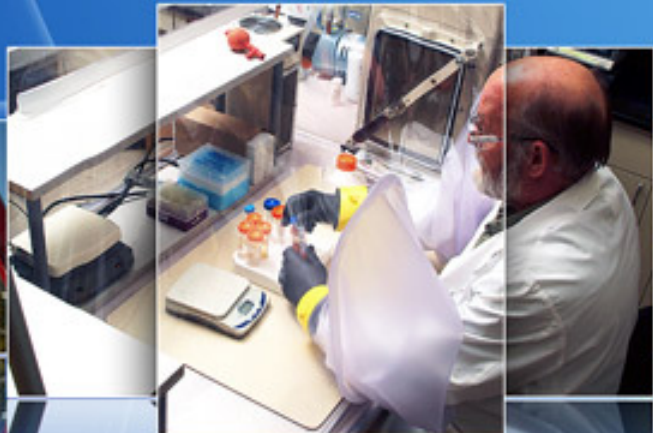




**Shaw**® a world of **Solutions**™



02M062007D

# Shaw MMRP Project Update Ravenna AAP, Ohio

by  
Robert Harrison, Shaw Field Manager

**RVAAP RAB Meeting  
11 January 2012**

# Acronym Cheat Sheet

- **CERCLA = Comprehensive Environmental, Response, Compensation and Liability Act**
- **DQO = Data Quality Objective**
- **FS = Feasibility Study**
- **HASP = Health and Safety Plan**
- **LTM = Long Term Monitoring**
- **MAMMS = Multiple Award Military Munitions Services**
- **MC = Munitions Constituents**
- **MEC = Munitions and Explosives of Concern**
- **MMRP = Military Munitions Response Program**
- **MPPEH = Material Potentially Presenting an Explosive Hazard**
- **MRS = Munitions Response Site (term used for a site in MMRP program)**
- **NTP = Notice to Proceed**
- **PBA = Performance Based Acquisition**
- **PMP = Project Management Plan**
- **PP = Proposed Plan**
- **RA(O) = Remedial Action Operations**
- **RD/RA = Remedial Design/Remedial Action**
- **RI = Remedial Investigation**
- **RIP = Remedy in Place**
- **ROD = Record of Decision**
- **USACE = United States Army Corps of Engineers**

# Agenda

- Introductions
- Summary of Military Munitions Response Program (MMRP) Remedial Investigation (RI) Project
- Contract Specific Update of Work

# MMRP RI

## Summary of Work

- Contracting Vehicle: USACE-Baltimore MAMMS
- Contract Type: Performance Based Acquisition (PBA)
- Army Oversight: USACE-Louisville, USACE-Baltimore
- Project Award Date: 28 May 2009
- Performance Goal: Complete RIs within 3 years of Notice to Proceed (NTP), Attain Remedy in Place (RIP) (4 sites only) within 5 years of NTP
- 14 sites covered under the contract (all funded)

