# AGENDA

**May 23, 2006**
**TECHNICAL PROJECT PLANNING (TPP) MEETING**
**FOR THE**
**MILITARY MUNITIONS RESPONSE PROGRAM (MMRP)**
**SITE INSPECTION (SI) OF**

# MALTA TEST STATION

1. **Introductions –** *Name, Organization, & Role on the Project*

2. **MMRP & SI Overview -** *SI collects the minimum amount of information necessary to meet the objective (determination if further action is necessary for the site)*

3. **Overview of the TPP** – *Systematic & Comprehensive Process*

   **Phase 1 – Identify Current Project**
   **Phase 2 – Determine Data Needs**
   **Phase 3 – Develop Data Collections Options**
   **Phase 4 – Finalize Data Collection Program**

4. **Site History/Previous Investigations/Proposed Sampling Locations/CSM**

5. **Data Quality Objectives (DQOs)/Screening Criteria**

6. **Schedule** – *Review upcoming tasks and durations (i.e. TPP Memo, Draft Site Specific Work Plan, etc.)*

7. **TPP Memorandum -** *Minutes of TPP Meeting; Signatures by Team Members (for concurrence on what was discussed, does not signify agreement)*

8. **TPP Work Sheets / Memo for the Record (MFR) –** *To be completed as a group*

9. **Action Items** – *Items, responsible person, suspense date*

10. **Closing Remarks from the Team**

11. **TPP Evaluation Form** – *To be completed by all Participants*

# Handout

## Malta Test Station
## Military Munitions Response Program
## Site Inspection

Technical Project Planning Meeting
May 23, 2006
Malta, NY

1

## Agenda

- Introduction
- Site Inspection Overview
- Technical Project Planning (TPP) Process
- Closing Remarks
- TPP Evaluation

2

## SI Objectives & Approach

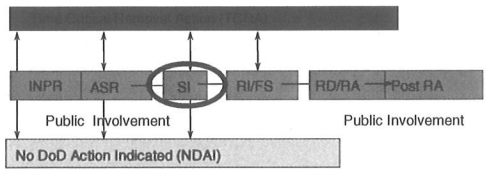
- **Primary Objective**
  - Determine whether site warrants further response action under CERCLA, or NDAI
- **Secondary Objectives**
  - Confirm the presence/absence of MEC/MC
  - Determine the need for an emergency response action or a TCRA
  - Collect data to characterize site and determine risks
  - Collect data for Hazard Ranking System (HRS)
  - Collect data to complete the Munitions Response Site Priority Protocol (MRSPP)
- **Approach**
  - Focus on areas with MEC/MC operations, e.g., range, firing point, OB-OD, or burial area
  - Additional areas identified by stakeholders
  - Areas not having historical evidence of MEC/MC activities are not assessed

**The SI is a limited scope study!**

3

# Handout

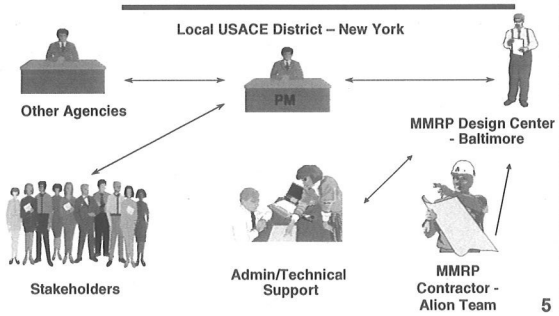
## The MMRP Response Process Parallels the CERCLA Process




- Inventory Project Report (INPR) – Completed
- Archive Search Report (ASR) – Not Completed
- The Site Inspection (SI) Phase - 18 Month Schedule

4

## Project Team Composition




5

## TPP Overview



**TPP is a four-phase process:**

- **Phase I - Identify the project.** *(90% of TPP effort)*
  - Stakeholders?
  - Project definition/CSM?
  - Customer goals?
- **Phase 2 - Determine data needs.**
  - What *do* we know?
  - What *don't* we know?
- **Phase 3 - Develop data collection options.**
- **Phase 4 - Finalize data collection program.**
  - How best to get the information we need?

