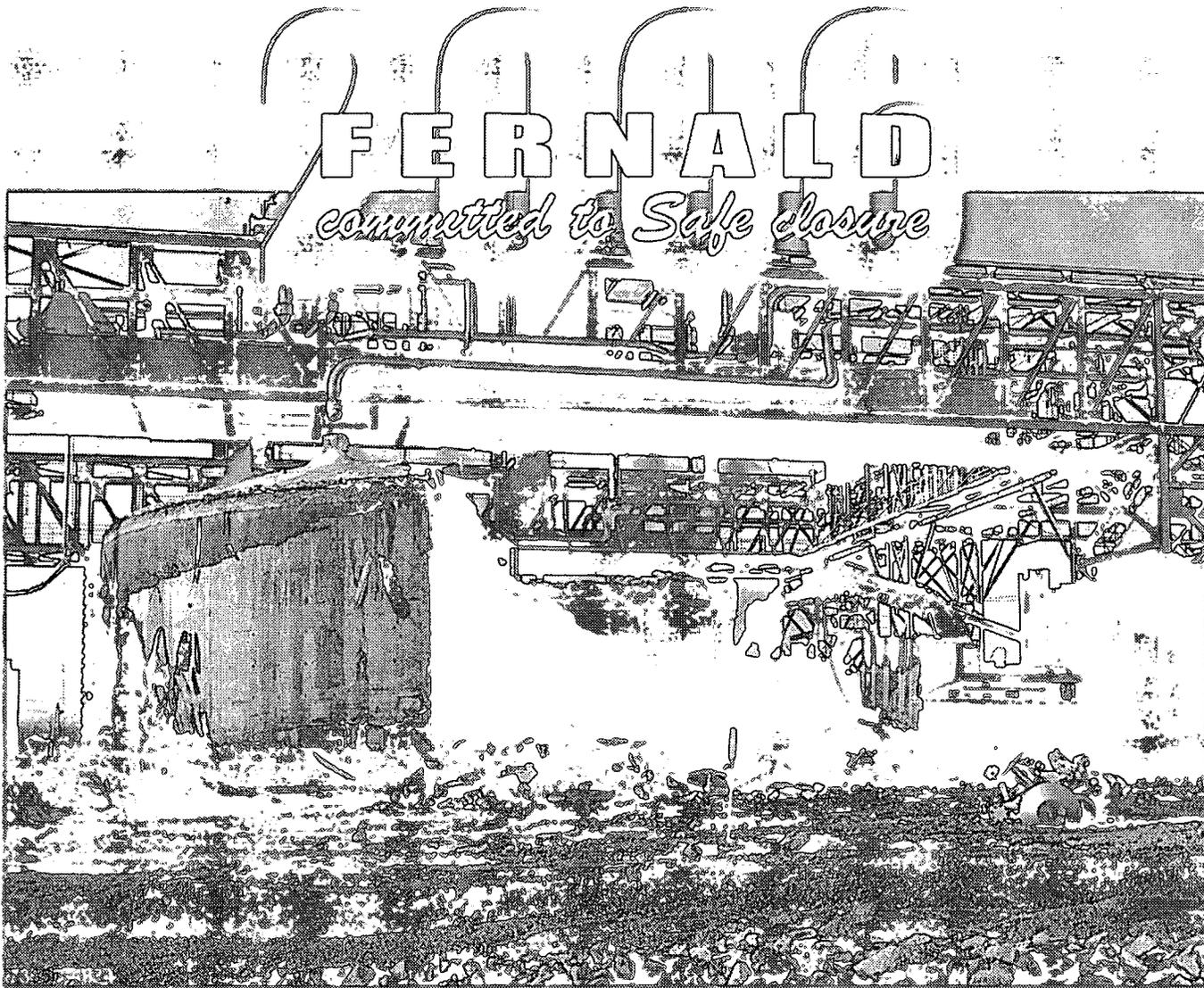


MS 78



June 2005

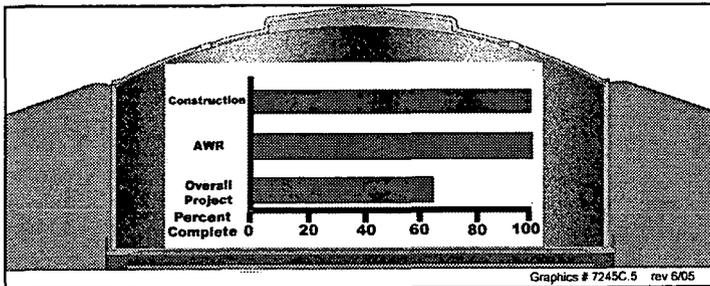


Fluor Fernald

# SILOS 1 AND 2 PROJECT



Photo # 8117D-32



## WORK SCOPE

- Remove 8,900 cubic yards of low-level waste from two concrete silos
- Chemically stabilize waste and ship off site for disposal

## CLEANUP REMEDY

- Record of Decision signed in December 1994
- Record of Decision Amendment for Operable Unit 4 Silos 1 and 2 Remedial Action approved in July 2000
- Remove waste using sluice and pump process to storage facility
- Stabilize waste to reduce leachability and decrease moisture content, package and ship off site for disposal

## STATUS

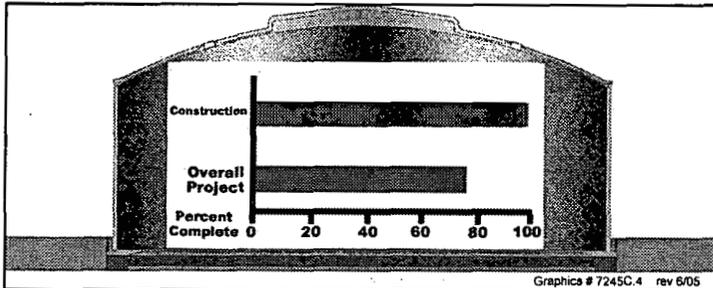
- Accelerated Waste Retrieval (AWR) Subproject – **COMPLETE**
- Awarded \$7.5 million waste storage contract to Waste Control Specialist (WCS) in Texas. WCS is pursuing a permanent disposal license.
- Silos 1 and 2 Waste Treatment
  - Remediation facility startup: May 19, 2005
  - Approximately 4,000 steel canisters needed
  - First shipment: June 6, 2005
  - Last shipment: December 2005

## PROJECT COMPLETION - 2005

# SILO 3 PROJECT



Photo # 8117D-59



