



U. S. Army Corps of Engineers (USACE)
Information Session
Niagara Falls Storage Site
and
Lake Ontario Ordnance Works
March 2, 1999



Agenda

- Opening Remarks - Major Kally L. Eastman
- Purpose - Ray Pilon
- Identify Two Programs
- Covers
 - Radiological contamination
 - Chemical contamination
- Comprehensive Environmental Response, Compensation and Liability Act Process



Agenda (Cont.)

Niagara Falls Storage Site

- Identify Program
- Discuss Work Accomplished to Date
- Identify Schedule



Agenda (Cont.)

Lake Ontario Ordnance Works

- Identify program
- Remedial Investigation
 - Purpose
 - Plan
 - Status



Agenda (Cont.)

- Remedial Investigation (Cont.) :
 - Status
 - Work to date
 - Findings
 - Current Interim Removal Actions
 - Proposed Removal Actions
 - Recommendations
- Identify schedule



Agenda (Cont.)

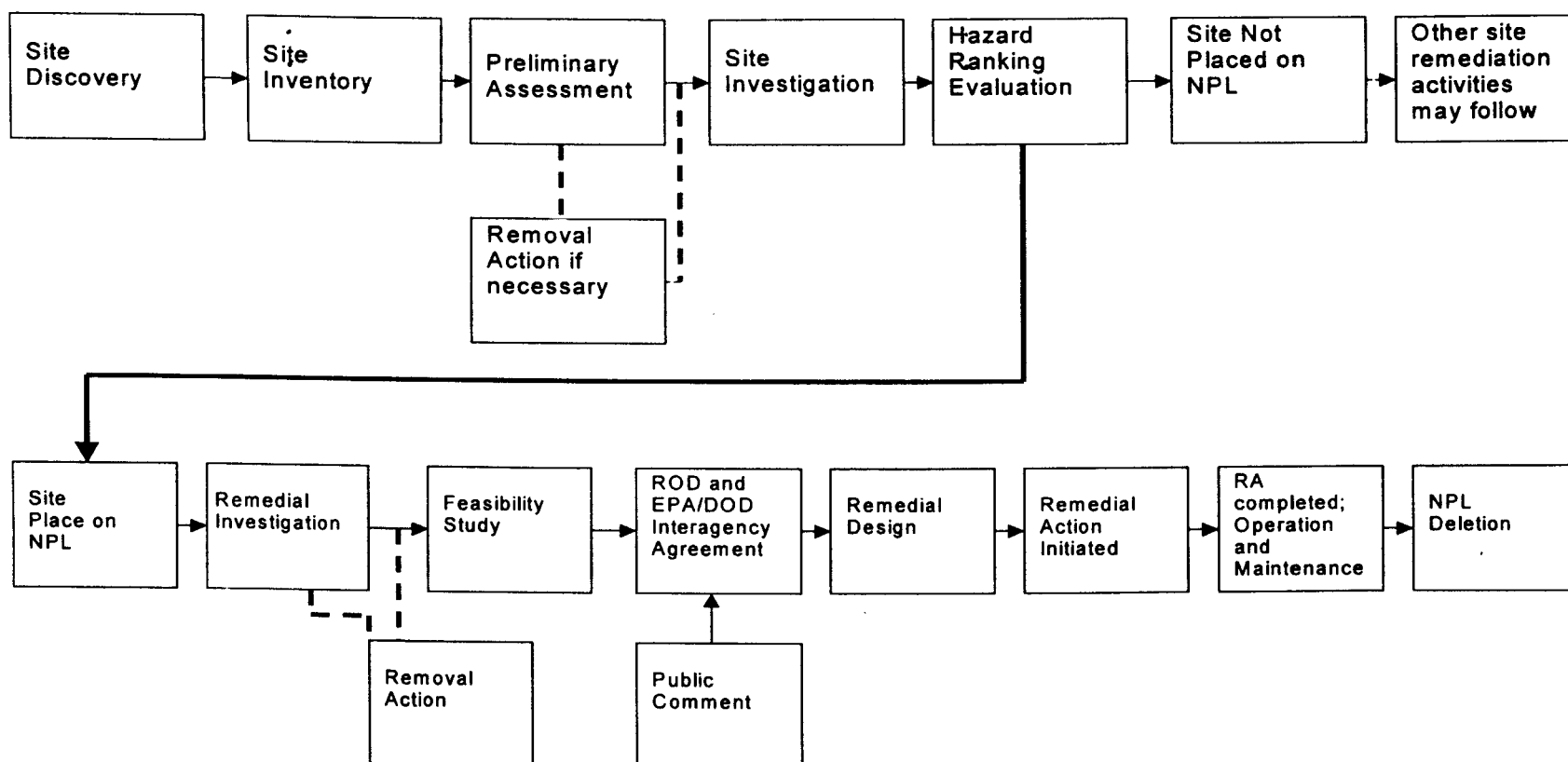
Niagara Falls Storage Site and Lake Ontario