*(Phases 3 & 4 mostly pre-defined for MMRP projects.)*

6

# Handout

## Phase I - Define the Project

- Project Definition
  - ~165 acres of developed land in Malta and Stillwater, New York
  - R&D facility for rocket and weapons testing for > 50 years
- Site History
  - Established in 1945 by lease from Thomas Luther. In 1955, U.S. Army acquired site in fee
  - General Electric Company (GE) was contractor/operator for ~25 structures
  - USAF/NASA used the site from 1955-1960 space vehicle reentry simulation
  - Determined to be excess in 1960 , conveyed in 1964 to New York Atomic and Space Development Authority (NYSASDA) later succeeded by New York State Energy Research Development Authority (NYSERDA)
- Previous Investigations
  - 1980 USACE Inventory Project Report (INPR), amended November 2005
  - 1995 EPA Remedial Investigation (RI) Report
  - 1999 EPA Superfund Preliminary Site-Closeout Report
  - 2006 Luther Corporation Environmental Site Assessment

7

## Phase I - Define the Project (Cont'd)

- Stakeholders
  - NYSERDA
  - Luther Forest Technology Economic Development Corp.
  - Saratoga Economic Development Corp.
  - Wright Malta Corp.
  - GE Corp.
- CSM (see Handout)
- Site Closeout Statement
  - Achieve the walk-away goal, or final condition of the site, which includes safe access following any remediation, maintenance, and monitoring for activities that are consistent with the current use of the site

8

## Phases 2 - 4 Determine Data Needs, Options, & Program



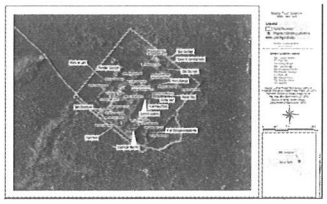
- Phase 2: Determine Data Needs
  - No ASR or Supplemental ASR completed for the site
  - Current official ownership needs to be ascertained
  - Site-specific data for MC not identified
  - No additional MEC discoveries known onsite
- Phase 3: Define Data Collection Options
  - Non-Measurement Data
  - Field Sampling Data
- Phase 4: Finalize Data Collection Program (see Handout)
  - Project objective
  - Data needs (contaminants, media, location and number of samples, performance criteria)
  - Sampling and analysis methods

9

# Handout

## Proposed Field Work (See Handout)

- MC Sampling
  - 21 Surface / Subsurface Soil
  - 5 Groundwater
- MEC Investigation
  - Geophysical reconnaissance
  - Meandering path



10

## The Path Forward

- Schedule Review **(See Handout)**
- Complete TPP Worksheets **(See Handout)**
- Prepare Draft & Final TPP Memorandum
- Prepare Draft and Final Site Specific Work Plan Addendum
- Closing Remarks
- TPP Meeting Evaluation **(See Handout)**

11

## Malta Test Station
## Military Munitions Response Program
## Site Inspection: Abbreviated Accident Prevention Plan

Technical Project Planning Meeting
May 23, 2006
Malta, NY

12

# Handout

## Abbreviated Accident Prevention Plan (AAPP)

- Purpose
  - Safety procedures for sites with suspected or confirmed MEC where a site visit is being performed
  - Reinforces plans in the programmatic work plan
- Procedures
  - All site visit attendees to attend safety briefing, sign, and comply with the AAPP
  - Site visit conducted under OE Safety Specialist leadership