## WORK SCOPE

- Remove 5,100 cubic yards of low-level waste from one concrete silo
- Ship waste off site for disposal

## CLEANUP REMEDY

- Record of Decision signed in December 1994
- Explanation of Significant Differences for Operable Unit 4 Silo 3 Remedial Action approved in March 1998
- Record of Decision Amendment to allow for treatment only as required to meet permitted disposal facility's waste acceptance criteria
- Use pneumatic and mechanical retrieval systems
- Load conditioned material into soft-sided containers and ship off site for disposal

## STATUS

- Packaging operations – 20 percent complete
- First waste shipment to Envirocare: April 12, 2005
- Material flowing better than expected
- Estimate 1,500 soft-side packages needed
- Filling approximately 95 packages a week
- Last shipment: August 2005

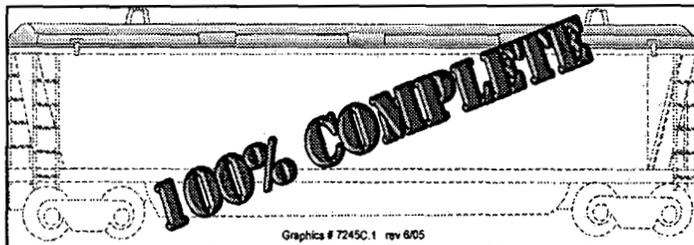
## PROJECT COMPLETION - 2005

6035

# WASTE PITS PROJECT



Photo # 8117D-26



## WORK SCOPE

- Remediate the contents of six waste pits, which range in size from a baseball diamond to a football field and vary in depth from 13 feet to 30 feet
- Pits contain low-level radioactive waste byproducts of uranium and thorium processing generated during Fernald's 37-year production mission

