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Formerly Utilized Sites Remedial Action Program (FUSRAP) 101

30 October 2008



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Topics

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Program Overview

- Program Purpose
 - Established to identify, evaluate, and remediate sites with radioactive contamination resulting from the following activities:
 - Types of Sites
 - Manhattan Engineering District (MED) activities
 - Atomic Energy Commission (AEC) activities
 - Similar sites added by Congress
- History
 - 1974: Program initiated by AEC
 - 1975 -1977: Energy Research and Development Administration (ERDA) involved
 - 1977 – 1997: Program run by Department of Energy (DOE)
 - 1997 – Present: Program run by U.S. Army Corps of Engineers (USACE)
 - PUBLIC LAW 105–245—OCT. 7, 1998 112 STAT. 1843
FORMERLY UTILIZED SITES REMEDIAL ACTION
PROGRAM



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P.L. 105-245

- PUBLIC LAW 105–245—OCT. 7, 1998 112 STAT. 1843 FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (INCLUDING TRANSFER OF FUNDS) For expenses necessary to clean up contaminated sites throughout the United States where work was performed as part of the Nation’s early atomic energy program, \$140,000,000, to remain available until expended:
- Provided, That the response actions by the United States Army Corps of Engineers under this program shall consist of the following functions and activities to be performed at eligible sites where remediation has not been completed: sampling and assessment of contaminated areas, characterization of site conditions, determination of the nature and extent of contamination, selection of the necessary and appropriate response actions as the lead Federal agency, preparation of designation reports, cleanup and closeout of sites, and any other functions determined by the Chief of Engineers as necessary for remediation:
- Provided further, That response actions by the United States Army Corps of Engineers under this program shall be subject to the administrative, procedural, and regulatory provisions of the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601 et seq.), and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 CFR, Chapter 1, Part 300:
- Provided further, That, except as stated herein, these provisions do not alter, curtail or limit the authorities, functions or responsibilities of other agencies under the Atomic Energy Act (42 U.S.C.2011 et seq.):
- Provided further, That any sums recovered under CERCLA for response actions, or recovered from a contractor, insurer, surety, or other person to reimburse the United States Army Corps of Engineers for any expenditures for response actions, shall be credited to the account used to fund response actions on eligible sites, and will be available for response action costs for any eligible site:
- Provided further, That the Secretary of Energy may exercise the authority of 42 U.S.C. 2208 to make payments in lieu of taxes for federally-owned property where Formerly Utilized Sites Remedial Action Program activities are conducted, regardless of which Federal agency has acquired the property and notwithstanding references to “the activities of the Commission” in 42 U.S.C. 2208: Provided further, That the unexpended balances of prior appropriations provided for these activities in this Act or any previous Energy and Water Development Appropriations Act may be transferred to and merged with this appropriation account, and thereafter, may be accounted for as one fund for the same time period as originally enacted.



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Stakeholder Relationships

- Various local Restoration Advisory Boards (RABs)
- Federal Facility Site Agreement at Iowa Army Ammunition Plant (Corps, Army, EPA, & State of Iowa)
- Joint meetings with DOE, NRC, and Association of State and Territorial Air and Solid Waste Management (ATSWAMO)
- Public Meetings



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Overview (Cont.)

- **Sites**
 - Originally 51 sites in 14 states
 - Currently 22 “Active” sites in 9 states (CT, IA, MD, MO, NJ, NY, OH, & PA)
 - 1 additional site (Joslyn Manufacturing, Fort Wayne, IN) being considered for admission to the program
- **Contaminants of Concern**
 - Generally low activity materials
 - Primary contaminants are radium, thorium, and uranium



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FUSRAP Sites

-
- SLDS
 - **SLAPS**
 - SLAPS VPs
 - Latty Avenue
 - **Madison**
 - CE
 - Shpack
 - IAAAP
 - SLDA
 - Superior Steel
 - DuPont
 - WR Grace
 - **Colonie**
 - Maywood
 - **Wayne**
 - Middlesex
 - Guterl Steel
 - Harshaw
 - Sylvania-Corning Plant
 - **Ashland 1**
 - **Ashland 2**
 - Seaway
 - NFSS
 - Painesville
 - Luckey
 - Linde
 - **Bliss & Laughlin**