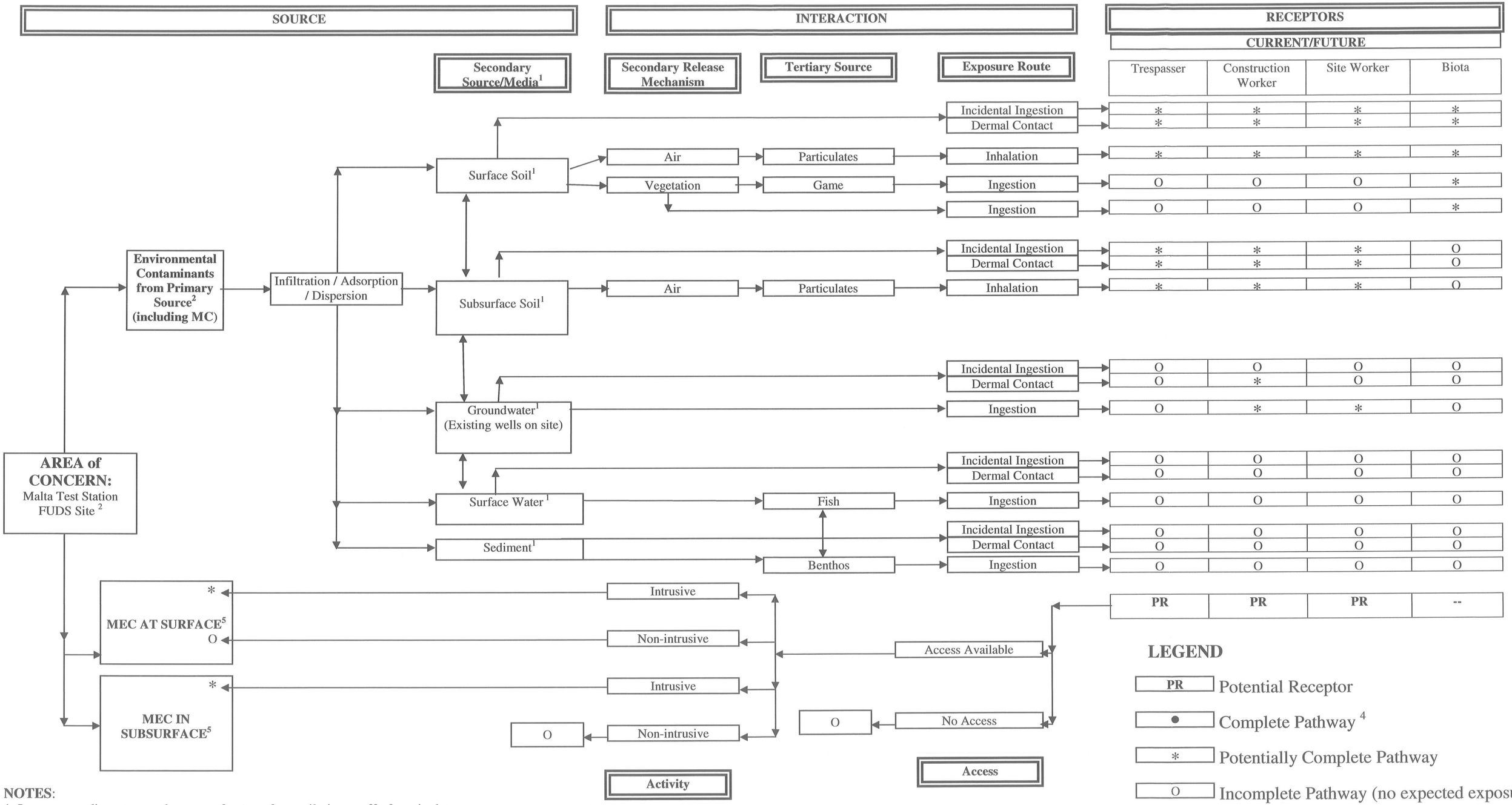
13

## Malta Site Visit: Summary Requirements

See CEHNC-OE-CX Memorandum dated Mar 16. 2006
(Procedures for PA/ SI teams that encounter UXO...)