## STATUS

- Project – 100 percent COMPLETE
  - April 1999 – June 2005
- 154 unit trains totaling 9,100 railcars have shipped 979,000 tons of waste
- Finishing facility demolition and beginning project turnover for restoration

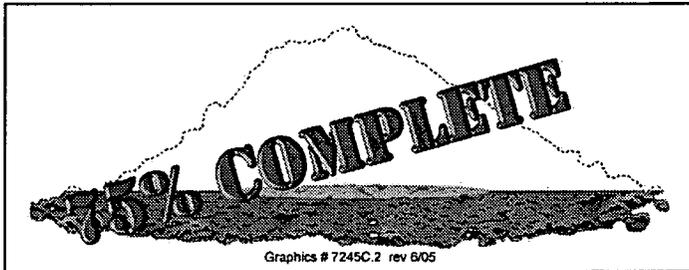
**PROJECT COMPLETED - 2005**

6035

# SOIL AND DISPOSAL FACILITY PROJECT



Photo # 8117D-108



## WORK SCOPE

- Remediate and dispose of contaminated soil
- Certify site as “clean” and perform natural resource restoration

## CLEANUP REMEDY

- Records of Decision signed in 1995 and 1996
- Excavate approximately 2.5 million cubic yards of soil, foundations and below-grade piping
- Certify that remaining soil meets EPA-established cleanup levels
- Design, construct and operate an On-Site Disposal Facility with the capacity to hold 2.94 million cubic yards of contaminated soil and debris

## STATUS

- Project – 75 percent complete
- Cell 1 – filled and capped
- Cell 2 – filled and capped
- Cell 3 – filled and capped
- Cell 4 – filled and capped
- Cell 5 – capping in process
- Cell 6 – 76 percent filled
- Cell 7 – 30 percent filled
- Cell 8 – 8 percent filled
- Excavated and dispositioned over 2.1 million cubic yards of contaminated soil and debris
- Over 80 percent of the site is certified “clean”

## 2006 STRATEGY

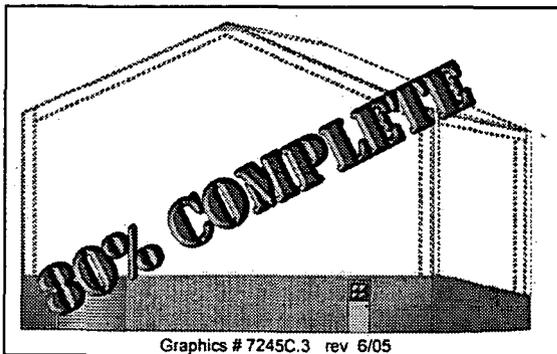
- Add 2<sup>nd</sup> shift to meet placement goal of 1 million cubic yards

## PROJECT COMPLETION - 2006

# DECONTAMINATION AND DEMOLITION PROJECT



Photo # 7385D-4745



## WORK SCOPE

- Dismantle 255 former production plants, support structures and associated components

## CLEANUP REMEDY

- Record of Decision for Interim Remedial Action signed in July 1994
- Record of Decision for Final Remedial Action signed in September 1996
- Complete safe shutdown of former production facilities by removing uranium material from process lines and piping, disconnecting utilities and gross decontamination
- Dismantle plants, structures and associated components

## STATUS

- Project – 80 percent complete
- Dismantled 193 structures and 91 trailers
- Completed Safe Shutdown in March 1999, two years ahead of schedule and \$7 million under budget
- Last production building dismantled May 2004

## 2006 STRATEGY

- Continue aggressive demolition schedule of buildings, miscellaneous support structures and silos treatment facilities upon completion of packaging operations