➤ **RA Complete/Soil RA Complete**



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Types of Contamination

- **Uranium Mill Tailing (11e(2)) Material**
 - Defined under Atomic Energy Act (AEA) of 1954, Amended in 1974 as Uranium Mill Tailings Radiation Control Act (UMTRCA)
 - Uranium
 - Thorium
 - Radium
 - Decay Products
- **RCRA Regulated Waste (Heavy Metals)**



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Clean-Up Criteria

Cleanup Approach is to Follow CERCLA/NCP Process & Related 9 Criteria (40CFR300), Including:

- Complying with ARARs (Applicable or Relevent and Appropriate Requirements)
- Ensuring Adequate Protection of Human Health and Environment



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Program Management

- Civil Works (Program Development)
 - Budget Development and Defense
 - National level program management and policy guidance
 - Communication with interested Congressional elements
 - Coordination of program with the Assistant Secretary of the Army (CW)
 - Coordination of policy issues with DOE Headquarters
- Military Programs (Program Execution)
 - Management of the execution of the FUSRAP program
 - oversees the field elements engaged in execution activities
 - Approval of work plans and associated funding documents
 - Coordination with federal regulatory agencies



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Performance Measures

- Identify/assess immediate human health and environmental risks
 - Number of Action Memorandums signed
- Identify cleanup standards as basis for removal or remedial actions
 - Number of Action Memorandums signed
 - Number of Remedial Investigations Complete
 - Number of RODS signed by USACE
- Protection of Human Health and Environment
 - CY of contaminated material removed
 - Number of properties returned to beneficial use
 - Number Remedies in Place or Response Complete
- Efficient Use of Funding
 - % of funding that is expended on cleanup activities rather than studies



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Funding

- FY05 Appropriation : \$165 Million
- FY06 Appropriation : \$140 Million
- FY07 Appropriation : \$140 Million
- FY08 Appropriation : \$140 Million
 - Additional \$2.6M received from settlement with Ashland site owner
- FY09 President's Budget: \$130Million
- Through FY07 - \$1,712,307,510 spent
- Remaining Need (after FY07) : \$986,711,000 – 1,300,000,000



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FY08 Funding

- FY08 Appropriation : \$140 Million
 - Additional \$2.6M received from settlement with Ashland site owner
 - \$1.9M to Linde to maximize remediation contract enabling site to be finished in FY09
 - \$500K to Painesville for excavation of increased soil volumes
 - \$200K at HQ for distribution to other sites as needed for material volume increases, work at potential sites, funding of Omaha Center of Expertise (CX) activities in support of FUSRAP, etc...



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Significant Achievements

- **84% (Moderately Effective) OMB Part Rating received in 2004**

Total Funds Available in FY08	\$147,370,000	
Funds spent on Remediation Activities	\$124,230,000	
FY08 PART Metrics	Target	Result
% of total funds spent on remediation	80%	84.30%
Properties Returned to Use	7	13
Yd ³ Contaminated Material Disposed	125,000	153,782
Records of Decision Signed	3	2 (schedule for Harshaw RoD slipped)
Remedial Investigations Complete	2	2 (IAAAP & NFSS)
Remedy Complete	1	2 (Middlesex & Linde Mudflats VP)



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Significant Achievements

- Work completed at 7 sites
 - Ashland 1 & 2, Wayne, Bliss/Laughlin Steel, Madison, St. Louis Airport, Colonie
- Work completed at 3 additional operable units
 - Middlesex Sampling Plant Soils (FY08), Linde Bldg. 14, Linde Groundwater,
- 2 Sites to be completed in FY09
 - Linde Soils, Combustion Engineering (site owner cleanup – no funding after FY09)
- Completion of first FUSRAP multi-agency Federal Facilities Agreement in 2006
 - Participants include USACE, EPA, IA Army Ammunition Plant, state of Iowa



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Significant Issues

- Need for Corporate Disposal Contract
- Site Volume Increases
- Out-year Budget Decrease
- Additional sites being identified for program



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Projected Disposal Volumes (2008-2018)

Waste type	Volume projected now thru 06/2013 (CY)	Volume projected from 06/2013 thru 05/2018 (CY)
Pre-78 11e.(2) +UQ	355,000	285,000
LLRW	48,000	30,000
11e.(2)	250,000	324,000
TENORM	24,000	
MLLW	2,000	
Total	679,000	639,000



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RA Challenges (2008-2018)