Ordinance Works

- Public Involvement
- Questions
- Adjournment

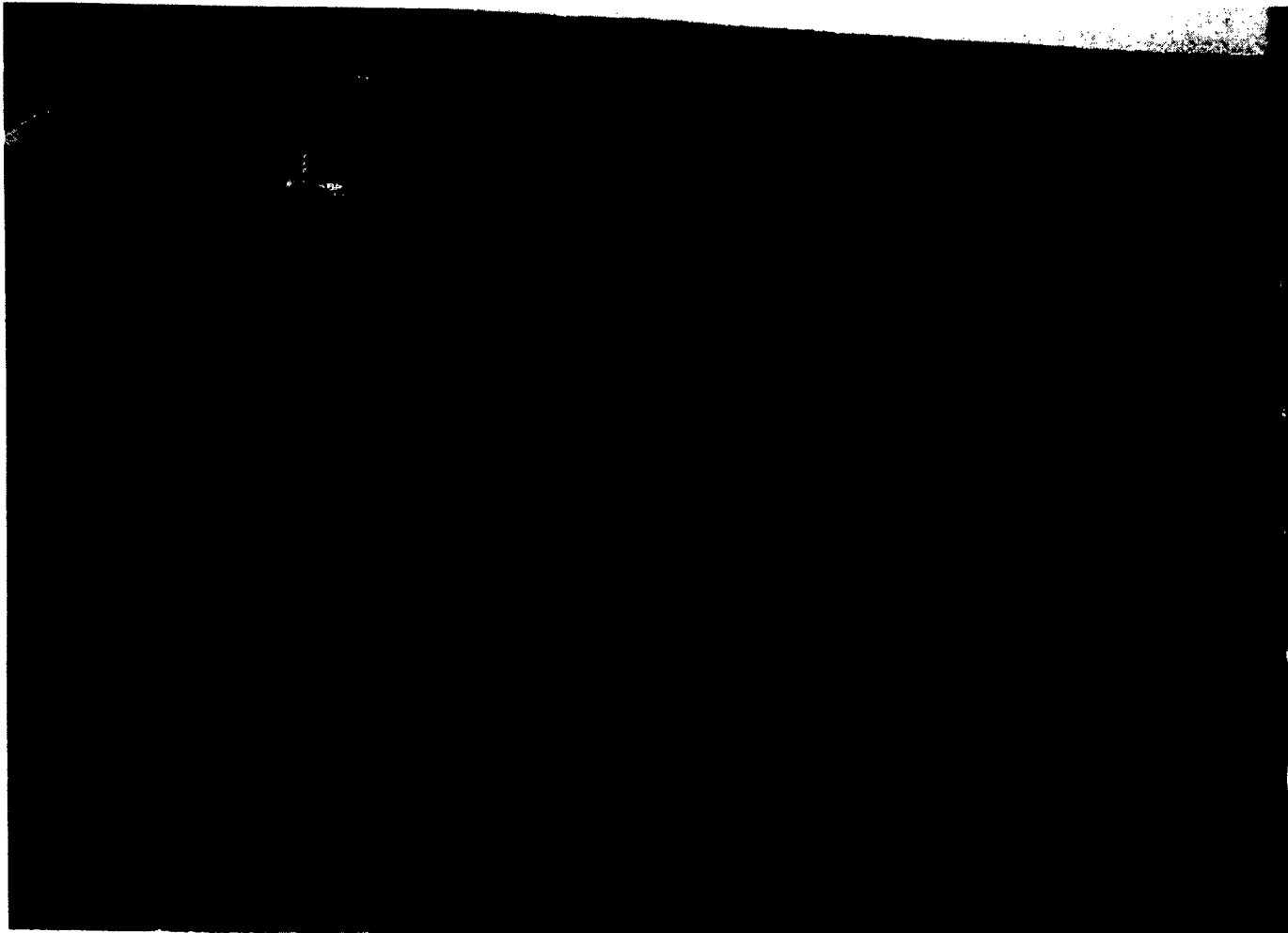


Comprehensive Environmental Response, Compensation and Liability Act Process



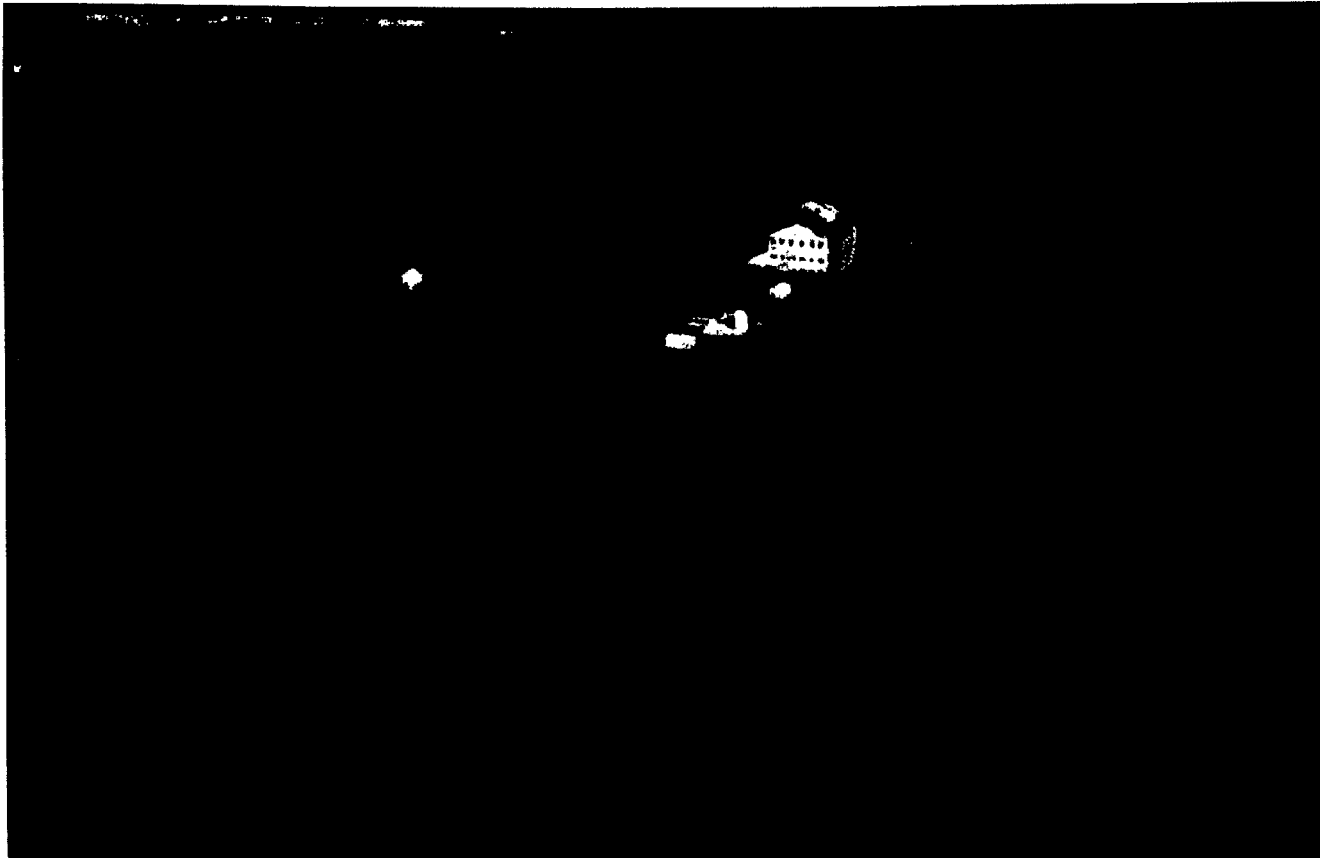


Niagara Falls Storage Site





Niagara Falls Storage Site





Niagara Falls Storage Site

Identify Program

- Formerly Utilized Sites Remedial Action Program (FUSRAP)



Niagara Falls Storage Site

Work to Date

- Security has been upgraded
- Site surveillance, maintenance and environmental monitoring continued
- Corps completed Building 403 decontamination
- Corps will remove palletized radioactive waste stored on site



Niagara Falls Storage Site

Work to Date (Cont.)

- Corps review of previous documentation has been completed
- Corps has finalized a Scope of Work to begin Remedial Investigation/Feasibility Study in 1999. Contracting action is underway.



Niagara Falls Storage Site

Schedule

- Remedial Investigation/Feasibility Study
 - begin Remedial Investigation in 1999
 - complete by 2000
 - begin Feasibility Study in 2000
 - includes possible treatability studies, pilot plant stage
 - complete by 2003
 - Corps recommendation on what to do with radioactive material in containment cell should be made by end of 2003.



