Proposed Plan for Soil and Dry Sediment at the

Central Burn Pits (CBP)

Ravenna Army Ammunition Plant
Ravenna, Ohio

Presented by:

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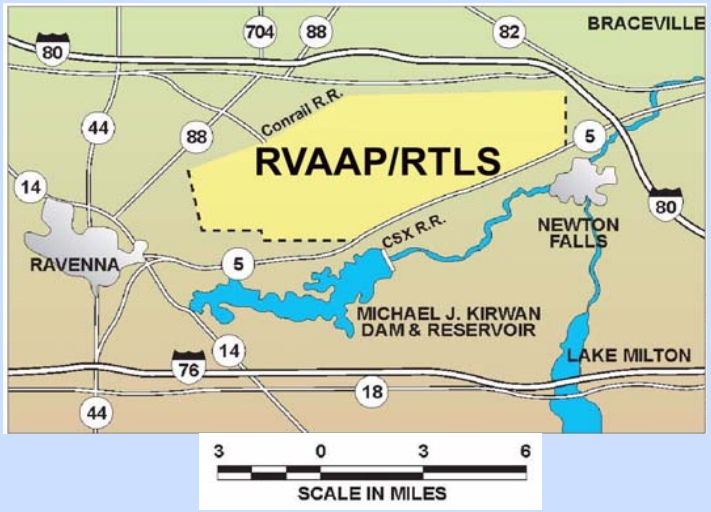
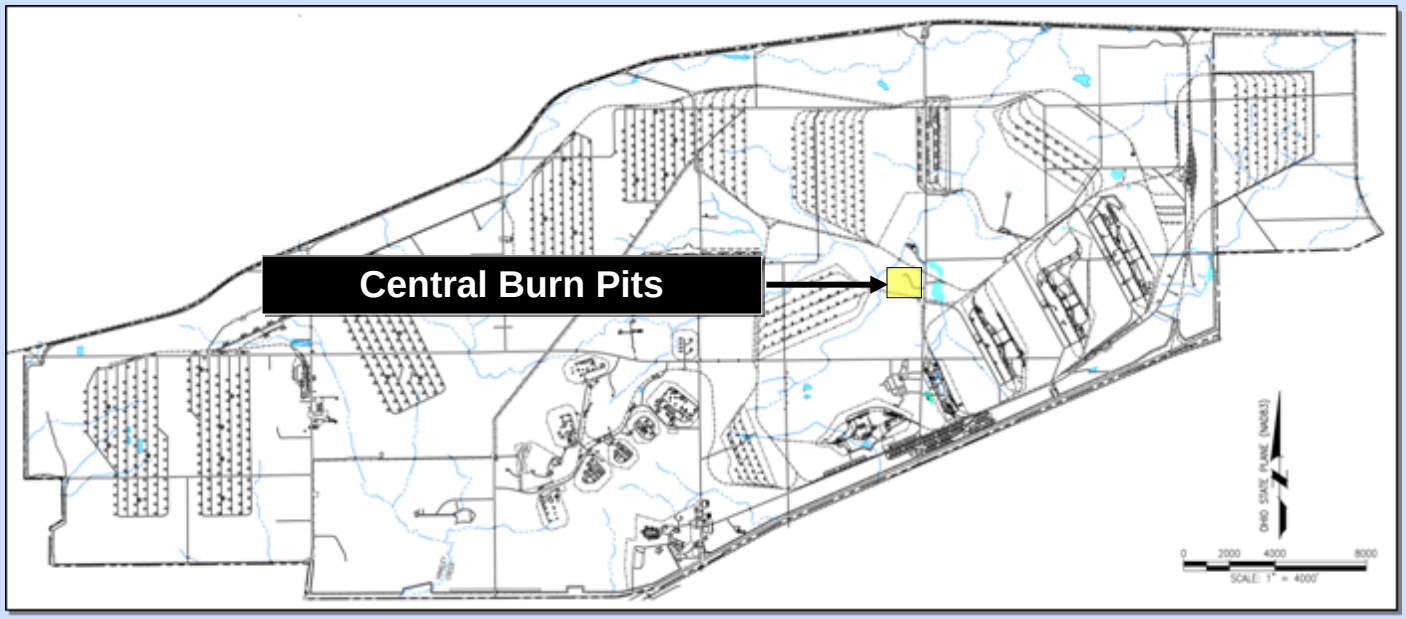
Presentation Agenda

