reserves its rights to seek equitable adjustments under current contract provisions.

GOVERNMENT POINTS OF CONTACT

Government POCs for administration, coordination, and facilitation of this project will be provided after contract award.

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This checklist shall be used to determine when the CSE Phase I documentation and activities meet established requirements. The checklist shall accompany the final CSE Phase I Report.

Checklist Preparer: _____
(Name/Title)

_____
(Company)

_____
(Address)

_____ _____
(E-mail address) (Phone)

Site Location: _____
(Installation)

_____
(Street)

_____
(City / State / Zip)

FFID No: _____

Latitude: _____ **Longitude:** _____

Complete the following checklist. If "NO" is checked for any response, please explain in the space provided below.	**YES**	**NO**
1. Are all Munitions Response Areas (MRAs) listed in the AF MMRP Inventory?		
2. Are all proposed Munitions Response Sites listed in the AF MMRP Inventory?		
PERFORMANCE TASK #1		
3. Does the Final Work Plan contain:		
a) A list of on-site/off-site data repositories that will be visited for information about the potential releases for each MRA; such as pathway(s) of exposure, targets, sources, and nature of the release been performed		
b) A review of historical aerial photographs		
c) A preliminary conceptual site model for each MRA in tabular and graphic form		
d) A schedule and coordination requirements for a visual survey of each MRA		
e) A schedule of interviews with persons knowledgeable of MEC-related activities at each MRA		
f) A schedule of interviews with persons knowledgeable of waste management activities at each MRA		
g) Incorporation the Systematic Planning Process approach (or equivalent)		
4. Has an ASSHP been developed that addresses both explosives safety and hazards associated with chemical releases, in accordance with AFMAN 91-201, *Explosive Safety Standards* (revised) and DoDD 6055-9, *DoD Ammunition and Explosive Safety Standards*?		
PERFORMANCE TASK #2		
5. Has the entrance briefing been performed?		

Complete the following checklist. If "NO" is checked for any response, please explain in the space provided below.		YES	NO
6.	Has the exit briefing been performed?		
	PERFORMANCE TASK #3		
7.	Has the Introduction to the CSE Phase I fact sheet been submitted?		
8.	Has the Findings of the CSE Phase I fact sheet been submitted?		
	PERFORMANCE TASK #4		
9.	Does the CSE Phase I Report contain:		
a)	A description of the historical, physical and environmental setting of installation and each MRA		
b)	A description/history/nature of waste handling for each MRA/MRS		
c)	A description/history/nature of activities involving MEC at each MRA/MRS		
d)	Recommendations for establishing new MRS(s) within the existing MRAs		
e)	Recommendations and justification for any new MRAs		
f)	A description of known/suspected hazardous substances, pollutants and contaminants of concern (COCs) at each MRA/MRS		
g)	A description of known or suspected MCs at each MRA/MRS		
h)	Justification and rationale for the potential for perchlorate contamination at each MRA/MRS		
i)	A description of the nature and location of suspected releases at each MRA		
j)	A description of known/suspected MEC at each MRA		
k)	A description of pathways of migration for MEC, MC, hazardous substances, pollutants, COCs and MC for each MRA/MRS		
l)	A comprehensive list of applicable or relevant and appropriate requirements for each MRA/MRS		
m)	A description of pathways of migration of MEC for each MRA/MRS		
n)	An identification and description of sensitive human and environmental receptors for MEC, MC, hazardous substances, pollutants and COCs for each MRA/MRS		
o)	A recommendation for further action or investigation, if required, for each MRA/MRS		
p)	Recommendations for sampling, field analysis, and laboratory analytical methods for COCs		
q)	An interim conceptual site model for each MRA/MRS		
r)	Clear identification of any MRA/MRS that (is)are not included in the current AF MMRP inventory		
s)	Completed tables (28) for the EHE, HHE, and CHE modules of the DoD Prioritization Protocol for each MRA/MRS		
t)	An MRS Priority for each MRA/MRS		
u)	A completed RACER Data Input Worksheet for each MRA/MRS		
v)	A completed AFRIMS Data Input Worksheet for each MRA/MRS		
w)	A cohort assignment for each MRA/MRS		

Complete the following checklist. If "NO" is checked for any response, please explain in the space provided below.	YES	NO
x) A determination and justification for natural resources injury for each MRA/MRS		
y) A compilation of required elements for a future Explosive Safety Submission, to include: site history, identification of future land use, appropriate UXO detection methods, appropriate detection depths and equipment, and mention of greatest fragmentation distance		
z) Documentation of assumptions made in data analysis		
aa) List of sources for all data		
10. Have aerial photographs, maps and digitally recorded and geo-referenced information in a format compatible with existing MAJCOM GIS tools been provided?		
11. Has a map that meets the requirements of FY02 NDAA, Section 311 been submitted for each MRS?		
PERFORMANCE TASK #5		
12. Has Administrative Record and Information Repository documentation been provided in the appropriate format and sufficient quantity?		

Provide a brief explanation of "no" responses shown above (attach additional sheets as needed):

_____
_____
_____
_____

(Checklist Preparer Printed Name/Organization)	*(Checklist Preparer Signature/Date)*
(Air Force Reviewer Printed Name/Organization)	*(USACE Reviewer Signature/Date)*
(USACE Reviewer Printed Name/Organization)	*(USACE Reviewer Signature/Date)*
(State Regulatory Reviewer Printed Name/Organization)	*(State Regulatory Reviewer Signature/Date)*
(EPA Regional Reviewer Printed Name / Organization)	*(EPA Regional Reviewer Signature / Date)*

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The Air Force has subdivided the existing Munitions Response Areas (MRAs) into seven "cohorts," or similar types of MRAs. The assignment of MRAs to cohorts, in conjunction with the KD/PBM approach, will support the streamlining of the restoration process, including the development and implementation of presumptive remedies for specific cohort types. The seven AF MMRP cohorts are shown below in **Table E-1**.

Table E-1
Air Force MMRP Cohort Assignments

Cohort	Description
A	Small Arms Ranges
B	Boresight Ranges
C	Explosive Ordnance Disposal (EOD) Ranges and Open Burn/Open Detonation (OB/OD) Sites
D	Chemical Warfare Materiel (CWM) Sites
E	Pyrotechnic/Practice Sites
F	All Other Sites
G	Munitions Constituents

As the Air Force MMRP evolves, the cohort assignments may be expanded or consolidated to reflect what has been learned about the MRAs. Each cohort type is discussed in more detail in the following sections.

