Rock Island District
Ordnance and Explosives (OE) Engineering

Time and Cost Benefits
of a
Range Assessment/
Archives Search Report

For

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**Time and Cost Benefits of a Range Assessment/Archives Search Report**

See also ADM000767. *Proceedings of the Twenty-Seventh DoD Explosives Safety Seminar Held in Las Vegas, NV on 22-26 August 1996.*
Range Assessment/Archives Search Report (ASR)

Outline

• Qualifications of the ASR Team
• Basic ASR Principles
• Report Organization
• Conclusions and Recommendations
Teamed w/ Corps/Army/DOD
Explosives Safety

- Corps Huntsville Engrg and Spt Ctr
  Manage OE program as Center of Expertise and Design Center

- Corps Division Headquarters
  Provide liaison between Rock Island District and Corps HQs

- Corps Military Support District
  Manage OE projects as Military design district

- Corps Rock Island District
  Support Huntsville and Military District's OE program

- U.S. Army Defense Ammo Ctr & School (USADACS)
  Support Rock Island District w/ explosives safety (co-located w/Rock Island)

- Army Medical Command (MEDCOM)
  Support OE team with industrial hygiene (co-located w/Rock Island)
U.S. Army Defense Ammunition Center and School (USADACCS)

Mission: Support Army Explosives Safety Program

- Ammunition Career Management
- Logistics Engineering
- U.S. Army Technical Center/Explosives Safety (USATCES)
- Demil Technology
- Logistics Review
- Army Ammunition School
Specialized Ordnance Staff

- Safety and Occupational Health Specialists (former EODs)
- Quality Assurance Specialists (Ammunition Surveillance) (QASAS)
- Research Specialists
- Chemical Engineers
- Industrial Hygienist
- Civil/Environmental Engineers
- GIS Specialists
- Engineering (CADD/GIS) Technicians
- Engineering Aides
- Electrical Engineer (diver/ordnance locator specialist)
ASR Purposes

- Provide site characterization
- Verify FUDS eligibility/boundaries
- Determine OE presence on subsite basis (Confirmed, Potential, Uncontaminated)
- Provide OE technical data
- Provide related HTRW and BD/DR considerations
- Provide recommended OE cleanup strategy
Final Report

- Findings
- Conclusions and Recommendations
- Appendices
- Reference Sources
- Drawings
## Definitions of OE Contamination

<table>
<thead>
<tr>
<th>Definition</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Confirmed</strong></td>
<td>live OE/energetics onsite (end items, components, explosive soil)</td>
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<tr>
<td><strong>Potential</strong></td>
<td>evidence of OE/nothing confirmed</td>
</tr>
<tr>
<td><strong>Uncontaminated</strong></td>
<td>no OE evidence (includes expended small arms)</td>
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Summary of Process

- Records Search
  - Government
  - Non-Government

- Site Safety Plan
  - Initial Hazards
  - Emergency contacts

- Site Inspection
  - Site dynamics/interviews
  - Visual inspection/identification/mapping

- Final Report
  - Records evaluations
  - Site inspection
  - OE analyses
  - Conclusions and recommendations
Types of OE Analyses

- Production/Manufacturing
  - Process analyses
  - Building usage
  - Waste Streams
  - Decontamination procedures

- Usage (Army, Navy, Air Force)
  - Range fans
  - Maneuver areas/uses
  - Bomb target hazard zones
  - Trajectory analyses
  - Military unit/mission analyses
  - Delivery weapon analyses

- Storage
  - Storage Practice
  - Reconditioning practice

- Disposal
  - Burn pits
  - Demolition ranges
  - Burial Pits
Summary of Conclusions

Site Name
Area: X
Size: Y Acres

- **Land Usage**
  - Former military usage, present usage, future probable end usage

- **Eligibility**
  - Confirmed FUDS or IR, Potential FUDS or IR

- **Ordnance Presence**
  - Confirmed, Potential, Uncontaminated

- **Risk Assessment Code**
  - 1 (imminent hazard threat); 2, 3, 4, or 5 (uncontaminated)
Summary of Recommended Strategy Issues

- **Rights of entry**
  Landowner will assist w/community relations
  Landowner has been very reluctant to participate
  Must coordinate work during nongrowing season

- **OE Detection Sweeps**
  Heavy brush will influence sweeps
  Terrain is very slippery after heavy rains
  Soil is mixture of clay and stone rubble
  Endangered plant life onsite

- **OE Disposal**
  Onsite destruction must consider nearby housing
  Site is heavily used by the public
Rock Island District
Ordnance and Explosives Engineering

- Ordnance Engineering Experts
  100 years of EOD expertise
  300 years of Army, Navy, Air Force ammunition experience
- Partner with COE/Army/DOD OE Assets
  Huntsville Engineering and Support Center
  USADACS/IOC/AMC/DDESB
- Fully Trained and Equipped
  PA, SI, EE/CA, RD, RA
  Magnetometers, GPS, other field equipment
  CADD/GIS/Internet OE Anchor
Summary of Recommendations

Site Name
Area: X
Size: Y Acres

- Preliminary Assessment Actions
  - Amend or prepare INPR or other PA documents
- OE Actions
  - NOFA, IRA, EECA
- HTRW Actions
  - Perform SI
- BD/DR Actions
  - Evaluate the hazard