## PROJECT COMPLETION - 2006

# AQUIFER RESTORATION AND WASTEWATER

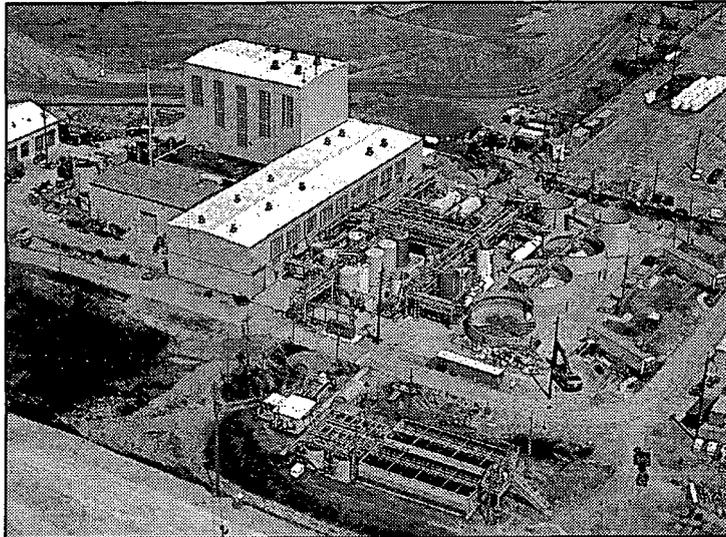
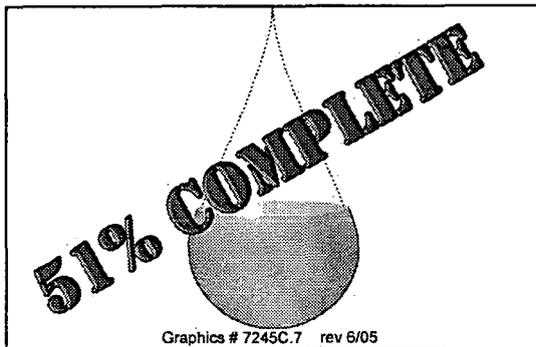


Photo # 8177D-62



## WORK SCOPE

- Remediate contaminated portions (approximately 196 acres) of the Great Miami Aquifer, one of the largest sole-source aquifers in the nation
- Treat storm water and wastewater resulting from site remediation activities

## CLEANUP REMEDY

- Record of Decision signed January 1996
- Restore impacted portions of the aquifer by treating extracted groundwater
- Treat site remediation wastewater and storm water
- Maintain comprehensive sitewide environmental monitoring program
- Meet EPA groundwater cleanup standard of 30 ppb total uranium

## STATUS

- Project – 51 percent complete
- Extracted more than 17 billion gallons of water from the aquifer since 1993
- Treated more than 10.9 billion gallons of water
- Removed more than 6,600 pounds of uranium from the aquifer since 1993

## 2006 STRATEGY

- Design and construct a Converted Advanced Wastewater Treatment facility to serve the sites long-term groundwater treatment and aquifer restoration needs

