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02N062007D

# Shaw Project Status Update Ravenna AAP, Ohio

by  
Dave Cobb, Shaw PM

**RVAAP RAB Meeting  
17 August 2011**

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# 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 Work by Shaw
  - Military Munitions Response Program (MMRP) Remedial Investigation (RI) Project
  - Environmental Services Contract under the Architectural/Engineering Contract
- Contract Specific Update of Work
- Open Floor

# Summary of Shaw RVAAP Work

- Shaw currently has two open Task Orders for work at RVAAP
  - MMRP RI Contract for 14 Munitions Response Sites (MRSs) (awarded May 2009)
  - Environmental Services at 4 Sites (awarded Sept 2008)
- Tasks orders are currently active and moving forward
- Working in conjunction with other contractors at site under coordination of Army

# MMRP RI

## Summary of Work

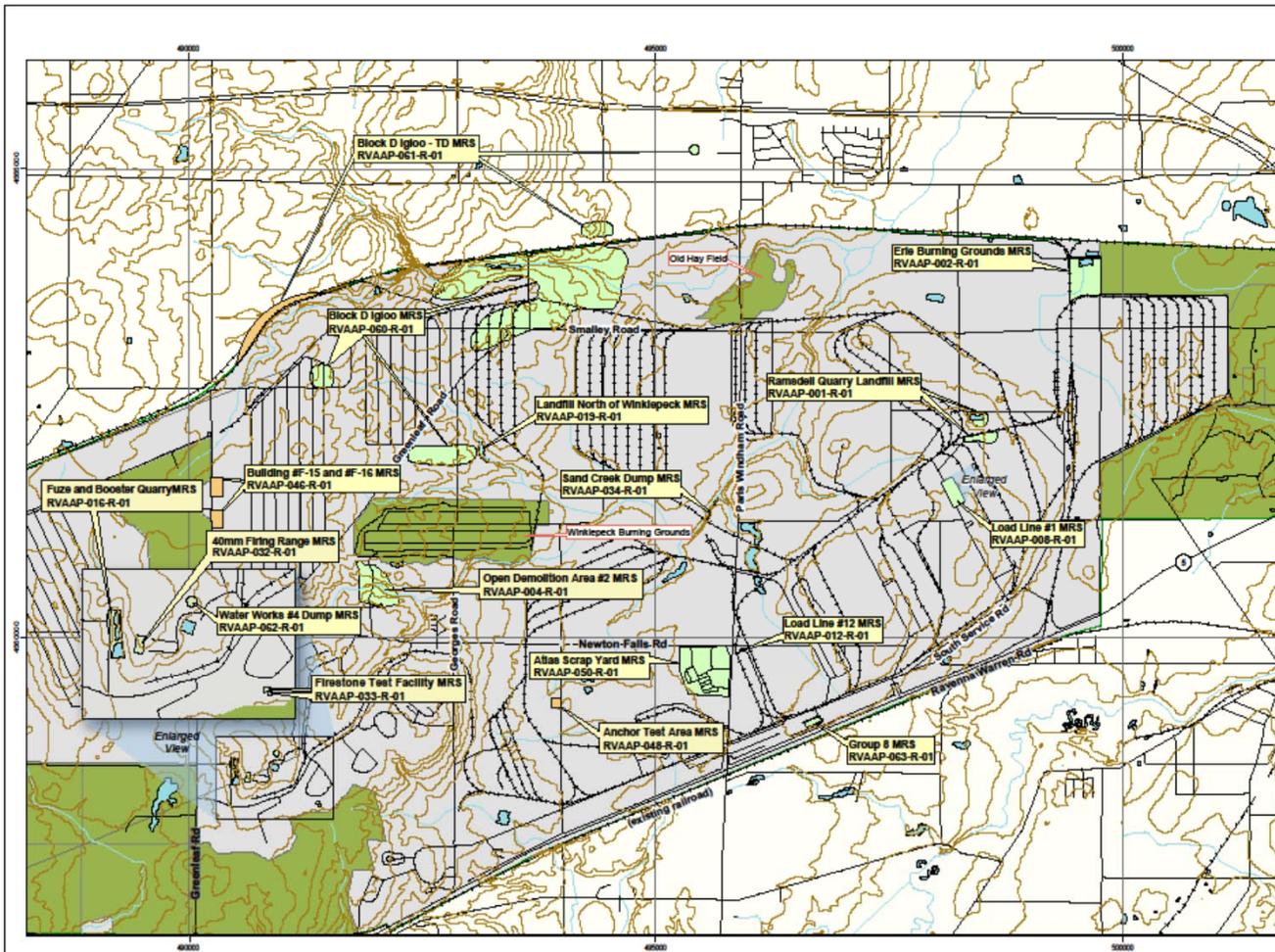
- Contracting Vehicle: USACE-Baltimore MAMMS
- Contract Type: Performance Based Acquisition (PBA)
- Army Oversight: USACE-Louisville, USACE-Baltimore
- Project Award Date: 28 May 2009
- Performance Goal: Complete RIs within 3 years of Notice to Proceed (NTP), Attain Remedy in Place (RIP) (4 sites only)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