- Site Description
- Historical Operations and Investigations
- Scope of the Response Actions
- Recent Investigations and Risk Assessments
- Debris Pile Removal Action
- Proposed Plan for Soil/Dry Sediment
- Questions and Comments
- Adjourn

Location of CBP



CBP is located in the east-central portion of the Ravenna Army Ammunition Plant (RVAAP)/Ravenna Training and Logistics Site (RTLS) at the intersection of Paris-Windham Road and Lumber Yard Road. CBP is designated as RVAAP Area of Concern (AOC) RVAAP-49.



Site Description and Historical Operations

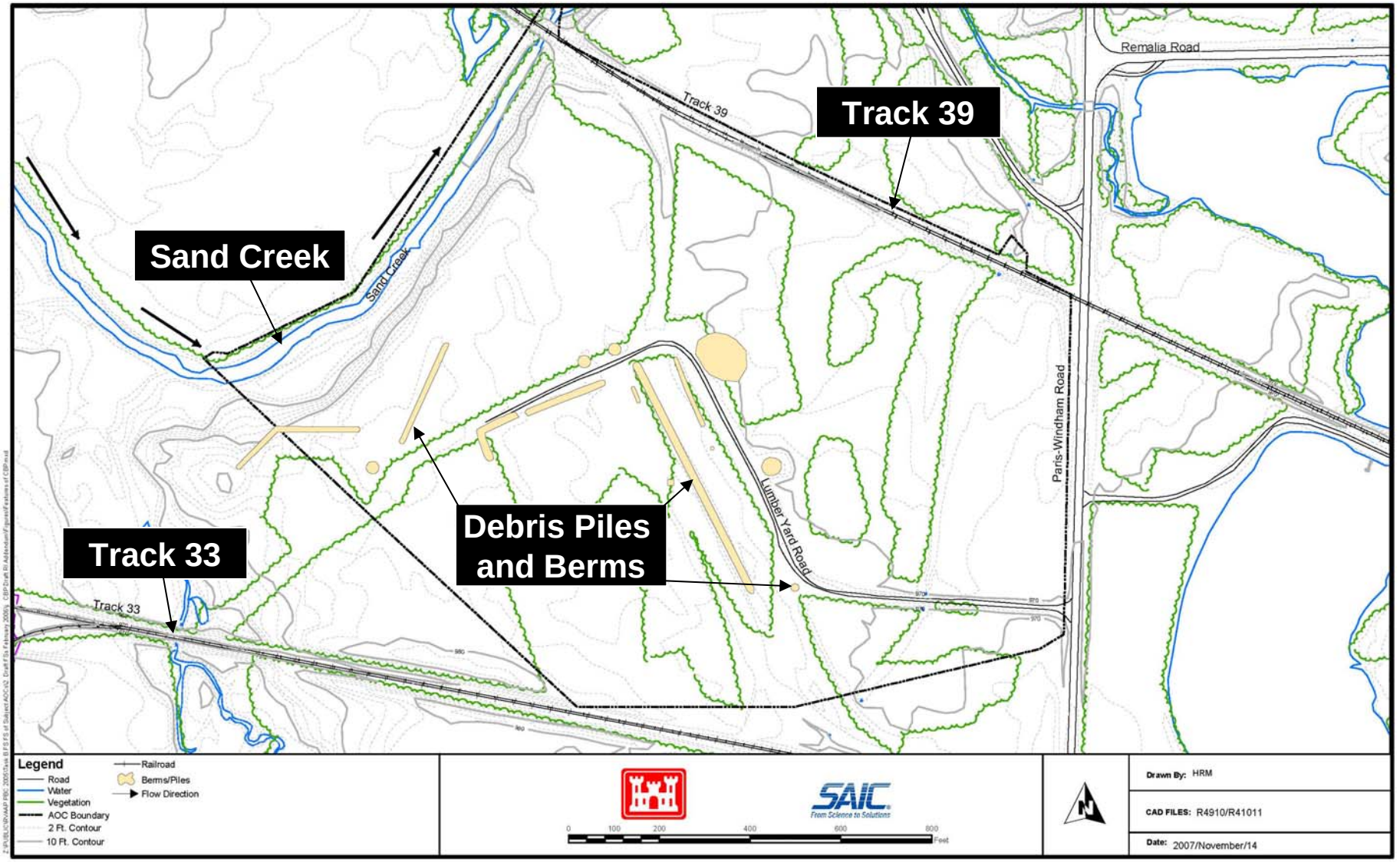
- CBP is bordered by Railroad Tracks 33 and 39. Sand Creek is on the west-northwest border of CBP.
- CBP is approximately 20 acres in size and relatively flat due to historical grading and fill activities. Piles and berms exist throughout the AOC.
- Originally used as lumber and building materials storage area.
- CBP was used for open burning of the following materials:

➢ Non-explosive wastes	➢ Electrical Components
➢ Wooden boxes	➢ Other combustible scrap

- The following non-hazardous waste material was disposed at CBP:

➢ Concrete	➢ Metal
➢ Excess fill dirt	➢ Gravel

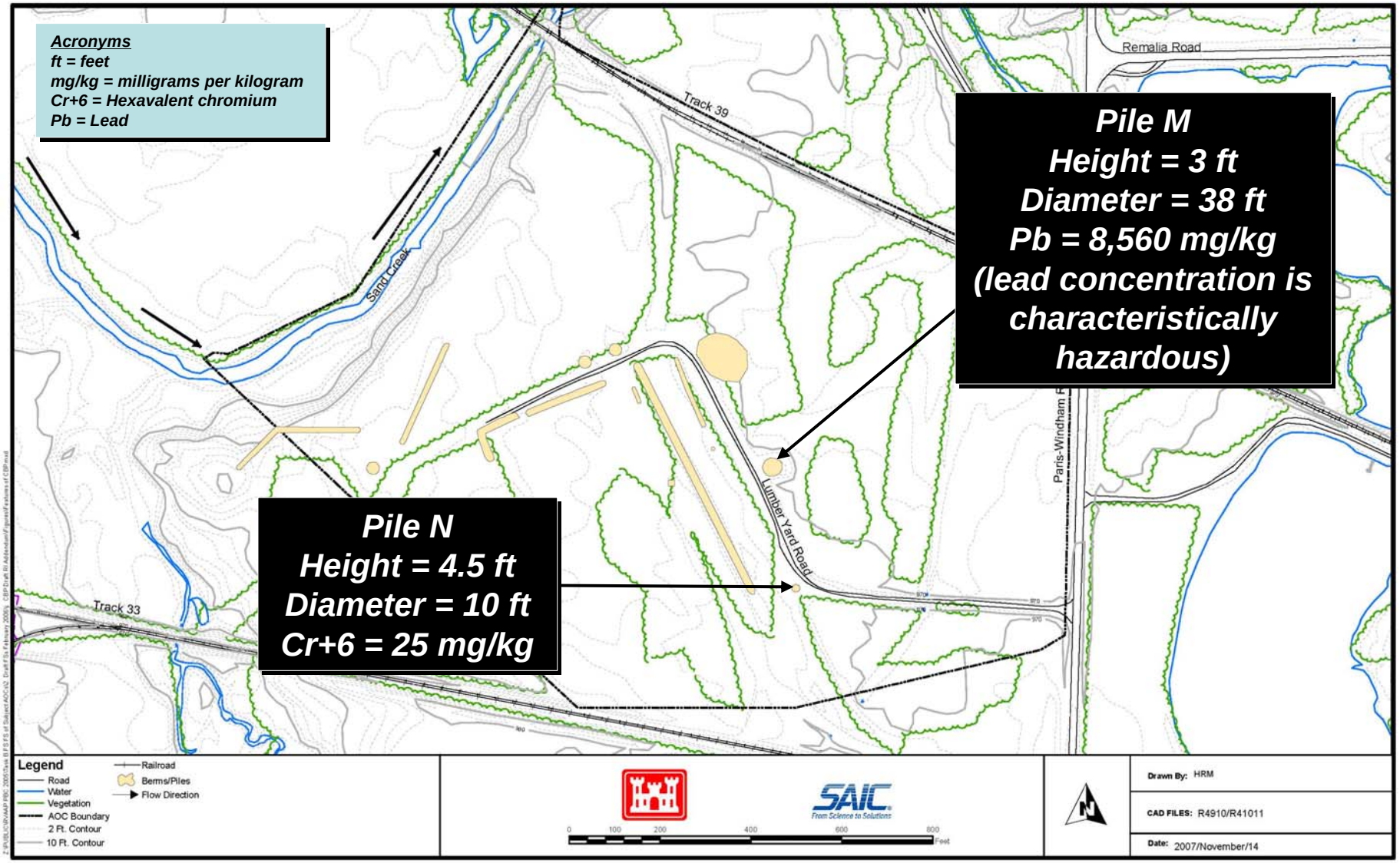
Central Burn Pits Site Map



Historical Investigations

- Two phases of remedial investigation (RI) completed as of 2005.
  - 118 soil samples collected and analyzed.
  - 12 debris piles and berms were sampled.
  - Soil contaminants include:
    - Metals.
    - Explosives.
- An Engineering Evaluation and Cost Analysis (EE/CA) recommended a non-time-critical removal action of two debris piles.
  - Pile M had elevated concentrations of lead.
  - Pile N had elevated concentrations of hexavalent chromium.
- Removal action of two debris piles was conducted in spring of 2008.

Removal Action of Piles M and N



Removal Action of Piles M and N (cont.)

- 50 tons of the upper portion of Pile M was excavated and disposed as hazardous waste.
- 496 tons of concrete and soil were excavated and disposed as nonhazardous waste until the cleanup goal for lead (400 mg/kg) was achieved.

- 157 tons of soil and burning residue comprising Pile N was excavated and disposed as non-hazardous waste.
- The hexavalent chromium cleanup goal (16 mg/kg) for Pile N was achieved after one week of excavation activities.

Remedial Investigation (RI) Addendum

- Remedial Investigation Report Addendum completed for CBP in June 2008 included:

  - **Qualitative risk evaluation**
  - **Updated human health risk assessment**
  - **Updated ecological risk assessment**