- **Never stray from the cleared path or road**
- **Never touch or move anything suspicious**
- **Never collect "Souvenirs"**
- **Report all Suspicious items to the property owner and have him/her call emergency response authority**
- **Any UXO items located MUST be reported. If the property owner does not call inform the property owner that you will.**

14




**NOTES**:

1. Impact to sediment may also occur from surface soil via runoff of particulates. A separate risk for surface soil and subsurface soil may be combined to represent risk from total soil from some receptors. Impact to surface water may also occur from infiltration of groundwater.
2. Primary sources will vary but are expected to include test pads, target berms and storage tanks.
3. CSM will be refined as more data is obtained and finalized in the Site Inspection Report.
4. For a pathway to be complete, it must include a source, an exposure medium, an exposure route, and a receptor. A complete pathway may also include a release mechanism and a transport medium.
5. Interaction between a potential receptor and MEC has two components: access and activity.

# DIAGRAM OF THE INTEGRATED CONCEPTUAL SITE MODEL FOR MALTA TEST STATION MMRP FUDS SITE[3] (**WORKING DRAFT**)

Reference: **USACE. 2003. EM 1110-1-1200. Conceptual Site Models for Ordnance and Explosives (OE) and Hazardous, Toxic, and Radioactive Waste (HTRW) Projects**

| Data Quality Objective Worksheet | |
|---|---|
| Site: **Malta Test Station**<br>Project: FUDS MMRP SI Project Number **C02NY089802**<br>DQO Statement Number: **1 of 6** | |
| **DQO Element Description** | **Site-Specific DQO Statement** |
| **Intended Data Use(s):** | |
| **Project Objective(s) Satisfied** | Determine the presence or absence of MEC |
| **Data Needs Requirements:** | |
| Data User Perspective(s) | Risk-MEC, Compliance |
| Contaminant or Characteristic of Interest | Conduct a site reconnaissance and visual search using a trained Unexploded Ordnance (UXO) Technician with a handheld analog magnetometer searching for physical evidence to indicate the presence of MEC (i.e., MEC on surface, munitions debris, soil discoloration etc.). |
| Media of Interest | Soil |
| Required Sampling Locations or Areas | Areas where MEC has been identified historically |
| Number of Samples Required | Not Applicable (N/A) |
| Reference Concentration of Interest or Other Performance Criteria | If one piece of MEC is found with the magnetometer or if physical evidence indicating the presence of MEC is found during the visual inspection, then an RI/FS may be recommended. If no anomalies are found, or if the UXO Technician indicates that there is no potential hazard from MEC, then MEC found previously may be considered an anomaly and No Department of Defense Action Indicated (NDAI) will be recommended. |
| **Appropriate Sampling and Analysis Methods:** | |
| Sampling Method and Depths | Geophysics with a handheld analog magnetometer. |
| Analytical Method | N/A |

| Data Quality Objective Worksheet | |
|---|---|
| Site: **Malta Test Station**<br>Project: FUDS MMRP SI Project Number **C02NY089802**<br>DQO Statement Number: **2 of 6** | |
| **DQO Element Description** | **Site-Specific DQO Statement** |
| **Intended Data Use(s):** | |
| **Project Objective(s) Satisfied** | Eliminate from further consideration those releases that pose no significant threat to public health or the environment by using data collected by others (if available) and collecting adequate samples to assess the presence or absence of Munitions Constituents (MC) at the site. |
| **Data Needs Requirements:** | |
| Data User Perspective(s) | Risk-MC, Compliance |
| Contaminant or Characteristic of Interest | Metals and explosives |
| Media of Interest | Soil, Groundwater |
| Required Sampling Locations or Areas | Areas where MEC has been identified historically |
| Number of Samples Required | 21 Soil, 5 Groundwater |
| Reference Concentration of Interest or Other Performance Criteria | In most cases, contamination findings that exceed federal or state Maximum Contamination Levels (MCLs), or Risk Based Concentrations (RBCs) (based on current land use), or background levels (may be based on previous studies) posing a risk to receptors will be sufficient to signal the need for a detailed investigation of the nature and extent of contamination (RI/FS) for a particular MMRP site. |
| **Appropriate Sampling and Analysis Methods:** | |
| Sampling Method and Depths | Soil-direct push depth 6 inches, Groundwater-use existing wells |
| Analytical Method | The following analytical methods are proposed: Explosives Method - SW8330A, SW8330M, SW8330M; Metals Method - SW6010B, SW7471. Explosives Prep Method – 8330A; Metals Prep Method – 3050B/3050M. |