E.1 SMALL ARMS RANGES

Small arms ranges include those sites where ammunition of .50 caliber or less and no longer than four inches is fired from rifles, shotguns, pistols, and machine guns. Small arms ranges include the following:

- Pistol Ranges
- Rifle Ranges; and
- Skeet and Trap Ranges.

The primary MEC items at small arms ranges are spent cartridges and clay target debris (in the case of skeet and trap ranges). The MCs associated with small arms ranges are heavy metals, primarily lead and polycyclic aromatic hydrocarbons (PAHs), associated with the coal tar binding material in the clay targets at skeet and trap ranges.

E.2 BORESIGHT RANGES

Boresight ranges were used to align the fixed machine guns or cannon on an airplane, so that the rounds would impact at a desired point in front of the aircraft. The specific types of MEC and MC likely to be encountered are functions of the types of aircraft and armaments tested at the ranges. If the range was used to align aircraft-mounted machine guns, then it is anticipated that munitions of .50-caliber or less (i.e., small arms) would be present. If the range was used to align aerial cannon, then it is anticipated that munitions of 20-millimeter (mm) or larger would be present.

E.3 OPEN BURN/OPEN DETONATION (OB/OD) SITES/EXPLOSIVE ORDNANCE DISPOSAL (EOD) RANGES

OB/OD operations are used to destroy excess, obsolete, or unserviceable munitions and energetic materials. In OB operations, munitions are destroyed by self-sustained combustion that is ignited by an external source, such as flame, heat, or a detonation wave. In OD operations, detonatable explosives and munitions are destroyed by the detonation of an energentic charge. MEC and MC encountered at OB/OD sites are a function of the past disposal practices during the operational lifecycle of the site.

EOD ranges are MRAs that were used for the training of EOD unit personnel and/or for the disposal of MEC items by EOD personnel. MEC and MC encountered at EOD ranges are a function of the training activities and/or disposal operations conducted during the operational life cycle of the ranges.

E.4 CHEMICAL WARFARE MATERIEL SITES

Chemical Warfare Materiel (CWM) sites present unique challenges not encountered in other MMRP cohort types. In addition to the explosive hazards posed by conventional MEC, CWM presents significant acute toxicity risks to human health, due to its chemical or biological filler (i.e., mustard gas, VX nerve agent, etc.). When CWM is present at an MRA, explosive hazards are addressed and mitigated first, followed by non-stockpile CWM hazards.

E.5 PYROTECHNIC/PRACTICE ORDNANCE SITES

Pyrotechnics are used to send signals, illuminate areas, simulate weapons during training, and as ignition elements for some weapons. Pyrotechnics consist of a wide range of materials that when combined, produce the desired effects of specific time delays, heat, noise, smoke, light, or infrared radiation.

Practice ordnance is used to simulate the weight and flight characteristics of an actual weapon. Practice ordnance usually carries a small spotting charge (i.e., black powder) to allow observers to assess the accuracy of impact. MCs encountered at pyrotechnic/practice sites include, but are not limited to, various metals, white phosphorous, and perchlorate.

E.6 MUNITIONS CONSTITUENTS SITES

This classification includes MRAs for which MEC are not anticipated to be encountered but evidence indicates MCs are present. MCs include thousands of compounds, including metals, explosives, propellants, pyrotechnic chemicals, and the intermediate compounds that result from degradation of the munitions fillers in the environment. The types of MCs encountered at these sites are a function of past MEC usage, storage and disposal practices.

E.7 ALL OTHER SITES

This generic category was created due to the large number of sites that either did not fall into any of the other six cohort types or for which there was insufficient information available from the Air Force MMRP Inventory so as to definitively classify them.

After conducting CSE Phase I and Phase II investigations, the Air Force may be able to move MRAs from this cohort type into one of the other six cohort types. Alternatively, the Air Force may seek to expand its MMRP cohorts to include the following types of MRAs:

- Bombing Ranges;
- Air-to-Air Ranges;
- Air-to-Ground Ranges;
- Artillery Ranges;
- Missile Ranges;
- Medium Caliber Ranges;
- Large Caliber Ranges;
- Aerial Rocket Ranges; and
- Munitions storage facilities
- Bunkers.

With the exception of munitions storage facilities, the categories listed above primarily include those sites where ammunition of greater than .50-caliber and other ordnance types (i.e., bombs, missiles, rockets, projectiles, etc.) have been fired, launched, or dropped.

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ABBREVIATED SITE SAFETY AND HEALTH PLAN (ASSHP)

(IAW EM 385-1-97, 15 September 2008)

Site Name:	Schenectady County Airport Stratton Air National Guard Base, Schenectady, NY
Version:	[X] Original [ ] Revision/Date:
Prepared by:	Peter Corigliano
Affiliation:	FPM Remediations, Inc
Address/Phone:	153 Brooks Rd., Rome, NY, 13441 315-336-7721 ext. 211
Signature/Date:	
Reviewer Signature/Date:	Justin Damann
Title/Affiliation:	Environmental Scientist FPM Remediations, Inc. – Rome, NY
Sr. Reviewer Signature/Date:	Maureen Whalen, C.P.C., PMP
Title/Affiliation:	Project Manager/ Senior Geologist FPM Remediations, Inc. – Rome, NY
Team Leader:	Peter Corigliano
Title/Affiliation:	Environmental Scientist FPM Remediations, Inc. – Rome, NY
Signature/Date:	

This ASSHP follows USACE EM 385-1-97; Appendix L dated 15 September 2008

NOTE: This ASSHP is to be used only for non-intrusive site visits and it must be approved prior to the start of the field visit. Each team member must read and comply with the ASSHP and attend the safety briefings. The FPM Site Safety Officer (SSO) will ensure that the Safety Briefing Checklist and the plan acceptance forms are filled out prior to the start of the field work.