# MMRP RIs

## Current Project Status

- Contract Award on 27 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, 40mm Range
  - RIP Sites – Load Line 1, Firestone Test Facility, Sand Creek Landfill Site, 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*
- Draft Workplan/HASP (second 7 sites) - Under review by Stakeholders (Workplan)/Army (HASP).

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



Reference Location Map  
RVAAP

0 3,000 feet  
0 500 meters  
1:18,000

Universal Transverse Mercator  
Zone 17 North GCS WGS 1984 Meters  
Source: e<sup>3</sup>M, Final Military Munitions  
Response Program Historical Records Review,  
Ravenna Army Ammunition Plant,  
Ohio, October 2006

**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

Shaw Environmental, Inc.

(adapted from e<sup>3</sup>M, 2006)

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# MMRP RIs

## Current Project Status

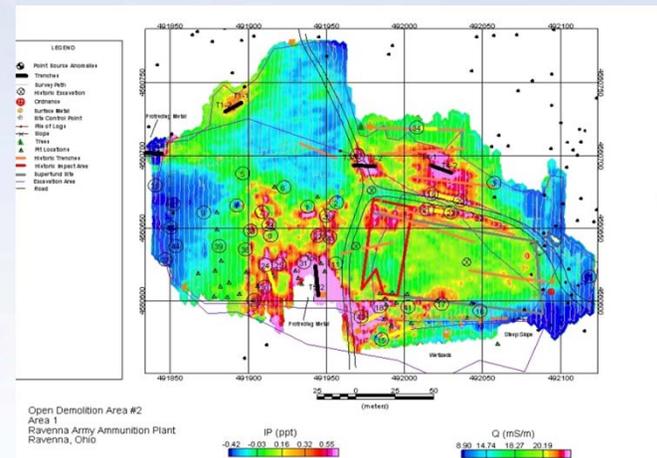
- Field Work for 2011 (April – October 2011)
  - RI activities for 14 sites (7 currently ongoing in field)
  - Tasks include:
    - Geophysical surveys
    - Visual Inspections
    - Anomaly investigation/trenching
    - MC sampling – soil, surface water, and sediments
  - Work performed by geophysicists 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 **75% complete** on RI field activities for **first 7 sites**
  - Second set of 7 sites will begin once workplan addendum is approved (late September 2011 +/-)

# MMRP RIs

## Field Activities



- ODA2 Investigation Activities
  - Trenching in possible burial pit areas
  - Anomaly Investigation
  - Soil Sampling
  - Digital mapping
  - Visual Survey
- What has been discovered to date
  - 57 pieces of MEC/MPPEH
  - Large amounts of MD
  - Soil samples are pending