| Data Quality Objective Worksheet | |
|---|---|
| Site: **Malta Test Station**<br>Project: FUDS MMRP SI Project Number **C02NY089802**<br>DQO Statement Number: **3 of 6** | |
| **DQO Element Description** | **Site-Specific DQO Statement** |
| **Intended Data Use(s):** | |
| **Project Objective(s) Satisfied** | Determine the potential need for an emergency response action and/or a TCRA for MEC by collecting data from previous investigations/reports, conducting site visits, and performing analog geophysical activities. |
| **Data Needs Requirements:** | |
| Data User Perspective(s) | Risk-MEC, Compliance |
| Contaminant or Characteristic of Interest | Conduct a site reconnaissance and visual search using a trained UXO Technician with a handheld analog magnetometer searching for physical evidence to indicate the presence of MEC requiring a TCRA |
| Media of Interest | Soil |
| Required Sampling Locations or Areas | Areas where MEC has been identified historically |
| Number of Samples Required | N/A |
| Reference Concentration of Interest or Other Performance Criteria | If there is a complete pathway between source and receptor and the MEC constitutes an imminent threat to the local populace or site personnel, the Alion Team will immediately notify the Military Munitions Design Center Project Manager at USACE and the property owner. The Military Munitions Design Center Project Manager will then coordinate with the Military Munitions Design Center Ordnance and Explosives Safety Lead and the property owner. Local law enforcement will be contacted by the property owner. |
| **Appropriate Sampling and Analysis Methods:** | |
| Sampling Method and Depths | Geophysics with a handheld analog magnetometer. |
| Analytical Method | N/A |

| Data Quality Objective Worksheet | |
|---|---|
| | |
| Site: **Malta Test Station** | |
| Project: FUDS MMRP SI Project Number **C02NY089802** | |
| DQO Statement Number: **4 of 6** | |
| **DQO Element Description** | **Site-Specific DQO Statement** |
| **Intended Data Use(s):** | |
| **Project Objective(s) Satisfied** | Collect, or develop, additional data, as appropriate, for Hazard Ranking System (HRS) scoring by Environmental Protection Agency (EPA). |
| **Data Needs Requirements:** | |
| Data User Perspective(s) | Risk-MEC and MC, Compliance |
| Contaminant or Characteristic of Interest | Data for HRS worksheet parameters will be compiled by gathering basic identifying information, general site description, site type, waste description, demographics, water use, sensitive environments, and response actions. |
| Media of Interest | Soil, Groundwater |
| Required Sampling Locations or Areas | Areas where MEC has been identified historically |
| Number of Samples Required | N/A |
| Reference Concentration of Interest or Other Performance Criteria | The HRS levels of contamination are Level I (concentrations that meet the criteria for actual contamination and are at or above media-specific benchmark levels), Level II (concentrations that either meet the criteria for actual contamination but are less than media-specific benchmarks, or meet the criteria for actual contamination based on direct observation), and Potential (no observed release is required but targets must be within the target distance limit). These levels are weighted for each target by EPA (Level I carries the greatest weight) and scores of 28.5 or above are then eligible for listing on the National Priorities List (NPL). |
| **Appropriate Sampling and Analysis Methods:** | |
| Sampling Method and Depths | Data gathering prior to field activities as well as additional data gathered during field reconnaissance and sampling. Refer to NPL Characteristics Data Collection Form, version 3.0, December 2001. |

| Data Quality Objective Worksheet | |
|---|---|
| | |
| Site: **Malta Test Station** | |
| Project: FUDS MMRP SI Project Number **C02NY089802** | |
| DQO Statement Number: **4 of 6** | |
| **DQO Element Description** | **Site-Specific DQO Statement** |
| Analytical Method | N/A |