1. SITE DESCRIPTION AND CONTAMINATION CHARACTERIZATION

A. SITE DESCRIPTION:

SITE LOCATION (MRA –MRS)	APPROXIMATE SIZE
Ordnance Area: Inspection reports from 1953 indicate ammunition storage facilities consisted of an armament vault at the end of the Squadron Supply Warehouse. A small safe inside the storage vault was used to store MK 13 Distress Flares. Ammunition on hand included: .30, .45, and .50 caliber ammunition; 12 gauge, No. 8 skeet shotgun shells; and MK 13 Distress Signals. The exact location of the ordnance storage area is unknown.	To Be Determined (TBD)
Pistol Range: This range was identified from a 1982 document. Buildings in the general area of the site can be seen on the 1973, and 1990 aerial photographs, and current proprietary sources, such as Google Earth.	224 Acres
Rifle, Pistol, and Machine Gun Range: The location of the Rifle, Pistol, and Machine Gun Range, referenced in documents from the 1960s is unknown.	TBD
	Current Acres Identified – 224

TOPOGRAPHY		SITE USES	
☐ Forested		☐ Rural	☐ Urban
☑ Open Terrain		☐ Ag Business	☐ Commercial
☐ Lake, Pond		☐ Farming	☐ Industrial
☐ Wetland		☐ Ranching	☐ Mining
☑ Grassland	☐ Arid	☑ Military	☐ Residential
☐ Hilly	☐ Tillage	☑ Government	☐ Recreational
☐ Other		☑ Other: County Airport	

B. CONTAMINATION CHARECTERIZATION:

CHEMICAL CONTAMINANT LISTING		
Chemical	**Location**	**Concentration**
None	N/A	N/A

ORDNANCE/EXPLOSIVES CONTAMINATION			
Type	**Amount**	**Location**	**Surface/Subsurface**
None	N/A	N/A	N/A

2. HAZARD/RISK ANALYSIS

Tasks to be performed:

- Task 1: Visual surveying of areas of interest on the suspected MRAs to photograph physical evidence supporting historical use of the sites as ranges; this includes target debris, MEC, distressed vegetation, craters, terrain features indicative of burial sites, firing points, berms, etc. Walking on and off paths, and roads; Driving on and off road will be conducted while completing tasks. Personnel will be escorted by a UXO Technician with a handheld

magnetometer following MEC avoidance techniques to provide additional information supporting the location of suspected burial sites and impact areas and their approximate extent. No intrusive operations will be conducted during this project.

UXO support (including the use of a hand-held magnetometer) is not anticipated to be necessary for the site visit based on available historical munitions usage information. However, if information collected during the site visit indicates the potential for MEC to be present, then the ASSHP, as written, will support MEC avoidance activities.

Task #	HAZARDS: Safety, Chemical, Physical, Radiological, Biological, OE (* See Below)	ACTION LEVELS (** See Below)
1 – Visual Survey of MRAs. Involves field work to investigate areas on military site. Two-person teams will walk these areas to collect data to identify potential presence of historical munitions use.	**SAFETY HAZARDS** Slips, trips and falls: Wear the appropriate PPE. Watch where you are going, and always use firm footing. Maintain firm footing while walking on uneven surfaces. Avoid open trenches/excavations. Wear work boots that are in good condition: Watch where you walk and maintain awareness of site conditions. Stay only in areas that have been cleared and with the UXO escort. Debris: Watch carefully for exposed nails; broken timbers; sharp protruding objects; broken glass, etc. when walking around the site. Confined Space: Not Applicable (N/A) (No entry is authorized) Eye Hazards: Safety glasses will be available for times when there is dust or windy conditions or for anyone that wishes to use them. Lifting Hazards: Utilize proper lifting technique, size up load before lifting, and ask for help when lifting items over 50 lbs.	Action levels shall typically be defined as requiring site evacuation only if significant hazards are encountered.
	CHEMICAL HAZARDS No evidence in historical records suggests chemical hazards at this site.	

	PHYSICAL HAZARDS Heat / Cold Stress: Dress appropriately. Take sufficient breaks and drink plenty of fluids. Watch for signs/symptoms of cold/heat stress. Monitoring may be applicable depending on the site weather conditions and type of personal protective equipment (PPE) worn. Vehicle Operation: Personnel operating a vehicle shall attend daily safety meetings and don seatbelts if the vehicle is so equipped. A specific manufacturer's operating manual shall be present with the vehicle and protected from the elements for reference. Ground guide should be used when backing vehicle.	
	RADIOLOGICAL HAZARDS No evidence in historical records suggests radiological presence at this site.	Withdrawal from the area is required in the event the field team discovers evidence of a radiological hazards
	BIOLOGICAL HAZARDS Poisonous Snakes, Insects or Spiders: • DO NOT handle any snake/insect/spider even those that appear to be dead. • Avoid areas of limited visibility such as tall grass or heavy vegetation. • Roll sleeves down and use insect repellant. • Do not use equipment to poke into animal burrows or nests. Poisonous Plants: • Avoid areas of limited visibility such as tall grass or heavy vegetation. • Roll sleeves down, use barrier cream, and wear gloves.	

	MEC Hazards Evaluate exposure; minimize people, time, and amount of hazardous material. Age or condition of ordnance DOES NOT decrease hazard. Presence of GREEN MARKINGS indicates chemical filler MEC exposure to fire EXTREMELY hazardous	If during the visual survey the team discovers MEC, they will immediately move to a safe distance and record the location of the item/items for future investigation. At this time, the survey team will contact the installation POC, the installation EOD (if applicable), and USACE UXO Safety Official; and await further instructions. After contacting the aforementioned personnel, the survey team will contact the contractor's PM who will in turn contact the USACE PM. The visual survey team will secure the area until relieved by the installation's response team.

Note: The non-intrusive activities for which this ASSHP is designed, will not typically encounter MEC, chemical contaminant, or radioactive exposures above background. In the event chemical or radioactive exposures which are judged to be significant are encountered (reasonable potential to exceed permissible exposure limits or encounter IDLH conditions, or where MEC is expected) this plan requires evacuation of the site, reevaluation, and development of a SSHP by the Qualified Industrial Hygienist/Safety Personnel which addresses the potential exposure.

3. STAFF ORGANIZATION, QUALIFICATIONS, AND RESPONSIBILITIES

TITLE	NAME	RESPONSIBILITY	PHONE NO.
Qualified IH/SP	Tim O'Rourke	Plan Approval	607.687.7434 (O)
Project Manager	Maureen Whalen	**FPM Project Manager** will oversee preparation for the site visit; implementation of the site-specific work plan, including this abbreviated ASSHP; provide progress reviews; prepare reports; and maintain schedule control. PM will also be responsible for project cost tracking, quality control, human relations, EPA regulations, work results, and personnel management.	315.336.7721 (O) 315.440.2416 (C)
Team Site Leader	Peter Corigliano	**On-Site SOH Authority**: The Team Leader will work with technical resources and installation personnel to prepare for the site visit, including arrangements for records access, personnel meetings, and visual surveys of the MRAs. The Team Leader will conduct research and interviews, conduct a safety briefing before the team visits the MRAs, and participate in the visual surveys. He will also conduct Installation Entrance and Exit Briefings.	315.336.7721 (O)

UXO Technician/ SSO	TBD	Brief this ASSHP. Ensure the ASSHP guidelines are followed. Provide UXO escort duties.	
CPR/First Aid	Peter Corigliano	Administer First Aid in the event of an emergency.	315.336.7721 (O)
Physician	Local medical facility ER	Medical treatment of personnel transported due to injury. Ellis Hospital, Schenectady, NY.	518.243.4000

4. TRAINING

All site personnel will have completed the training required by EM 385-1-1 and 29 CFR 1910.120(e). The Project Manager will ensure and the SSO will verify on-site personnel have completed the appropriate training prior to submitting the plan to the Safety Office for review. Additionally, the SSO will inform personnel before entering, of any potential site-specific hazards and procedures.