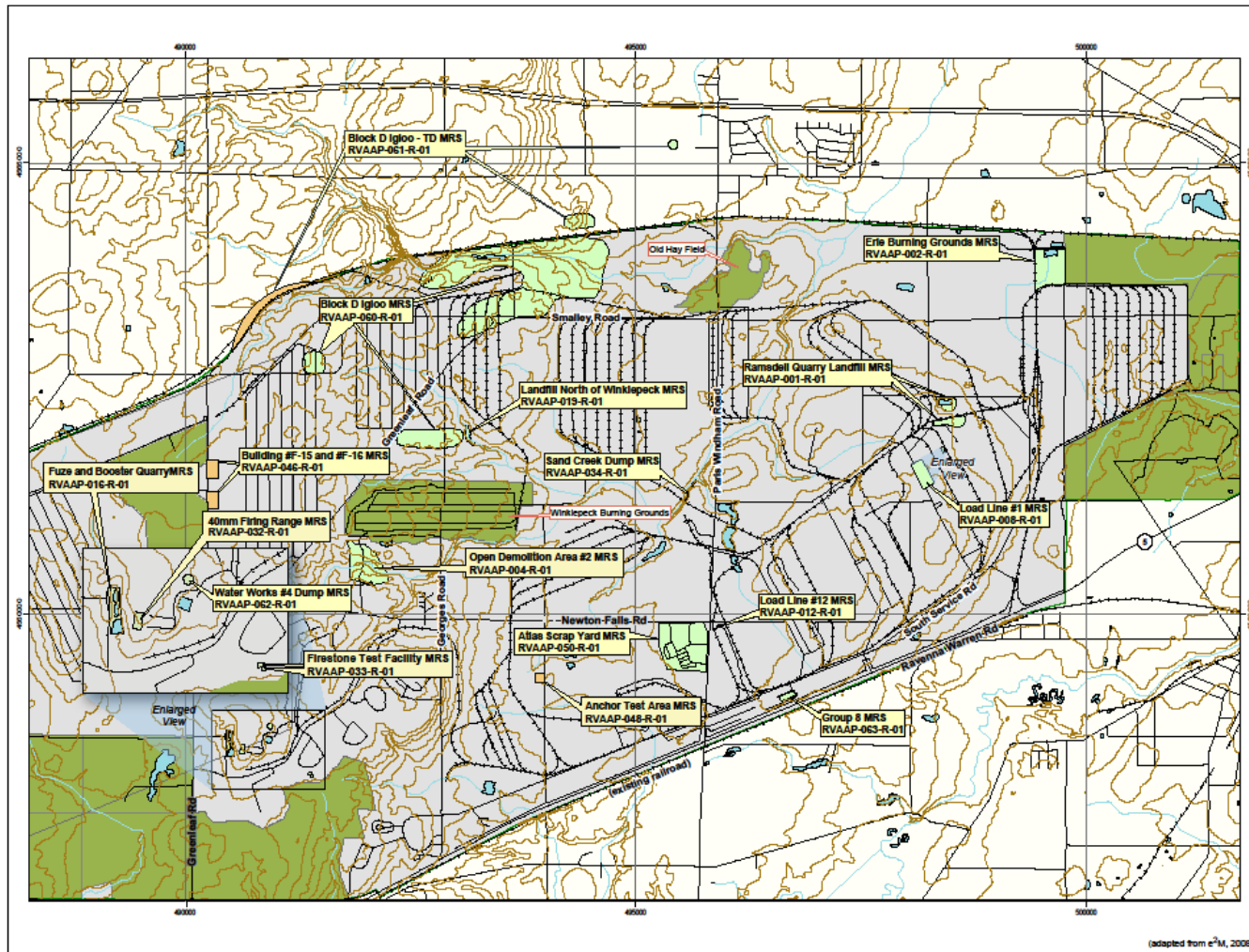


# MMRP RIs

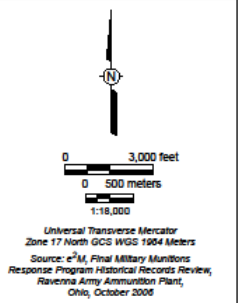
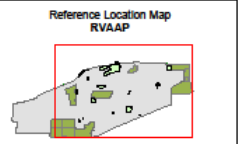
## Current Project Status

- Contract Award on 28 May 2009
- 10 RI Sites and 4 RIP sites funded
  - RI sites – ODA #2, Block D Igloo, Atlas Scrap Yard, Ramsdell Quarry, Landfill North of Winklepeck, Erie Burning Ground, Group 8 MRS, Fuze and Booster Quarry, Block D-TD, and 40mm Range.
  - RIP Sites – Load Line 1, Firestone Test Facility, Sand Creek Landfill Site, and Water Works 4.
- Final Project Management Plan and project specific plans - *Complete*
- Final Workplan (First 7 sites) - *Complete*
- Final Health and Safety Plan (HASP) – *Complete*
- Final Workplan (second 7 sites) – *Essentially Complete (Ohio EPA approval pending)*

Red = Sites included in initial set of sites funded (“First 7”)



(adapted from e<sup>3</sup>M, 2008)



- Legend**
- Installation Boundary
  - Former Railroad
  - Road
  - Elevation Contour
  - Stream
  - Water
- Area Status**
- Operational Range
  - Other than Operational Range
  - MRS
  - MRS, NFA
- e<sup>3</sup>M Engineering-Environmental Management, Inc.  
MRS Munitions Response Site  
NFA No Further Action  
RVAAP Ravenna Army Ammunition Plant

**Figure 1-2**  
**Site Plan Showing MRS Sites**  
**Ravenna Army Ammunition Plant**  
**Ravenna, Ohio**



136147.01001200.02

02/06/2007D

# MMRP RIs

## Current Project Status

- Field Work for 2011 (April – January 2012)
  - RI activities for 14 sites (14 currently ongoing in field)
  - Tasks include:
    - Geophysical surveys
    - Visual Inspections
    - Anomaly investigation/trenching
    - MC sampling – soil, surface water, and sediments
  - Work performed by geophysicists and MEC technicians
  - Intent of data collection is to develop a site model that:
    - Represents the conditions related to MEC and MC;
    - Evaluates the likelihood of any remaining MEC;
    - Evaluates environmental impacts related to MEC;
    - Aids in developing a path forward for each site
  - Currently about **95% complete** on RI field activities for **first 7 sites** and **65% complete** on **second 7 sites**

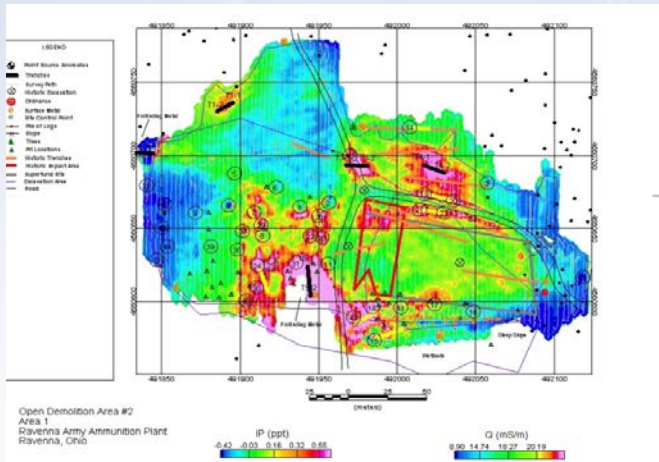


# MMRP RIs

## Current Field Activities



- **Investigation Activities**
  - Digital mapping surveys
  - Magnetometer Surveys
  - Anomaly Investigations
  - Soil Sampling
  - Demolition events