| Data Quality Objective Worksheet | |
|---|---|
| Site: **Malta Test Station**<br>Project: FUDS MMRP SI Project Number **C02NY089802**<br>DQO Statement Number: **5 of 6** | |
| **DQO Element Description** | **Site-Specific DQO Statement** |
| **Intended Data Use(s):** | |
| ***Project Objective(s) Satisfied*** | Collect data, as appropriate, to determine if a release has occurred to confirm the need to transition the project into a Remedial Investigation and Feasibility Study (RI/FS). |
| **Data Needs Requirements:** | |
| Data User Perspective(s) | Risk-MEC and MC, Compliance |
| Contaminant or Characteristic of Interest | MEC and MC |
| Media of Interest | Soil, Groundwater |
| Required Sampling Locations or Areas | Areas where MEC has been identified historically |
| Number of Samples Required | N/A |
| Reference Concentration of Interest or Other Performance Criteria | If one piece of MEC is found with the magnetometer or if physical evidence indicating the presence of MEC is found during the visual inspection, then RI/FS may be recommended. If any samples for MC exceed the PMMQL (action levels) and are greater than background levels (for metals), RI/FS will be recommended. |
| **Appropriate Sampling and Analysis Methods:** | |
| Sampling Method and Depths | For MEC, geophysics with a handheld analog magnetometer; For MC, soil-direct push depth 6"and groundwater samples using existing wells onsite |
| Analytical Method | N/A |

| Data Quality Objective Worksheet | |
|---|---|
| Site: **Malta Test Station**<br>Project: FUDS MMRP SI Project Number **C02NY089802**<br>DQO Statement Number: **6 of 6** | |
| **DQO Element Description** | **Site-Specific DQO Statement** |
| **Intended Data Use(s):** | |
| ***Project Objective(s) Satisfied*** | Collect the additional data necessary to the complete the Munitions Response Site Prioritization Protocol (MRSPP). |
| **Data Needs Requirements:** | |
| Data User Perspective(s) | Risk-MEC and MC, Compliance |
| Contaminant or Characteristic of Interest | Explosive Hazard Evaluation (EHE), Chemical Warfare Material Hazard Evaluation (CHE), and Health Hazard Evaluation (HHE). For the EHE and CHE modules, factors evaluated include the details of the hazard, accessibility to the Munitions Response Site (MRS), and receptor information. HHE factors include an evaluation of MC and any non-munitions-related incidental contaminants present, receptor information, and details pertaining to environmental migration pathways. Typical information compiled includes details pertaining to historical use, current/future use and ownership, cultural/ecological resources, and structures. |
| Media of Interest | Soil, Groundwater |
| Required Sampling Locations or Areas | Areas where MEC has been identified historically |
| Number of Samples Required | N/A |
| Reference Concentration of Interest or Other Performance Criteria | An MRS priority is determined by USACE based on integrating the ratings from the EHE, CHE, and HHE modules. Refer to Federal Register/Vol. 70, No. 192/Wednesday, October 5, 2005/Rules and Regulations. |
| **Appropriate Sampling and Analysis Methods:** | |
| Sampling Method and Depths | Data gathering prior to field activities as well as additional data gathered during |

| Data Quality Objective Worksheet | |
|---|---|
| Site: **Malta Test Station**<br>Project: FUDS MMRP SI Project Number **C02NY089802**<br>DQO Statement Number: **6 of 6** | |
| **DQO Element Description** | **Site-Specific DQO Statement** |
| | field reconnaissance and sampling. Refer to Federal Register/Vol. 70, No. 192/Wednesday, October 5, 2005/Rules and Regulations. |
| Analytical Method | N/A |