NAME	TYPE (40hr/Ref/Supv.)	PPE	SITE HAZARD
Peter Corigliano	40-hr HAZWOPER 8-hr Refresher 8-hr Supervisor CPR & First Aid	Level D	
UXO Tech - TBD	40-hr HAZWOPER 8-hr Refresher CPR & First Aid	Level D	

5. PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment Program

- PPE Selection: Level D
    1. Typically, for non-intrusive site visits, Level D is required. Hard hats will be worn if an overhead hazard exists. If hard hats are worn in an ordnance area, they will be securely fastened to the wearer's head. Eye protection will be available while on-site. Safety footwear is required on-site. For those persons operating magnetometers, safety boots of non-metallic construction or athletic shoes may be substituted for steel-toed safety boots. It is recommended that all footwear provide ankle support to the wearer.
    2. Contingency: Evacuate site if higher level of protection is needed.
- PPE Use and Equipment Limitations: No known atmospheric hazard; work tasks preclude splashes, immersion and potential for unexpected inhalation/contact with chemical hazards.
- Work Mission Duration: Maximum 10 hours per day for 4-day week, or 8 hours per day for 5-day week; task duration until all MRAs are covered.
- PPE Maintenance and Storage: Each team member is responsible for the storage and maintenance of their own PPE for this 'Level D' task.

- PPE Decontamination and Disposal: N/A
- PPE Training/Fitting: N/A
- PPE Donning and Doffing: Manufacturer's Instructions
- PPE Inspection: Team Leader will inspect each team member's PPE before field work begins each day.
- PPE Program Effectiveness: NA; Level D only
- PPE Temperature Limitations: Impermeable work clothing may cause heat stress. **>See paragraph 9 this ASSHP**

Levels of Protection/Task:

Level D: A standard work uniform affording minimal protection, used for nuisance contamination only. The following constitute Level D equipment; it shall be used as specified below. (Per 29 CFR 1910.120, Appendix A)

- Coveralls (optional)
- Gloves
- Boots/shoes, chemical-resistant steel toe and shank
- Boots, outer, chemical-resistant, disposable (optional)
- Safety glasses or chemical splash goggles (optional)
- Hard Hat (when over head hazardous exists)
- Escape masks (optional)
- Face shield (optional)
- Disposable Work Clothing (optional)

TASK #	PPE
All Tasks	Level D

6. MEDICAL SURVEILLANCE

a. Medical Surveillance Program employee participation certification:

NAME	EXAMINATION DATE
Peter Corigliano	Current
UXO Tech - TBD	

7. DOSIMETRY

a. Safety and Health issues involving employees working within a radiological restricted area, or activities that will generate worker exposure in excess of what is considered acceptable to the general public, are beyond the scope of this ASSHP.

b. Radiation Dosimetry: N/A

c. Employee radiation exposure history: N/A

d. Internal radioactive contamination exposure hazards: N/A

e. Report of Exposure to Ionizing Radiation: N/A

8. EXPOSURE MONITORING/AIR SAMPLING PROGRAM

Note: The non-intrusive activities for which this ASSHP is designed, will not typically encounter MEC, chemical contaminant, or radioactive exposures above background. In the event chemical or radioactive exposures which are judged to be significant are encountered (reasonable potential to exceed permissible exposure limits or encounter IDLH conditions, or where MEC is expected) this plan requires evacuation of the site, reevaluation, and development of a SSHP by the Qualified Industrial Hygienist/Safety Personnel which addresses the potential exposure.

a. Air Monitoring/Air Sampling: (See note above)

b. Real-time Screening for Ionizing Radiation: (See note above)

c. Sampling and analytical methods: N/A

d. Sampling analysis laboratories: N/A

e. Meteorological data: N/A

f. Noise Monitoring: N/A

g. Monitoring/Sampling results: N/A

h. Exposure monitoring records: N/A

9. HEAT/COLD STRESS MONITORING

The 2-person rule (buddy system) or appropriate monitoring procedures shall be used to observe heat stress symptoms. Arrangements shall be made to provide access to plain cool potable water.

Heat/Cold Stress Monitoring:

a. If heat stress monitoring is necessary, the monitoring criteria published in Chapter 8 of the NIOSH/OSHA/USCG/EPA "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities" (Oct 85) will be followed.

b. If cold stress monitoring is necessary, it will be conducted in accordance with the most current published American Conference of Governmental Industrial Hygienists cold stress standards.

10. STANDARD OPERATING SAFETY PROCEDURES, ENGINEERING CONTROLS AND WORK PRACTICES

a. Site rules/prohibitions: Teams will use the 2-person rule (buddy system); eating, drinking, and smoking will be done in designated areas and outside the immediate area of known or suspected MEC

b. Work Permit Requirements: None. (e.g. No radioactive work, excavation, hot work, confined space, etc.).

c. Material handling procedures: Do not handle soils, liquids, radioactive materials.

d. Drum/container handling procedures and precautions: Do not open, sample, or over pack.

e. Confined space entry procedures: For this project confined space entry is not required to accomplish the data acquisition requirements and is not authorized.

f. Hot work, sources of ignition, fire protection/prevention, and electrical safety: Avoid all electrical hazards, no smoking, avoid spark producing objects.

g. Evacuation and trench safety: Avoid/do not enter.

h. Safety Guards of Machinery and equipment: Do not operate/avoid all physical contact.

i. Lockout/Tagout: N/A

j. Fall Protection: No structural climbing, avoid potential areas where fall through could occur.

k. Hazard communication: N/A

l. Illumination: Daylight hours only (flash lights should be in field gear).

m. Sanitation: Use on-site/off-site facilities.

n. Engineering controls: N/A

o. Process Systems Safety: N/A

p. Signs and Labels: N/A

q. MEC Site Work Practices:

1. Do not touch or move any MEC items regardless of the marking or apparent condition.
2. Do not visit a MEC site if an electrical storm is occurring or approaching. If a storm approaches during a site visit leave the site immediately and seek shelter.