Niagara Falls Storage Site

Schedule (Cont.)

- Remedial Design
 - begin remedial design in 2003
 - phase continues through any remedial action phase



Niagara Falls Storage Site

Schedule (Cont.)

- Remedial Action
 - begin Remedial Action in 2004
 - complete Remedial Action 2006
- IMPORTANT QUALIFIER
 - Schedule identified is dependent on unconstrained budget!



Lake Ontario Ordnance Works

Identify Program

- Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS)



Lake Ontario Ordnance Works

Remedial Investigation - Purpose

- Determine if site contaminants are from Department of Defense (DoD) activities
- Identify DoD related contaminants
- Determine the location and extent of DoD related contamination



Lake Ontario Ordnance Works

Remedial Investigation Plan

(conducted in 2 phases)

- Phase 1 - Complete history search, then sample areas where DoD operations were reported
- Phase 2 - conduct focused sampling in areas where DoD contaminants were found
 - Address data gaps identified in Phase 1



Lake Ontario Ordnance Works

Remedial Investigation Status

- Phase 1 work completed during Fall 1998
- Phase 1 Draft Report issued December 1998
 - Draft Report was reviewed by:
 - Corps of Engineers
 - New York State Department of Environmental Conservation
 - Other interested parties
- Phase 2 currently in planning stage



Lake Ontario Ordnance Works

Remedial Investigation Work to Date

- Site wide investigation broken into several components:
 - Component 1 - Chemical Waste Management Property
 - Component 2 - Somerset Property
 - Component 3 - Town of Lewiston (former waste water treatment plant)
 - Component 4 - Town of Porter (water tower area)



Lake Ontario Ordnance Works

- Site wide investigation broken into several components (Cont.):
 - Component 5 - Niagara Falls Storage Site
 - Component 6 - Modern Landfill Property
 - Components 7 and 8 - Underground Utilities
 - Component 9 - Surface Drainage (creeks and ditches)



Lake Ontario Ordnance Works

Remedial Investigation Work to Date (Cont.)

- 38 areas were investigated
- 27 areas require further investigation during Phase 2
- 11 areas proposed for no further action



Lake Ontario Ordnance Works

Remedial Investigation Phase 1 Findings

- Component 1 - (CWM Property)
 - Soil - confirmed chemical contamination
 - Groundwater - confirmed chemical contamination
- Discovered:
 - Drum trench
 - a former burn area



Lake Ontario Ordnance Works

Remedial Investigation Phase 1 Findings (Cont.)