# MMRP RIs

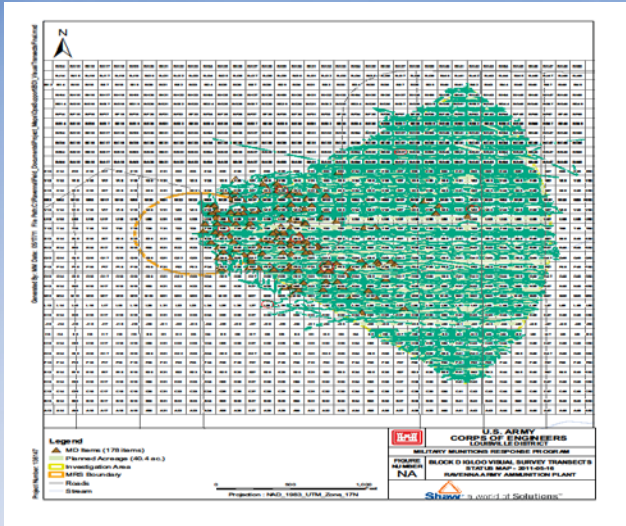
## Summary of Field Work

Site Name	Investigati on Complete	Anomaly Reacquisition/Dig Complete	Sampling Complete	Shaw Proposed Completion
RVAAP-004-R-01 - ODA #2	X	X	X	Oct 2011
RVAAP-060-R-01 - Block D Igloo	X	X	X	Aug 2011
RVAAP-050-R-01 - Atlas Scrap Yard	X	X	X	Nov 2011
RVAAP-001-R-01 - Ramsdell Quarry	X	75%	50%	May 2012
RVAAP-019-R-01 - Landfill N. of Winklepeck	X	X	X	Oct 2012
RVAAP-008-R-01 - Load Line #1	75%	N/A	50%	May 2012
RVAAP-033-R-01 – Firestone Testing Facility	X	X	X	Sept 2011
RVAAP-063-R-01 - Group 8 MRS	X	65%		Jan 2012
RVAAP-034-R-01 - Sand Creek Dump	X			May 2014
RVAAP-016-R-01 - Fuze/Booster	X			Jan 2012
RVAAP-002-R-01 - Erie Burning Grounds	30%			May 2012
RVAAP-032-R-01 - 40-mm Firing Range	X	X		Jan 2012
RVAAP-062-R-01 - Water Works #4	X	X	X	Dec 2011
RVAAP-061-R-01 - Block D Igloo – TD	N/A	N/A	N/A	May 2012



# MMRP RIs

## Field Activities



02M062007D

# MMRP RIs

## Field Activities



- **Results to date**

- MEC primarily in ODA2
- What was found?
  - Fragments of 155 mm, 105 mm, 81 mm, 60 mm
  - Fuzes
  - No intact munitions
- After Ohio EPA approval, demolition event in July and October destroyed recovered MEC/MPPEH
- Soil and sediment samples collected
- Investigation results will be presented in RI reports



# MMRP RIs

## Schedule of Work

Site Name	PWS Objective	Shaw Proposed Completion
RVAAP-004-R-01 - ODA #2	RI by 29 May 2012	April 2012
RVAAP-060-R-01 - Block D Igloo	RI by 29 May 2012	March 2012
RVAAP-050-R-01 - Atlas Scrap Yard	RI by 29 May 2012	April 2012
RVAAP-001-R-01 - Ramsdell Quarry	RI by 29 May 2012	March 2012
RVAAP-019-R-01 - Landfill N. of Winklepeck	RI by 29 May 2012	April 2012
RVAAP-008-R-01 - Load Line #1	RIP by 29 May 2014	February 2013
RVAAP-033-R-01 – Firestone Testing Facility	RIP by 29 May 2014	May 2014
RVAAP-063-R-01 - Group 8 MRS (Option 1)	RI by 29 April 2013	September 2012
RVAAP-034-R-01 - Sand Creek Dump (Option 2)	RIP by 29 April 2015	May 2014
RVAAP-016-R-01 - Fuze/Booster Quarry (Option 3)	RI by 29 April 2013	September 2012
RVAAP-002-R-01 - Erie Burning Grounds (Option 4)	RI by 29 April 2013	December 2012
RVAAP-032-R-01 - 40-mm Firing Range (Option 5)	RI by 29 April 2013	September 2012
RVAAP-062-R-01 - Water Works #4 (Option 6)	RIP by 29 April 2015	June 2014
RVAAP-061-R-01 - Block D Igloo – TD (Option 7)	RI by 29 April 2013	December 2012



# Shaw RVAAP Work Update

Questions?