3. Do not use radio or cellular phones in the vicinity of suspect MEC items.
4. Do not walk across an area where the ground cannot be seen. If dead vegetation is present, or dead animals are observed, leave the area immediately due to the potential contamination of chemical agent.
5. Do not drive vehicles into suspected MEC area; use clearly marked lanes.
6. Do not carry matches, cigarettes, lighters or other flame producing devices into an MEC site.
7. Do not rely on color code for positive identification of MEC items or their contents.
8. If necessary, approach MEC items from the side, and avoid approaching the front and rear areas.
9. Always assume MEC items contain a live charge until it can be determined otherwise.

SPECIFIC ACTIONS TO BE TAKEN UPON LOCATING MEC

a. Do not be misled by markings on the MEC item stating practice bomb, a dummy or inert. Even practice bombs have explosive charges that are used to mark/spot the point of impact; or the item could be mismarked.
b. Do not roll the item over or scrape the item to identify the markings.
c. The location of any MEC found during site investigation should be clearly marked so it can be easily located and avoided.
d. Upon locating any MEC, notify the installation POC, installation EOD (as applicable) USACE UXO Safety Official, and USACE PM (See **Table 2-1** of the Work Plan for contact information).

General Information:

- The cardinal principle to be observed involving explosives, ammunition, severe fire hazards, or toxic materials is to limit exposure to a minimum of personnel, for the minimum amount of time, to a minimum amount of hazardous material consistent with a safe and efficient operation.
- Old, damaged, and possibly deteriorated MEC requires extreme caution. Some explosives may react with metals, other explosives, air, or chemicals in the earth to produce extremely sensitive explosive compounds.
- When chemical agents may be present, further precautions are necessary. If the munitions item has green markings, leave the area immediately, since it may contain chemical filler.
- Consider MEC that has been exposed to fire as extremely hazardous. Chemical and physical changes may have occurred to the contents that render it more sensitive than it was in its original state.

11. SITE CONTROL MEASURES

Work zones and access points: The base POC will determine access points and the SSO, in

conjunction with the base POC, will determine specific work zone accesses.

Site map delineating work zones: (See Figure F-1)

Ionizing radiation restricted areas: N/A

On-site and off-site communications:

On-site communication: Oral with a contingency for hand signals, or on-site cellular phone / FM two way radio (in the absence of suspected MEC). Verbal communications will be used among team members to communicate to each other on-site. If this communication is not possible, the following hand signals will be used.

- GRIP PARTNER'S WRIST OR BOTH HANDS AROUND WAIST: Leave the area immediately.
- HAND GRIPPING NOSE: Unusual smell detected.
- THUMBS UP: OK, I am alright or I understand.
- THUMBS DOWN: No, negative.

Off-site communication (Either on-site cellular phone / FM two way radio (in the absence of suspected MEC) or specified readily accessible on/off-site public or private phone. Communications with individuals off-site will be established on every site. Communications may be established by using an on-site cellular phone or by locating the nearest public phone or private phone that may be readily accessed.

☑ Cellular Phone
□ Public/Private Phone
□ other :(specify)

EMERGENCY SIGNALS: In the case of small groups, a verbal signal for emergencies shall suffice. The emergency signal for large groups should be incorporated at the discretion of the SSO.

☑ Verbal
☑ Nonverbal (Specify)

Three blasts on a vehicle's horn signals an emergency indicating the site must be evacuated and team members return to a pre-designated rally point.

Site security (physical and procedural) description:

Physical Site Security: Physical site security is maintained by the Stratton ANG personnel on duty.

Procedural Site Security: Stratton ANG personnel will dictate the security procedures to the field team and they will be followed.

General site access description:

The Stratton ANGB MMRP sites can be accessed from the installation off of Air National Guard

Road. It is located in Schenectady County, New York, and is situated approximately three miles north of the city of Schenectady, NY.

12. PERSONAL HYGIENE AND DECONTAMINATION

a. Necessary facilities and their locations: Local sanitary facilities will be used by on-site personnel during project operations.

b. Decontamination SOPs: N/A

13. EQUIPMENT DECONTAMINATION

a. Decontamination facilities/locations: N/A

b. Decontamination procedures: N/A

14. EMERGENCY EQUIPMENT AND FIRST AID REQUIREMENTS

a. First aid equipment and supplies: A first aid kit and eye flushing bottle will be located in the FPM SSO field car. If a qualified person (i.e., fire department, medical facility, or physician) is not accessible within 5 minutes of the site, at least two team members will be qualified to administer first aid and CPR.

b. Emergency eye washes/showers: N/A

c. Emergency-use respirators: N/A

d. Spill control materials and equipment: N/A

e. Fire extinguishers: A fire extinguisher will be located in the FPM SSO vehicle and in each team vehicle.

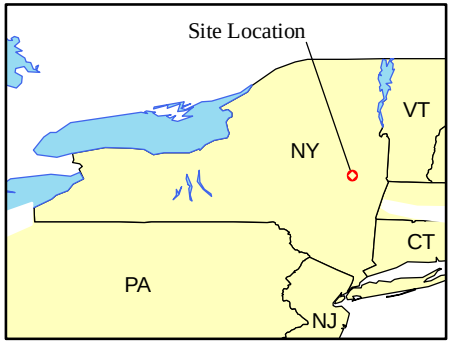
15. EMERGENCY RESPONSE AND CONTINGENCY PROCEDURES (ON-SITE AND OFF-SITE)

Local fire/police/rescue pre-notification:

Pre-notification of work will be given to the local emergency contacts for Fire, Police, and Rescue services. Notification will be conducted by the Team Leader as soon as the FPM personnel arrive in the project area prior to starting any site work.

Emergency response plan:

1. Pre-emergency planning and procedures for reporting incidents to appropriate government agencies:
   - Should an accident occur, reporting will comply with USACE EM 385-1-1, using the Preliminary Accident Notification Form and USACE Engineering Form 3394.