## Technical Project Planning

## Draft Phase I MFR Worksheet

**Author(s):** Alion Team
**Latest Revision Date:**

**Reviewer:**
**Review Date:**

**Location:** Malta, New York
**Site(s):** Malta Test Station
**Project:** MMRP Project C02NY089802

(Attach Phase I MFR to PMP)

| **TPP Team** | **EM 200-1-2, Paragraph 1.1.1** | |
|---|---|---|
| **Decision Maker** | | |
| **Customer** | USACE | |
| **Project Manager** | Robert Williams-USACE Baltimore District; Greg Goepfert- USACE New York District | |
| **Team Leaders** | Corinne Shia—Alion Team, Tim Reese—Alion Team | |
| **Regulators** | NYSDEC, USEPA | |
| **Stakeholders** | NYSERDA<br>Luther Forest Technology Economic Development Corp.<br>Saratoga Economic Development Corp.<br>Wright Malta Corp.<br>GE Corp. | |
| **Data Types** | **Data User** | **Data Gatherer** |
| **Compliance / Regulatory (CR)** | USACE – Baltimore / New York / Huntsville Districts | Alion Team |
| **Demographics/Land Use (LU)** | USACE – Baltimore / New York / Huntsville Districts | Alion Team |
| **Site Conditions (SC)** | USACE – Baltimore / New York / Huntsville Districts | Alion Team |
| **Munitions and Explosives of Concern (MEC)** | USACE – Baltimore / New York / Huntsville Districts | Alion Team |

| CUSTOMER'S GOALS | EM 200-1-1, Paragraph 1.1.2 | |
|---|---|---|
| **Future Land Use(s) @ Site** | **Issues and Regulatory Compliance Status** | **Site-specific Closeout Goal (if applicable)** |
| Land Development | Potential for metals and explosives in soil as well as munitions and explosives of concern (MEC) | |
| | | |
| | | |
| Site Closeout Statement | | |
| Achieving the walk-away goal, or final condition of the site, as envisioned by the customer. The final condition of the site includes safe access following any remediation, maintenance, and monitoring for activities that are consistent with the current and future land use of the site. | | |
| Customer's Schedule Requirements | | |
| None | | |
| Customer's Site Budget | | |
| N/A | | |
| IDENTIFY SITE APPROACH | | |
| | | |

| EXISTING SITE INFORMATION & DATA EM 200-1-2, Paragraph 1.1.3 and 1.2.1 | | |
|---|---|---|
| **Attachment(s) to Phase I MFR** | **Located at Repository** | **Preliminary Conceptual Site Model** |
| 1980 INPR, amended November 2005 | USACE - New York | Yes |
| 1995 EPA Remedial Investigation (RI) Report | USACE - New York | Yes |
| 1999 EPA Superfund Preliminary Site-Closeout Report | USACE - New York | Yes |
| 2006 Luther Corporation Environmental Site Assessment | USACE - New York | Yes |
| **POTENTIAL POINTS OF COMPLIANCE EM 200-1-2, Paragraph 1.2.1.3** | | |
| NYSDEC Regulations (within boundaries of areas of concern) | | |
| Region II USEPA (within boundaries of areas of concern) | | |
| | | |
| **MEDIA OF POTENTIAL CONCERN EM 200-1-2, Paragraph 1.2.1.4** | | |
| Surface and Subsurface Soil | | |
| Groundwater | | |
| | | |
| | | |
| **SITE OBJECTIVES EM 200-1-2, Paragraph 1.2.2** | | |
| See attached | | |
| | | |
| | | |

| REGULATOR AND STAKEHOLDER PERSPECTIVES EM 200-1-1, Paragraph 1.2.3 | | |
|---|---|---|
| Regulators | Community Interests | Others |
| | | |
| | | |
| | | |

| PROBABLE REMEDIES EM 200-1-2, Paragraph 1.2.4 |
|---|
| Detonation or removal of suspect MEC found during the site investigation. |
| Removal of residual MEC from the site, treatment of MC via removal, onsite treatment, and engineering/institutional controls as appropriate to reduce the risk to future site users. |

| EXECUTABLE STAGES TO SITE CLOSEOUT EM 200-1-2, Paragraph 1.2.5 | | |
|---|---|---|
| Site Inspection | | |
| Remedial Investigation/Feasibility Study | or | NDAI |
| Proposed Plan | | |
| ROD/Decision Document | | |
| Remedial Design | | |
| Remedial Action | | |