  - **Developed cleanup goals**

- The Addendum evaluated if the following items were needed:

  1) Further investigation.
  2) Engineering Feasibility Studies for soil cleanup.
  3) No further action.

Remedial Investigation (RI) Addendum Results

- Chemicals in soil not predicted to impact groundwater.
- Human health risk assessment for soil evaluated a wide range of possible scenarios:
  - National Guard Trainee (intended use)
  - Security Guard/Maintenance Worker
  - Fire/Dust Suppression Worker
  - Trespasser
  - Resident Subsistence Farmer
- Contaminants less than cleanup goals for intended land use (National Guard Trainee) and residential land use (Resident Subsistence Farmer).
- Ecological clean-up goals are not required.
  - Healthy ecosystem, not likely to change.
  - Low levels of soil contamination and ecological risk.
  - Low likelihood of contaminant movement from soil to adjacent wetland.
  - A vast amount of high-quality habitat adjoins the AOC.

Recommendation for Soil and Dry Sediment

CBP – No Further Action

- This response action addresses soil and dry sediment.
- Future wet sediment, surface water, and groundwater decisions are planned.
- National Guard Trainee is the anticipated land user.
- National Guard anticipates using CBP for Dismounted Training/No Digging.
- No remaining chemicals in soil or dry sediment above cleanup goals exist for residential land use (Resident Subsistence Farmer) or anticipated land use (National Guard Trainee).
- A healthy ecosystem currently exists at CBP.

Your Comments and Input are Appreciated!

Questions?