Legend

- Potential MRA Site
- Stratton ANGB Boundary

0 300 600 1,200 Feet

N

FPM

FIGURE F-1
MRA Location Map

Designed By: MF	**Military Munitions Response Program Work Plan**
Drawn By: MF	Stratton ANGB, Schenectady County Airport Scotia, New York
Checked By: JD	Projection: Projection: WGS 84 Meters
Submitted By: JD	Source: Source: ESRI Data & Maps 2008

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2. Personnel roles, lines of authority, communications:
    a. Personnel roles: Project Manager-Maureen Whalen, (O) 315.336.7721; SSO/CPR & First Aid-TBD; Team Leader/CPR & First Aid-Peter Corigliano, (O) 315.336.7721.
    b. Lines of Authority: The Project Manger and Team Leader are the main lines of authority on site. The Program Manger will be contacted in the event of any type of emergency.
    c. Communications: Communications will be conducted as outlined in Section 11.D. The Team Leader will be the on-site communications and coordinate client notification.
3. Posted Instructions (see attached route map below) and list of emergency contacts:
4. Emergency recognition and prevention: The site shall be evacuated in the event significant unexpected hazards are encountered which cannot be safely documented from an appropriate safe distance.
5. Site topography, layout, and prevailing weather conditions:
    a. Site Topography: Open terrain and grassland.
    b. Layout: See Figure F-1.
    c. Prevailing Weather Conditions: Weather conditions will be identified for each work day on-site. Specifics will be noted such as wind direction, daily temperature conditions, and other general weather patterns conditions and predictions each day that can affect site work
6. Criteria and procedures for site evacuation (emergency alerting procedures/employee alarm system, emergency PPE and equipment, safe distances, places of refuge, evacuation routes, site security and control).

Note: The non-intrusive activities for which this ASSHP is designed, will not typically encounter MEC, chemical contaminant, or radioactive exposures above background. In the event chemical or radioactive exposures which are judged to be significant are encountered (reasonable potential to exceed permissible exposure limits or encounter IDLH conditions, or where MEC is expected) this plan requires evacuation of the site, reevaluation, and development of a SSHP by the Qualified Industrial Hygienist/Safety Personnel which addresses the potential exposure.

    a. Emergency Alerting Procedures/Alarm System: Field-team personnel will be notified of an emergency orally if it is a small group within hearing distance, and/or by three, long, honks of a vehicle horn indicating the site must be evacuated.
    b. Emergency PPE and Equipment: Emergency PPE is not required for this non-intrusive investigation, see note above.
    c. Safe Distances: No minimum safe distances are proposed for this ASSHP, see note above.
    d. Places of Refuge: No places of refuge are identified for this ASSHP, see note above.
    e. Evacuation Routes: An evacuation route will be evaluated and chosen each day by the SSO before work begins. The chosen route and location will be communicated to each team member.

Project Manager	Maureen Whalen	(O) 315.336.7721 (C) 315.440.2416
Qualified Industrial Hygienist	Clark Robert	
Qualified Safety Personnel	Peter Corigliano CPR/First Aid	(O) 315.336.7721
Nearest Medical Facility	Ellis Hospital, Schenectady, NY	518.243.4000
Ambulance, Police, Fire		**Police, Fire, and Ambulance (emergency)**: 911, TTY 911 **Schenectady County Sheriff's Department** 320 Veeder Ave. Schenectady, NY 12307 518.388.4300 **Air National Guard Fire Department** Stratton Air Base. Schenectady County Airport Glenville, NY 12302-9752 Business Phone 518.344.2305 Chief James Acors **109 Safety Office** 1 Air National Guard Road Scotia, NY 12302-9752 518.344.2438
Poison Control Center	Hudson Valley Regional Poison Center	800.336.6997 (NY only) 914.353.1000
State/Local Emergency Response Centers	New York State Emergency Management Office Schenectady County CERT Program	518.292.2200 518.370.3113
National Response Center (by U.S. Coast Guard)	The National Response Center (NRC)	800.424.8802

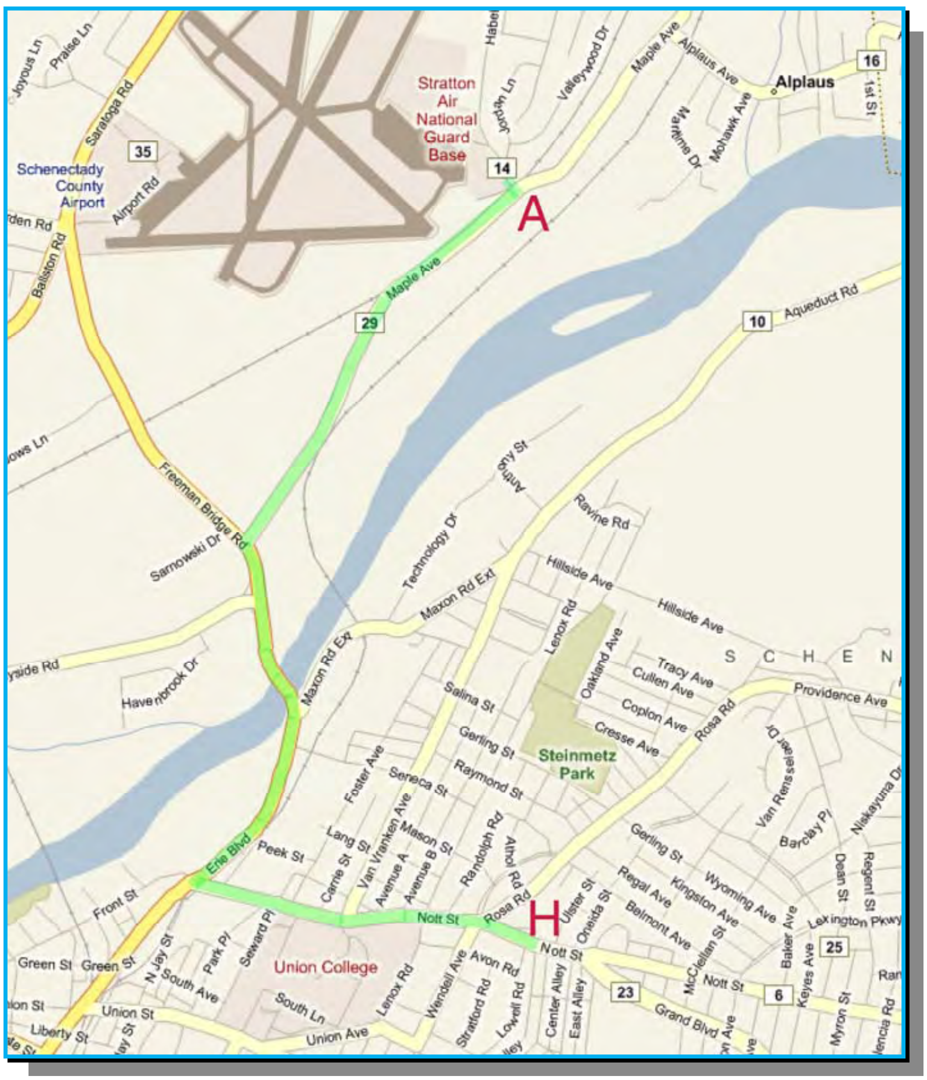
f. Site Security and Control: Site security is maintained by the Stratton ANG personnel on duty. Stratton ANG personnel will dictate the security procedures to the field team and they will be followed.