1-6035

# WASTE MANAGEMENT PROJECT

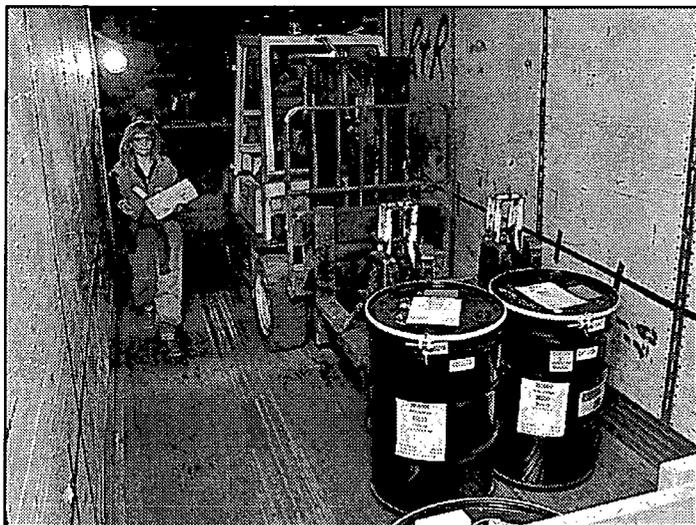
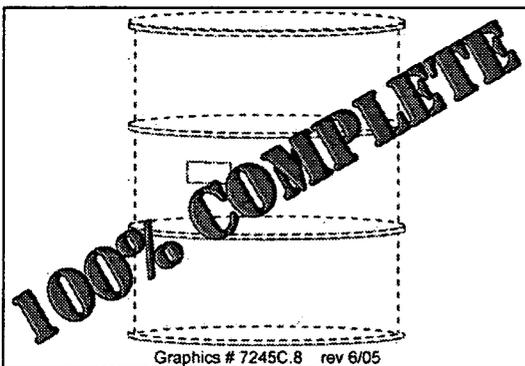


Photo # 7980-D38



## WORK SCOPE

- Characterize, visually inspect, sample, package and dispose of low-level radioactive, hazardous and mixed waste inventories
- Provide sitewide support for waste planning and off-site shipping
- Emphasize waste minimization, recycling or reuse wherever practical

## STATUS

- Project – 100 percent **COMPLETE**
- Shipped 6.6 million cubic feet of low-level waste to the Nevada Test Site
- Shipped 174,912 gallons of low-level mixed waste off site for incineration
- Shipped 59,147 cubic feet of low-level mixed waste off site for treatment
- Transferred 595,266 cubic feet of low-level waste to WPP
- Transferred 792,510 cubic feet of low-level waste to OSDF
- Positioned all containerized waste from the Plant 1 Pad

**PROJECT COMPLETED - 2005**

# NUCLEAR MATERIALS DISPOSITION

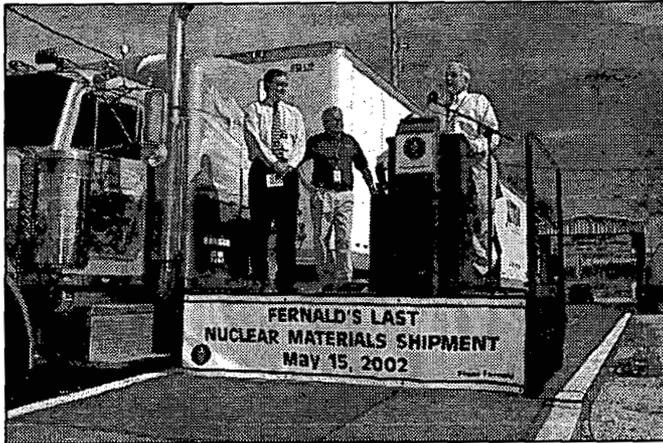
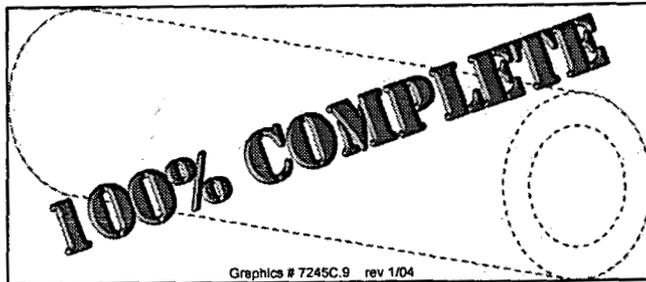


Photo # 7368-D503



## WORK SCOPE

- Characterize, package and ship nuclear materials off site

## STATUS

- Project – 100 percent COMPLETE
- Dispositioned 31 million pounds of nuclear product through:
  - Transfer to other DOE sites for programmatic use
  - Sale to private sector
  - Transfer to Portsmouth Facility for interim storage under DOE's Uranium Facility Management Group (9.1 million net pounds transferred since June 1999)
  - Burial of Department of Defense materials off site

## PROJECT COMPLETED - 2002