GREAT LAKES AND OHIO RIVER DIVISION
CONSTRUCTION ROUNDTABLE

LTC Jason Toth
Commander, Buffalo District
05 – 06 December 2019
AGENDA

- FUSRAP/FUDS
  - Assigned mission / program synopsis
  - Districts with mission
  - Example project
  - Projected work

- Dredged Material Management
Program: Formerly Utilized Sites Remedial Action Program (FUSRAP)

Mission: Identify, investigate and if necessary remediate radiological and chemical contamination at sites involved in the early atomic weapons program

Example Project: Luckey Site – Remediation of soils contaminated with beryllium, lead and radionuclides

Expertise: Beryllium and radiation health and safety; contaminated soil excavation, transportation and disposal; data management

Lessons Learned: Health and safety and contamination control are major components on projects with beryllium

Tips: Earned value management important to project success
<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>CDR</th>
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<tbody>
<tr>
<td>Buffalo</td>
<td>LTC Toth</td>
<td>David Romano</td>
<td>Bill Kowalewski</td>
<td>716-879-4418</td>
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<td>Pittsburgh</td>
<td>COL Short</td>
<td>Lenna Hawkins</td>
<td>Tim Herald</td>
<td>412-395-7442</td>
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- Preliminary assessment
- Site inspection
- Remedial investigation
- Feasibility study
- Proposed plan
- Record of decision
- Remedial design
- Remedial action
- Project closeout
- Return to Dept. of Energy

**FUSRAP DISTRICTS**

- Ashland 1 / Seaway D / Rattlesnake Creek & Ashland 2
- Niagara Falls Storage Site (NFSS)
- Seaway
- Harshaw
- Joslyn
- Luckey
- Lake Erie
- Bliss & Laughlin
- Painesville
- Superior Steel
- Tonawanda Landfill
- Shallow Land Disposal Area (SLDA)
<table>
<thead>
<tr>
<th>Remedial Action</th>
<th>2019</th>
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Investigation Phase (RI = Remedial Investigation, FS = Feasibility Study, PP = Proposed Plan, R = Record of Decision)
Awaiting Funding / Contract Procurement
Remedial Design Phase
Remedial Action / Cleanup Phase (CA = Contract Award)
Closeout / Turn Back to USDOE (CR = Closeout Report, TO = Turnover)

Remedial Design & Remedial Action Schedule Pending HQ USACE Approval

Remedial Action TBD

25 NOV 2019
• Former beryllium production facility
• Soils contaminated with beryllium, lead and radionuclides
• Remedy is excavation and off-site disposal
• Building removal may be required to address soils underneath
• Former lagoons are currently being remediated under existing contract
<table>
<thead>
<tr>
<th>Location</th>
<th>Requirement</th>
<th>Year</th>
<th>FAR Range</th>
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<tbody>
<tr>
<td>Luckey Site, Luckey OH</td>
<td>Site remediation (Beryllium and radionuclide contaminated soils excavation and disposal; building demolition)</td>
<td>2021</td>
<td>$100M - $250M</td>
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<tr>
<td>Niagara Falls Storage Site, Lewiston, NY</td>
<td>Site operations and maintenance (Maintain interim waste containment structure [IWCS])</td>
<td>2023</td>
<td>$1M - $5M</td>
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<td>Seaway Site, Tonawanda, NY</td>
<td>Site remediation (Complete capping of inactive landfill)</td>
<td>TBD</td>
<td>$10M - $25M</td>
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<td>Harshaw Chemical, Cleveland, OH</td>
<td>Site remediation (Radionuclide contaminated soils excavation and disposal)</td>
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<td>Guterl Steel, Lockport, NY</td>
<td>Site remediation (Radionuclide contaminated soils excavation and disposal; radionuclide contaminated groundwater cleanup)</td>
<td>TBD</td>
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<tr>
<td>Niagara Falls Storage Site, Lewiston, NY</td>
<td>Site remediation (Removal/treatment/disposal of high activity radioactive residues in IWCS; radionuclide/chemical contaminated soils excavation and disposal)</td>
<td>TBD</td>
<td>TBD</td>
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FORMERLY USED DEFENSE SITES (FUDS)

- **Mission:** The environmental restoration of properties that were formerly owned by, leased to or otherwise possessed by the US and under the jurisdiction of the Secretary of Defense prior to October 1986.