7. Specific procedures for decontamination and medical treatment of injured personnel: Decontamination is not expected for this non-intrusive task. Injured personnel will receive immediate first aid from the appropriate personnel listed above. The personnel performing first aid will determine whether emergency services will be notified.

8. Route maps to nearest pre-notified medical facility: See figure below.

Directions from Stratton ANGB to Ellis Hospital

	Starting Point	**Stratton ANGB** (Intersection of Air National Guard Road and Habel Lane)
1	Head southeast on Air National Guard Rd	go 120 feet
2	Turn right at Maple Ave	go 1.3 miles
3	Turn left at Freemans Bridge Rd	go 0.5 miles
4	Continue onto Erie Blvd/Maxon Rd	go 0.6 miles
5	Turn left onto Front St/Nott St	go 1.0 miles
	Destination	**Ellis Hospital** (1101 Nott Street Schenectady, NY 12308-2489)



9. Criteria for initiating community alert program, contacts and responsibilities: N/A
10. Critique of emergency responses and follow-up: c. 29 CFR 1910.38(a) applicability: See Paragraph 15.b.

16. ACCIDENT PREVENTION

Additional Accident Prevention Plan topics required by EM 385-1-1 are addressed as follows:

ALERTNESS TO DANGER: Team members are to be alert to the dangers associated with the site at all times. If a hazardous condition arises, stop work, evacuate the immediate area, and notify the FPM SSO.

GENERAL PRECAUTIONS

Prior to the on-site visit, all team members are required to read this ASSHP and sign the form acknowledging that they have read and will comply with it. In addition, the SSO will hold a brief tailgate meeting in which site specific topics regarding the day's activities will be discussed. The buddy system will be enforced at all times. If unanticipated hazardous conditions arise, team members are to stop work, evacuate the area and notify the SSO.

Accident reporting shall comply with USACE EM 385-1-1 using the Preliminary Accident Notification Form and USACE Engineering Form 3394.

ACCIDENT NOTIFICATION REQUIREMENTS

(1) All accidents that occur incidentally to this project will be investigated, reported, and analyzed as prescribed in this document and by the USACE-Omaha Project Manager.

a. Employees are responsible for reporting all injuries or occupationally related illnesses as soon as possible to the FPM Project Manager.

b. The FPM Project Manager is responsible for reporting all injuries to the USACE-Omaha Project Manager within 24 hours.

c. Under no circumstances will the Project Manager decline to accept a report of injury from a subordinate.

(2) An accident that appears to have any of the consequences listed below shall be immediately reported to the USACE-Omaha Project Manager. These accidents will be investigated in depth to identify all causes and to recommend hazard control measures. The USACE-Omaha Project Manager shall immediately notify the Safety and Occupational Health Office of all serious accidents and follow-up with official accident reports as prescribed by regulation. The FPM Project Health and Safety Officer shall notify the Occupational Safety and Health Administration (OSHA) when one or more of their employees are seriously injured.

a. Fatal injury;

b. Permanent totally disabling injury;

c. Permanent partial disabling injury;

d. Three or more persons admitted to a hospital; or

e. Property damage in an amount specified by USACE current accident reporting regulations.

(3) Except for rescue and emergency measures, the accident scene shall not be disturbed until it has been released by the investigating official. The FPM Project Manager or SSO is responsible for obtaining appropriate medical and emergency assistance and for notifying fire, law enforcement, and regulatory agencies. They must assist and cooperate fully with the USACE-Omaha Project Manager or other designated official conducting the government investigation of the accident.

The number of persons visiting the site will be held to a minimum. No more than eight persons per SSO will be allowed on site; the more persons on-site, the greater the potential for an accident. All changes or variances allowed to the approved ASSHP will be documented as modifications and approved by USACE-Omaha safety personnel (e.g., the USACE-Omaha Project Industrial Hygienist). This does not prohibit the on-site SSO from executing the modification and documenting it later, if site conditions warrant it, and without risking the safety and health of the team members. All modifications will be coordinated with the team members prior to entering the site.

17. LOGS, REPORTS, AND RECORD KEEPING

The records may include the following:

1. Daily safety inspection logs (may be part of the Daily QC Reports): N/A
2. Equipment maintenance logs: N/A
3. Environmental and personal exposure monitoring/sampling results: N/A
4. Records of radiation surveys, monitoring and disposal as per 10 CFR 20 subpart L: N/A

The following will be included:

1. Daily Tailgate Safety Briefing forms.

SAFETY BRIEFING CHECKLIST/ASSHP ACCEPTANCE

SITE NAME: **Stratton Air National Guard Base**

DATE/TIME: _____

GENERAL INFORMATION

_____ Purpose of Visit

_____ Key Site Personnel/Responsibilities

_____ Training & Medical Requirements

SITE SPECIFIC INFORMATION

_____ Site Description/Characterization/Past Uses

_____ Previous Studies/History

_____ Contaminant Characterization

_____ Potential Site Hazards/Health Effects

_____ MEC Safety Procedures

_____ Site Personal Protective Equipment (PPE) Program

_____ Site Standard Operating Procedures (SOP)

_____ Site Control Measures, Decontamination and Communications

_____ Emergency Equipment

_____ Emergency Response/Phone Numbers/Nearest Medical Facility

_____ Unanticipated hazardous conditions shall result in ceasing activities and evacuation of the site in accordance with instructions from the SSO.

