



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

Ravenna Army Ammunition Plant  
Restoration Advisory Board Presentation  
November 17, 2010

***TOLLEST, INC.***

# ToITest – Project Team

- Brian Morgan – Project Manager  
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- Karen Radomski – Onsite Technical Manager
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- Jennifer Resnik – Technical Lead
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The top of the slide features a blue world map with glowing white lines and circular markers. The text 'ToI Test' is centered in a large, white, sans-serif font.

# ToI Test

- Experienced contractor on cradle-to-grave environmental remediation contracts
- Aggressive, proactive, ongoing Corporate Safety & Health Program
- Solid commitment to health and safety
- Dedicated technical and management staff
- Committed to strong partnering and teamwork with all stakeholders
- Close coordination is required and will be diligently implemented with the RVAAP Facility Manager, Operating Contractor, PIKA International, Ohio Army National Guard on daily activities



# Background

- What is white phosphorus?
  - a colorless, white to yellow translucent wax-like substance with a pungent, garlic-like smell
  - highly energetic (active) and ignites once exposed to oxygen
  - exposed to air, it spontaneously ignites and is oxidized rapidly
  - chemical reaction continues until either all the material is consumed or the element is deprived of oxygen
  - made from a form of phosphorus that is used for smoke screens, marker shells, hand grenades, smoke markers, colored flares, tracer bullet and incendiary munitions
- White phosphorus used at Ravenna to produce the M19 rifle grenades during WWII



# Background

- Drums will contain residual WP contaminated soils, organic and metal debris, then will be topped with a water layer to maintain saturation
- No explosive hazard associated with WP drums
- WP drums will contain absolutely no MEC or Munitions – thoroughly screened by PIKA during generation and packing phase of project

# Project Objectives

- Generate project workplans (Waste Mgmt Plan, Health & Safety, Quality Control, Emergency Response and Spill Contingency, etc)
- Ensure compliance with State and Federal regulations during all phases of project – storage, tracking, transport and disposal phases
- Maintain temporary staging area in Building 1047
- Weekly inspections and an inventory of all drums
  - Drums inspected for leaks, ruptures, bulging, odors (indicates seals not tight), deterioration, labeling, proper storage and spacing , tampering
- Earth covered magazine repairs and upgrades
- Wet Storage Area - road improvements
  - Transportation and disposal services of white phosphorus contaminated soils and debris



# Schedule

- Project schedule coordinated closely with PIKA operations
- Road improvements are complete
- Earth covered magazine repairs complete first week of December 2010
- Drum generation beginning February 2011
- Approximately 80 drums per week, 1000 estimated total drums – no drums will be stored for more than 90 days
- Weekly transportation and disposal of drums
- Anticipated completion date end of April 2011



# Sequence of Drum Processing

- PIKA – transports 8-10 drums twice daily from site to Building 1047
- ToITest will receive drums via Chain-of-Custody, then initiate drum labeling and manifesting protocols
- Weekly Drum Loading
  - Veolia Environmental Solutions – North Jackson Office
- Transporter
  - Triad Transport
  - Registered US DOT Hazardous Waste Transporter
- Disposal Facility
  - Veolia Environmental Solutions, Inc. located in Sauget, Illinois
  - RCRA permitted incineration facility
- Manifesting and Certificate of Destruction (included w/ Final Report)



# Transportation Route

RVAAP to State Route 5 West to State Route 44 South  
44S to I-76 W to (Akron by-pass) to Columbus, I270 West to I-70 West



# Emergency Response Coordination – RVAAP Facility

“Dry-Run” scenario will be practiced with respective agencies prior to first shipments in the highly unlikely event of emergency spill, leak, or fire during storage at RVAAP

- ToITest will upon discovery secure entrances to building and initial default setbacks for evacuation per Approved Spill Contingency Plan
- Notify the On-Duty RVAAP Security Dispatcher (Post 1)
- Notify PIKA International who is contracted to handle small spills or leaks
- Larger emergencies will be handled by the local emergency responders including Ravenna City Fire Department and Portage County Emergency Response Team
- Notifications will also be made to the project Generator, OEPA and other regulatory agencies as needed
- Small spill evacuations = 1000' min. / Fires = 0.5 miles

# Emergency Response Coordination – Transport Phase

- In event of emergency spill, leak, or other emergency during transportation
- Triad Transport is monitored 24 hours by GPS tracking
- Driver will notify dispatch who in turn notifies the local police and fire departments first to help secure the area
  - Following notification of police Triad will notify a facility Emergency Coordinator
    - Facility Operation Manager  
Name: Safety Director  
Phone: 1-800-324-1139
    - Facility Manager  
Name: Asst. Safety Manager  
Phone: 1-800-324-1139
  - The Emergency Coordinator will notify the National Response Center, proper state, local agencies and the Generator as well as fire departments
    - U.S. National Response Center (800) 424-8802
    - CHEMTREC (800) 424-9300
    - HAZARDOUS MATERIALS/WASTE INCIDENTS (800) 843-0699



**Questions?**