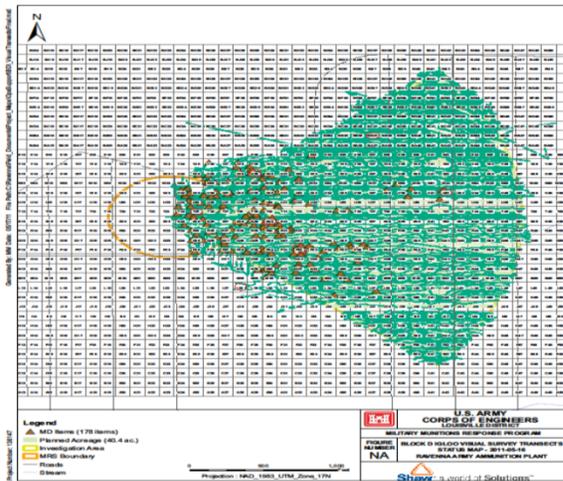


# MMRP RIs

## Field Activities

- Block D Investigation Activities
  - Anomaly Investigation Complete
  - Visual Survey (66 miles)
  - Soil Sampling (results pending)

- What has been discovered to date
  - Few pieces of MEC/MPPEH (5 total)
  - Large amounts of MD in blast fan
  - Soil samples are pending
  - Field data indicates explosives hazards (MEC/MPPEH) never left RVAAP



# MMRP RIs

## Field Activities



- **Results to date**
  - 62 pieces of MEC primarily in ODA2 (57 pieces)
  - 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 destroyed majority of recovered MEC/MPPEH
  - Soil and sediment samples collected (results pending)
  - 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

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# Environmental Services at 4 Sites

## Summary of Work

- Contracting Vehicle: USACE- Louisville A&E
- Contract Type: Fixed Price
- Army Oversight: USACE-Louisville
- Project Award Date: 22 September 2008
- Project Tasks:
  - Bring 3 sites to ROD under CERCLA process
  - Complete Data Quality Objective (DQO) evaluations
- 4 sites covered under the contract – ODA1, Sand Creek Landfill Site, Suspected Mustard Agent Burial Site (SMABS), and Winklepeck Burning Ground

# Environmental Services at 4 Sites

## Current Project Status

- Scope of Work:
  - Sand Creek Landfill Site (previous surface removal action)
    - DQO report and RI Investigation - *Complete*
    - RI, FS, PP, and ROD – *Pre Draft RI in RTC stage*
  - ODA1 (at RI when taken over)
    - DQO report and supplemental investigation - *Complete*
    - FS, PP, and ROD – *Pre Draft FS in RTC stage*
  - SMABS (limited investigation)
    - DQO report and RI Investigation - *Complete*
    - FS, PP, and ROD – *Pre Draft Complete, site on hold pending Army evaluation*
  - Winklepeck Burning Ground (ROD in place, RAs complete)
    - DQO report – *Complete*
  - Prepare required project plans
    - PMP, Workplans, HASP, Sampling Analysis Plan- *Complete*

# Environmental Services at 4 Sites Schedule of Work

Site Name	Current stage	Estimated Completion of Contract Tasks
RVAAP-003 - ODA 1	Draft FS	October 2012 (Final ROD)
RVAAP-005 - Winklepeck Burning Ground	Final DQO Report Complete	July 2011 (Final DQO)
RVAAP-028 - Suspected Mustard Agent Burial Site	Draft FS (on hold)	January 2013 (Final ROD)
RVAAP-034 – Sand Creek Dump	Draft RI Report	February 2013 (Final ROD)

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# Groundwater Geochemical Evaluation Summary of Work

- Contracting Vehicle: USACE- Louisville A&E
- Contract Type: Fixed Price
- Army Oversight: USACE-Louisville
- Project Award Date: 22 September 2008
- Project Tasks:
  - Required project plans - *Complete*
  - Geochemical evaluation of groundwater based on sample results provided by USACE – *Complete*
  - Geochemical Evaluation Report – *Complete*
- Status – *Complete* as of 1 July 2011

# Shaw RVAAP Work Update

Questions?