PLAN ACCEPTANCE

I, the undersigned, have read and have been verbally briefed on the topics noted above and in the ASSHP and agree to comply with all the indicated safety and health requirements:

Printed Name	Organization	Signature	Date
Printed Name	Organization	Signature	Date
Printed Name	Organization	Signature	Date
Printed Name	Organization	Signature	Date
Printed Name	Organization	Signature	Date
Printed Name	Organization	Signature	Date
Printed Name	Organization	Signature	Date
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Printed Name	Organization	Signature	Date
Printed Name	Organization	Signature	Date
Safety Briefing Presenter		Signature	Date

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MMRP CSE PHASE I

CONTACT/INTERVIEW REPORT

Date: _____ Interviewer: _____

Contact by: Telephone ____ Meeting ____ Other _____

Site:

Name, Title and Organization:

Address and Telephone Number:

Summary:

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MMRP CSE PHASE I

SAMPLE INTERVIEW QUESTIONS

1. What position/assignment did you have at the installation?

2. What is your association with the munitions response area or range; i.e. how are you aware of activities there?

3. For what time period do you have information?

4. Do you have information on the type of ordnance or ammunition fired at MRA or range?

5. Do you know if the MRA or range ever was cleared of fired materials?

6. Are you aware of any materials dumped or burned at MRA or range?

7. Do you have information on units that used the MRA or range for training or other activities?

8. Can you identify other persons with knowledge of historical activities on the MRA or range?

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USAF Military Munitions Response Program Comprehensive Site Evaluation Phase I

1st FACT SHEET

Schenectady County Airport/ Stratton Air National Guard Base

March 2010

THE AIR FORCE

- Is dedicated to protecting human health and the environment by making MRSs *safe to reuse*.
- Is developing the MMRP by *maximizing efficiencies* and lessons learned from 20 years of environmental restoration experience.
- Will *prioritize MRSs* according to environmental, health, and safety considerations; current and future planned resource use; and site attributes.

FOR MORE INFORMATION

Please contact the U.S. Air National Guard, National Guard Bureau Environmental Division, (ANG NGB/A7OR) by writing to Jody Murata, NGB/A7OR, Conaway Hall, 3500 Fetchet Ave, Joint Base Andrews, MD 20762-5157 or by calling 301-836-8120.

The Air Force developed the Comprehensive Site Evaluation (CSE) to serve as the initial munitions response action of its Military Munitions Response Program (MMRP). The goal of the CSE is to obtain sufficient data to support Air Force decision-making with regards to effectively managing its munitions response areas (MRAs), while protecting human health and the environment.

The CSE is a holistic process that investigates explosive safety issues created by the potential presence of munitions and explosives of concern (MEC), as well as the environmental hazards posed by the presence of munitions constituents (MC). The CSE also addresses hazardous wastes, pollutants and chemicals of potential concern when these items are known or suspected to be present at a munitions response site (MRS).

The CSE Phase I acquires historical, anecdotal, visual, and prior analytical and geophysical data that is used to generate the following output for each identified MRA:

1) a conceptual site model (CSM) to evaluate/communicate potential hazards and support decision making;

2) a recommendation on whether or not further munitions response action is required;

3) a "MRS Priority" to prioritize the site for further actions;

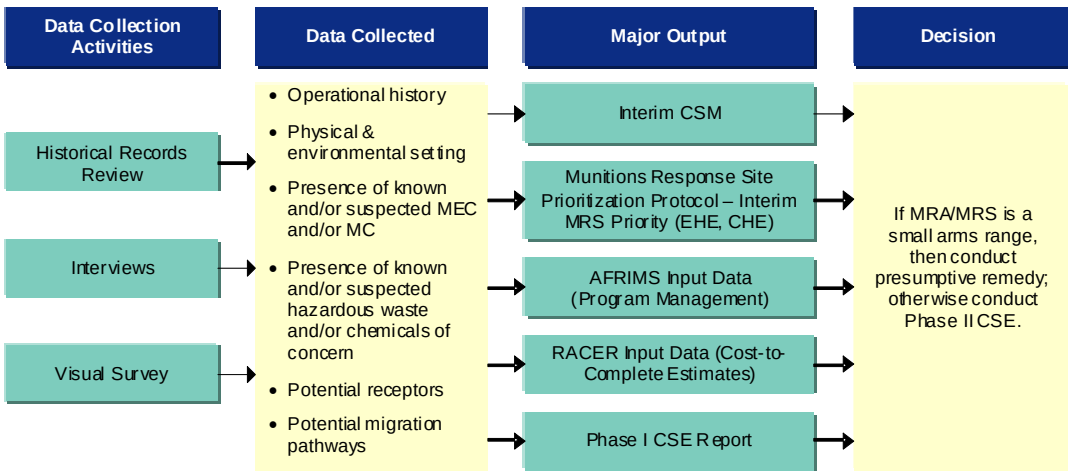
4) input data required for cost estimating; and

5) input data required for program management functions.

The CSE Phase I process is summarized in the figure below and on the following page.

The Air Force sees implementation of the CSE as the

CSE Phase I



USAF Military Munitions Response Program Comprehensive Site Evaluation Phase I

1st FACT SHEET

Schenectady County Airport/ Stratton Air National Guard Base

March 2010

ACRONYMS and ABBREVIATIONS

- AFRIMS: Air Force Restoration Information Management System
- CHE: Chemical Warfare Materiel Hazard Evaluation
- CSE: Comprehensive Site Evaluation
- CSM: Conceptual Site Model
- EHE: Explosive Hazard Evaluation
- MC: Munitions Constituents
- MEC: Munitions and Explosives of Concern
- MMRP: Military Munitions Response Program
- MRA: Munitions Response Area
- MRS: Munitions Response Site

FOR MORE INFORMATION

Please contact the U.S. Air National Guard, National Guard Bureau Environmental Division, (ANG NGB/A7OR) by writing to Jody Murata, NGB/A7OR, Conaway Hall, 3500 Fetchet Ave, Joint Base Andrews, MD 20762-5157 or by calling 301-836-8120.

first step in a performance-based, knowledge-driven approach for the Air Force MMRP as a whole. This approach will focus program efforts on achieving end results (as opposed to meeting artificial milestones), and provide high-quality, consistent data to support Air Force decision-making. The Air Force will solicit stakeholder participation throughout the CSE process.

Schedule

August 2009	**Off-Site Records Research**
March 2010	**CSE First Fact Sheet**
April – May 2010	**Phase I Work Plan**
June 2010	**On-Site Records Research and Field Reconnaissance**
Sept. 2010 – February 2011	**Draft and Final Report**
September 2010	**CSE Second Fact Sheet**
February 2011	**Administrative Record Update**

A contract for Air National Guard CSE Phase I activities was awarded in September 2009 and includes on-site records research, interviews and visual surveys of the munitions response areas (MRAs) for 13 installations in the Command's MMRP.

Stratton Air National Guard Base (ANGB) currently has three MRAs identified. A visual survey of the MRAs will be conducted to provide supplemental information including visual confirmation of evidence supporting historical range activities.

The on-site activities for Stratton ANGB are tentatively scheduled for the Spring of 2010.

The Phase I activities will include Work Plan preparation, records research, site visits, report preparation, public participation support, and administrative record updates. The administrative record file will be updated to include the final CSE Phase I report in December 2010.

For further information regarding Stratton ANGB CSE Phase I activities, contact Lieutenant Colonel Ronald Leadley, 109 AW, 518-344-2341.