- **Niagara Falls Storage Site**
 - **Interim Waste Containment Structure**
- **Intentional mixing of radioactively contaminated soils**
- **MARSAME implementation**
- **Disposal**
 - **Waste streams not covered by existing contracts**
 - **Contracts expiring**
 - **Waste streams that do not fit existing WAC at any available facility**
- **Constrained funding**



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FUSRAP Site Photo



Wayne Interim Storage Site



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FUSRAP Site Photo



Wayne Restoration



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FUSRAP Site Photo



U. S. Army Corps
of Engineers,
St. Louis District

Vicinity Property 56



"Gateway to Excellence"



Left: Bucket loader begins shallow excavation activities. Orange fencing designates the work area and assists in preventing inadvertent access to the site.

Right: Erosion control measures such as hay bales slowed the migration of sediment from excavation areas.



October 1999



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FUSRAP Site Photo



U. S. Army Corps
of Engineers,
St. Louis District

St. Louis Airport Site (SLAPS) & North Ditches



"Gateway to Excellence"



June 2000

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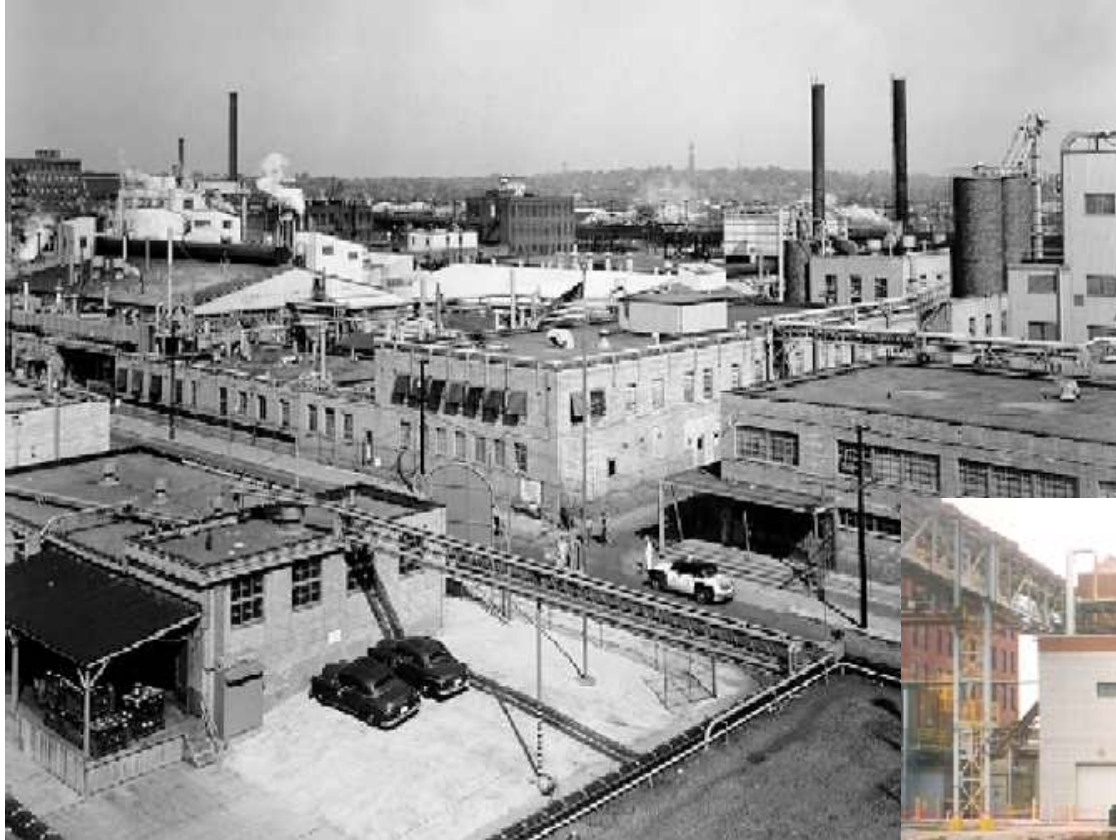
Dupont Site Photo





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St. Louis Downtown Site, St. Louis, Missouri



Site photo during MED/AEC
Operations, 1942-1957

Contaminated soils excavation
around Mallinckrodt Plant 2

St. Louis District

Civil War ordinance





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Points of Contact

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