


Project Update
Open Demolition Area #2
White Phosphorus Disposal at the Rocket Ridge Area

Ravenna Army Ammunition Plant
Restoration Advisory Board Presentation
March 16, 2011



TolTest – Project Team

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Background

- Waste munitions containing white phosphorus were disposed of at Rocket Ridge in the late 1940's and early 1950's



- White phosphorus
 - colorless, white to yellow wax-like substance, garlic/fish - like smell
 - highly energetic, once exposed to air, spontaneously ignites and oxidizes rapidly
 - chemical reaction continues until all the material is consumed or is deprived of oxygen

Background

- Remediation of the waste from Rocket Ridge is being performed by PIKA
- Drums will contain residual white phosphorus contaminated soils, organic and metal debris, topped with water to maintain saturation
- PIKA will thoroughly hand screen materials during the generation and packing phase of project
- No munitions or explosive hazards are associated with white phosphorus drums



Drum Management Processes

State, federal and local regulations prescribe the requirements to manage waste, and to protect the workers, public and environment.

- **Waste Management Plan** – specific to the management of staging, loading, transportation, disposal and recordkeeping
- **Contingency Plan** – emergency response, incident management, notifications procedures to emergency management and response personnel
- **Accident Prevention Plan** – procedures to mitigate the potential for workplace incidents and accidents
- **Site Safety and Health Plan** – worker protection, task hazard analysis, training requirements
- **Quality Control Plan** – procedures to ensure the project is completed in accordance with contract requirements and regulations



Drum Management Overview

- Drum staging area constructed along access road within the secured wet storage area
- Drums arrive secured 3 per pallet
- Drums are inspected to ensure structural integrity and clean exterior
- Each load of drums is certified to be free of explosives
- Each drum has a unique identification number, is inventoried and appropriately labeled
- Weekly inspections of staging area and drums
- Drum storage <90 days
- No more than 180 drums will be stored on site
- ~ 80 drums/week will be transported to the disposal facility
- Waste disposal will be via thermal destruction

Key Subcontractors

- *Non-Reactive Spill Response Contractor*
 - **PIKA International, Inc.** - RVAAP
- *Weekly Drum Loading*
 - **Veolia Environmental Solutions** – North Jackson, OH
- *Transporter*
 - **Triad Transport** – Warren, OH
 - Registered US DOT Hazardous Waste Transporter
- *Disposal Facility*
 - **Veolia Environmental Solutions** - Sauget, Illinois
 - RCRA permitted incineration facility



Emergency Response Coordination – Onsite

- **RVAAP Installation Spill Contingency Plan** - Vista Sciences Corporation
 - *On-Scene Coordinator* – Jim McGee (330)-358-3005
 - *Alternate On-Scene Coordinator* – Christy Esler (330)-358-7311
- **White Phosphorus Disposal Contingency Plan Addendum** – TolTest
- Table Top and Mock Drills coordinated with multiple agencies
 - US Army
 - US Army Corps of Engineers
 - Ohio Army National Guard
 - Ohio EPA Emergency Response
 - Security Guards on Post
 - Ravenna Fire Department
 - Portage County EMS
 - Robinson Memorial Hospital
 - State Police and Sheriff Department

Emergency Response Coordination – Transport Phase

- Triad Transport is monitored 24 hours by GPS tracking
- Emergency Response contractors are identified along entire haul route
 - Driver would notify dispatch who in turn notifies local police and fire departments
 - Following notification of police Triad would notify a facility Emergency Coordinator
 - Facility Operation Manager - Safety Director
Phone: 1-800-324-1139
 - Facility Manager - Asst. Safety Manager
Phone: 1-800-324-1139



- Emergency Coordinator would notify the National Response Center, state, & local agencies and the generator
 - U.S. National Response Center (800) 424-8802
 - CHEMTREC (800) 424-9300
 - HAZARDOUS MATERIALS/WASTE INCIDENTS (800) 843-0699

Primary Transportation Route

RVAAP to State Route 5 West to I-76 W to I-71 S to Columbus, I270 West to I-70 West to Sauget, IL



Schedule

ACTIVITY	DATE
Finalize Waste Management Plan & post to RVAAP website	3-17-11
Complete construction of drum staging area	3-17-11
Stage ER and site equipment	3-18-11
Conduct training of on-site personnel	3-18-11
Ready to accept drums	3-21-11
Anticipated completion of transportation and disposal of drums	End of July

Questions?