- **FUDS Vision:** Response complete in our lifetime.

- **FY20 Obligation Goal:** $17.8M
Projects

**Former Plumbrook Ordnance Works Red Water Pond Areas**
The Former Plum Brook Ordnance Works was a TNT and Pentolite Manufacturing facility during WWII from 1941 to 1945 producing over a billion pounds of explosives. Project 20 – Red Water Pond Areas: received process waste water from the trinitrotoluene (TNT) manufacturing areas. Remedial Action for the Pentolite Red Water Pond Area includes excavation, Alkaline Hydrolysis and on-site/off-site disposal.

**Raco Army Airfield & Missile Site TCE Investigation**
In 1960, a BOMARC missile base was constructed southeast of the airfield and operated until 1973. Since that time, the property has remained under US Forest Service (USFS) jurisdiction. A feasibility study is underway to evaluate remedial alternatives for the trichloroethene groundwater plume. A non-time-critical removal action (NTCRA) is underway to remove a concrete vault containing contaminated sludge.

*View of Pentolite Road Ditch: Dike constructed by NASA to control release of Redwater, 21 Jun 18*

*Raco Missile Site. TCE Groundwater Plume*
# FUDS DISTRICTS

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<tr>
<td>Louisville</td>
<td>COL Gant</td>
<td>Linda Murphy</td>
<td>Dave Dierken</td>
<td>502-315-6498</td>
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# FUDS FORECAST

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<th>Location</th>
<th>Requirement</th>
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<tr>
<td>Nike D-97 Oakland Community College Project 02</td>
<td>Conduct an RI/FS</td>
<td>2020</td>
<td>$1M - $5M</td>
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<tr>
<td>Plum Brook Ordnance Works Project 20</td>
<td>RA-C phase</td>
<td>2020</td>
<td>$1M - $5M</td>
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DREDGED MATERIAL MANAGEMENT

• Approximately 3 million cubic yards of material is dredged from the Great Lakes each year. Dredging supports nearly $25B commercial industry across Great Lakes.

• Consolidated Disposal Facility capacity, environmental concerns, and new laws have challenged how we traditionally dispose of dredged material.

• Continue to work with stakeholders and find beneficial uses for the dredged material.
Magnitude of Annual Toledo Dredged Material Volume

800,000 cubic yards of dredged material would fill enough dump trucks to stretch from Toledo to Cleveland four times. That’s a distance of approximately 450 miles.

Length: 30 feet
Capacity: 10 cubic yards

The equivalent of a 40 story building.
Beneficial Use of Dredged Material Project Collaboration

- $25B in annual business revenues generated by the harbors
- 130,000 jobs created or retained by the harbors
- Total Great Lakes dredging = 3.3M cubic yards; Lake Erie alone = 1.5M
- Ohio’s 2020 ban on open-lake disposal requires development of alternatives
USACE Contractor, Ryba Marine, placed dredged material into the Toledo-Lucas County Port Authority’s Riverside Facility. This demonstration project, funded by the Ohio Healthy Lake Erie Initiative, is aimed at helping to promote alternatives to open-lake disposal. The ultimate goal is to show the agricultural community there are benefits to using dredged material for crop growth.
HEALTHY PORT FUTURES | ASHTABULA - Dynamic Sediment Management Habitat Wetland Concept | 10 Acres | 400K cy

- Mobile Suspended Sediment Accumulation Zones
- Dredged Sediment Placement Locations
- Ashland River Flow
- Longshore Drift
- Dredged Harbor Extents

ASHTABULA, OH SECTION 204