

## 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
- 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

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## Agenda

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

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## Summary of Shaw RVAAP Work

- Shaw currently has three 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)
  - Groundwater Geochemical Evaluation (awarded Sept 2009)
- All contracts 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 RI Summary of Work

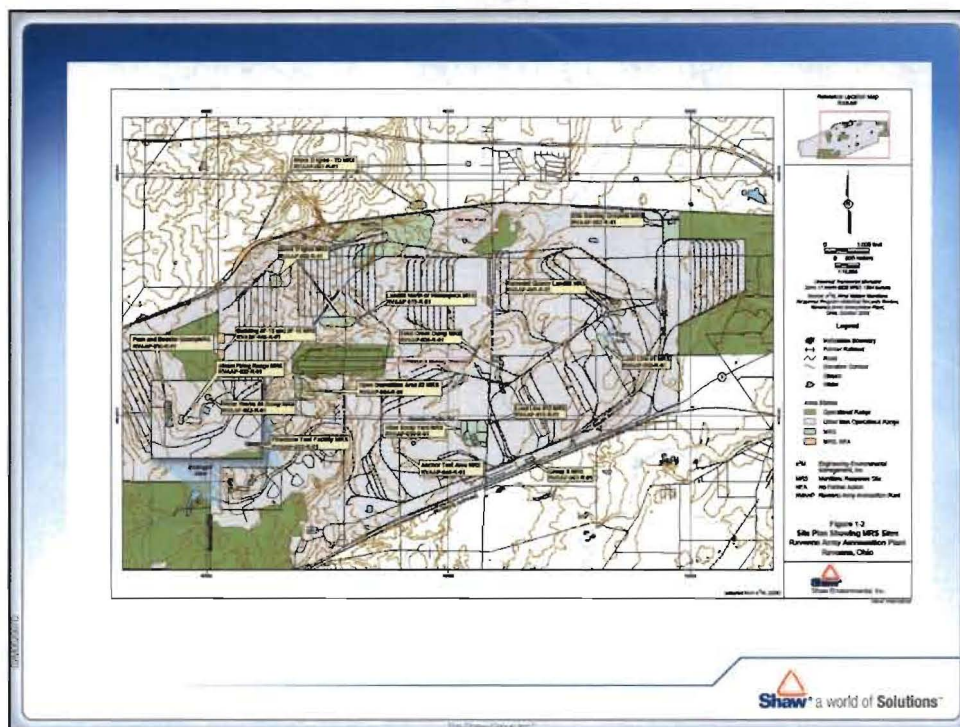
- Scope of Work:
  - Perform MMRP RIs for 10 Sites
    - RIs address Munitions and Explosives of Concern (MEC) and Munitions Constituents (MC)
    - Currently 10 are funded
    - Complete within 3 years of NTP
  - Attain RIP for 4 Sites
    - Includes RI, Feasibility Study (FS), Proposed Plan (PP), Record of Decision (ROD), Remedial Design/Remedial Action (RD/RA), Closeout Report
    - Remedial Action Operations/Long Term Monitoring (RAO/LTM) until end of contract
    - Attain RIP within 5 years of NTP
- Prepare required project plans



## 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) - Awaiting approval
- Final Health and Safety Plan (HASP) – Awaiting approval
- Pre Draft Workplan/HASP (second 7 sites) - In preparation





## MMRP RIs Current Project Status

- Field Work for 2011 (April – October 2011)
  - RI activities for 14 sites
  - Tasks will include:
    - Geophysical surveys
    - Visual Inspections
    - 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
  - Collected data is presented in a report that summarizes the results and findings.



## MMRP RIs Field Activities

- Geophysical Methods To be Used
  - Conductivity Surveys (EM31)
    - Appropriate to delineate source areas that are relatively large in size (e.g. burial pits)
    - 10 to 15 ft transect spacing for full coverage
  - EM61 Metal Detector
    - Instrument used to look below ground surface
    - Depth of survey will be dependent on site conditions
  - Visual Inspections with Magnetometer
    - Further subsurface characterization may be needed to vertically delineate extent of MEC
    - Used when surface munitions debris is expected.



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## MMRP RIs Field Activities

- What do we expect to find?
  - Mostly Munitions Debris at most sites
  - Occasional MEC item at some sites
- What if find something?
  - Confirm what we find
    - Review geophysical data to create representative "dig" lists;
    - Further visual inspection when possible;
    - If MEC, move when possible to onsite permitted storage magazines; and
    - Consolidated detonations of recovered MEC.

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## MMRP RIs Schedule of Work

| Site Name  | PWS Objective        | Shaw Proposed Completion |
|--|----------------------|--------------------------|
| RVAAP-004-R-01 - ODA #2                          | RI by 29 May 2012    | March 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    | March 2012               |
| RVAAP-001-R-01 - Ramsdell Quarry                 | RI by 29 May 2012    | January 2012             |
| RVAAP-019-R-01 - Landfill N. of Winklepeck       | RI by 29 May 2012    | February 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  | August 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            |



## 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 – RI in preparation
  - ODA1 (at RI when taken over)
    - DQO report and supplemental investigation
    - FS, PP, and ROD – FS in preparation
  - SMABS (limited investigation)
    - DQO report and RI Investigation
    - FS, PP, and ROD – FS in preparation
  - Winklepeck Burning Ground (ROD in place, RAs complete)
    - DQO report – Final in preparation
  - 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                               | Preliminary Draft FS        | October 2012 (Final ROD)               |
| RVAAP-005 - Winklepeck Burning Ground           | Final DQO Report            | August 2011 (Final DQO)                |
| RVAAP-028 - Suspected Mustard Agent Burial Site | Preliminary Draft FS        | October 2012 (Final ROD)               |
| RVAAP-034 – Sand Creek Dump                     | Preliminary Draft RI Report | February 2013 (Final ROD)              |





## 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:
  - Prepare required project plans - *Complete*
  - Perform geochemical evaluation of groundwater based on sample results provided by USACE – *Complete*
  - Preparation of evaluation report – Pre Draft and Draft *Complete, Final in comment/response stage*




## Groundwater Geochemical Evaluation Current Project Status

- Intent of work is to evaluate elemental analytical data collected from RVAAP monitoring wells to evaluate if elements (mostly metals) detected in groundwater are naturally occurring or related to a release;
- Considers observed interrelationships between element concentrations.
- Evaluates observations based on known geochemical behaviors of the elements in the site-specific environment and their impact.




## Groundwater Geochemical Evaluation Schedule of Work

| Site Name                     | Current stage        | Estimated Completion of Contract Tasks |
|-------------------------------|----------------------|--|
| Geochemical Evaluation Report | RTCs on Draft Report | June 2011 (Final Report)               |

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## Shaw RVAAP Work Update

Questions?

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