- Component 2 - (Somerset Group)
 - Groundwater - confirmed chemical contamination



Lake Ontario Ordnance Works

Remedial Investigation Phase 1 Findings (Cont.)

- Component 3 - (Town of Lewiston)
(former LOOW Waste Water Treatment Plant)
 - Soil - confirmed chemical contamination
 - Groundwater - confirmed chemical contamination



Lake Ontario Ordnance Works

Remedial Investigation Phase 1 Findings (Cont.)

- Component 4 - (Town of Porter)
 - (3.4 acres at water tower north of Balmer Road)
 - No finding of any DoD related contamination
 - Potential lead paint and asbestos containing materials
 - Beneficial use makes further investigation ineligible under DERP-FUDS program



Lake Ontario Ordnance Works

Remedial Investigation Phase 1 Findings (Cont.)

- Component 5 - (Niagara Falls Storage Site)
 - Soil - confirmed chemical contamination
 - Groundwater - confirmed chemical contamination



Lake Ontario Ordnance Works

Remedial Investigation Phase 1 Findings (Cont.)

- Component 6 - (Modern Disposal Property)
 - (only area near former incinerator investigated)
 - Soil - confirmed chemical contamination
 - (note: sampling limited due to extensive grading activities)
 - Groundwater - no sampling conducted in this area during Phase 1



Lake Ontario Ordnance Works

Remedial Investigation Phase 1 Findings (Cont.)

- Component 7 and 8
 - Underground Utilities
 - Sewer lines, sumps, and a 30-inch out-fall line were investigated
 - Sewer lines included acid waste and storm sewers
 - Sumps included acid concentration
 - 39 Manholes and/or storm drains located



Lake Ontario Ordnance Works

- Sewer lines, sumps, and a 30-inch out-fall line were investigated (Cont.)
 - Several areas identified where sewer lines removed or plugged
 - Preliminary results:
 - Manholes - confirmed chemical contamination
 - Surface Water - confirmed chemical contamination



Lake Ontario Ordnance Works

Remedial Investigation Phase 1 Findings (Cont.)

- Component 9 - Surface Drainage
 - Surface water and sediment evaluated at:
 - Four Mile Creek and Associated Drainage
 - Six Mile Creek
 - Twelve Mile Creek
 - Conclusion:
 - Twelve Mile Creek should be further investigated



Lake Ontario Ordnance Works

Remedial Investigation Phase 1 Findings (Cont.)

- ? Is the contamination dangerous now?
- A. There are environmental dangers on site.
 - We have found no evidence that contamination has migrated off-site. Our knowledge of the local geology leads us to conclude that the contaminated areas are stable.
 - We will further confirm this during Phase 2 investigation



Lake Ontario Ordnance Works

Current Interim Removal Actions:

- Asbestos removal project at Somerset Property initiated in 1998 (cost \$1 million)
- TNT pipeline and CWM sewer line removal will be completed 1999 (cost \$1.5 million)



Lake Ontario Ordnance Works

Proposed Removal Actions CWM Property 1999

- Area A drum trench (\$2 million)
- Area B burn pit (\$4 million)
- Design work for interim removal action at Area C trash pit and drum burial area



Lake Ontario Ordnance Works

Recommendations

- Proceed to Phase 2 Remedial Investigations
- Begin interim removal action at Area A drum trench and Area B burn pit areas located on CWM property.
- Begin design work for interim removal action at Area C trash pit and drum burial area located on CWM property



Lake Ontario Ordnance Works

Schedule

- Complete Remedial Investigation 2000
- Complete Feasibility Study 2001
- Proposed Plan/Record of Decision 2002
- Remedial Design 2003
- Remedial Action 2003 - 2005



Niagara Falls Storage Site and Lake Ontario Ordnance Works

Public Involvement

- Information Repository/Administrative Record
 - Lewiston Public Library
 - USACE FUSRAP Public Information Center
- Next Information Session Fall 1999
- Restoration Advisory Board presentation
 - Introducing Ms. Sandra Chaloux



Niagara Falls Storage Site and Lake Ontario Ordnance Works

Questions