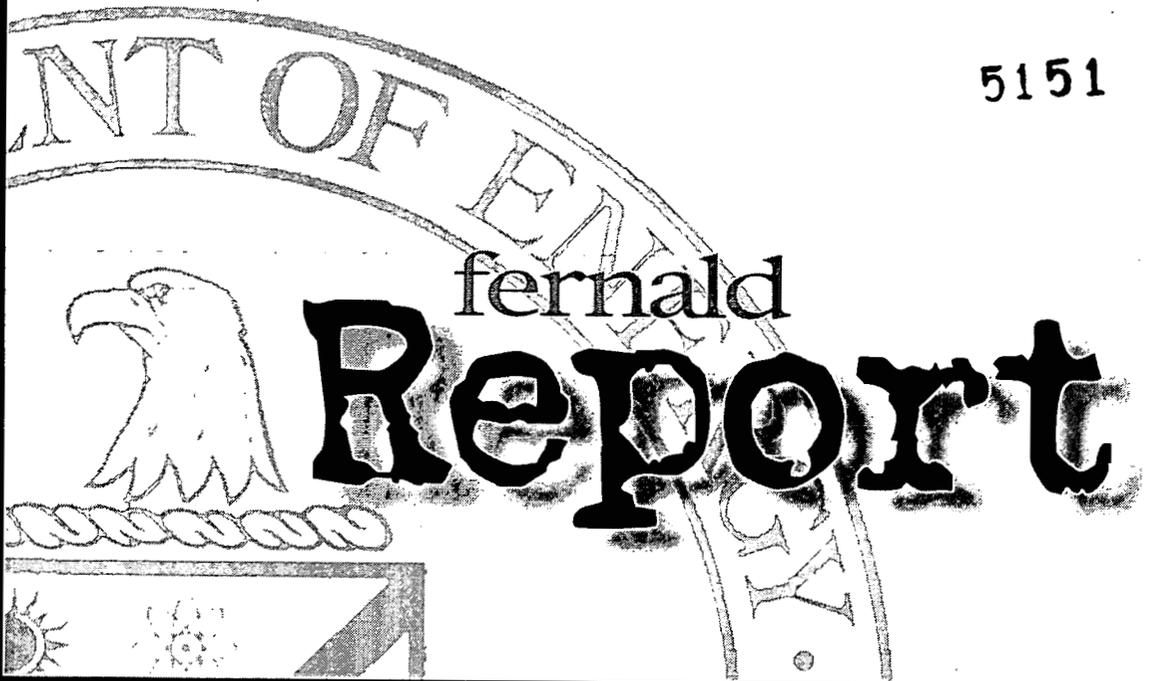


FALL 2003

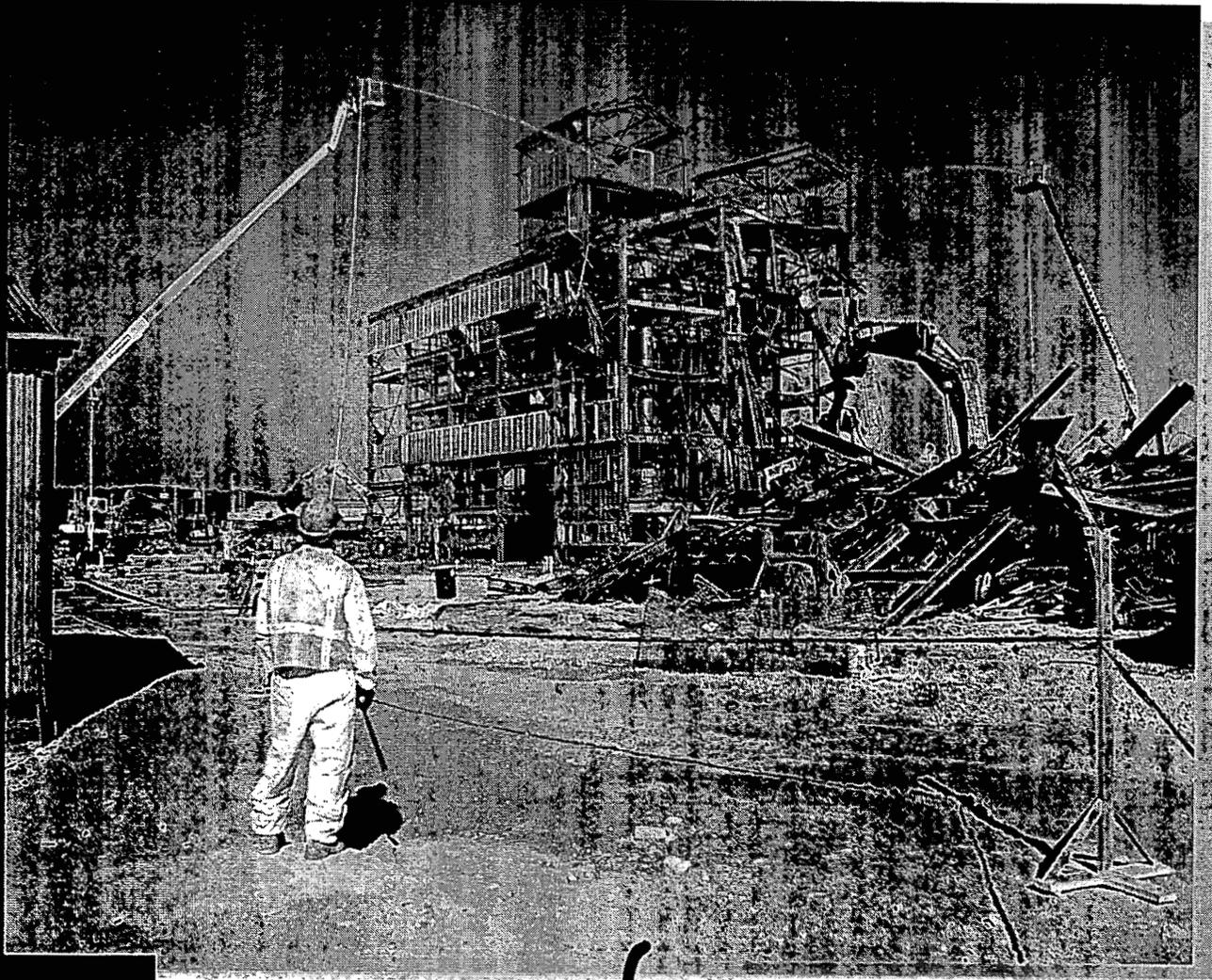
5151

INSIDE

- Demolition of a Landmark
- Cleanup Review
- Waste Management Milestone



ferald Report

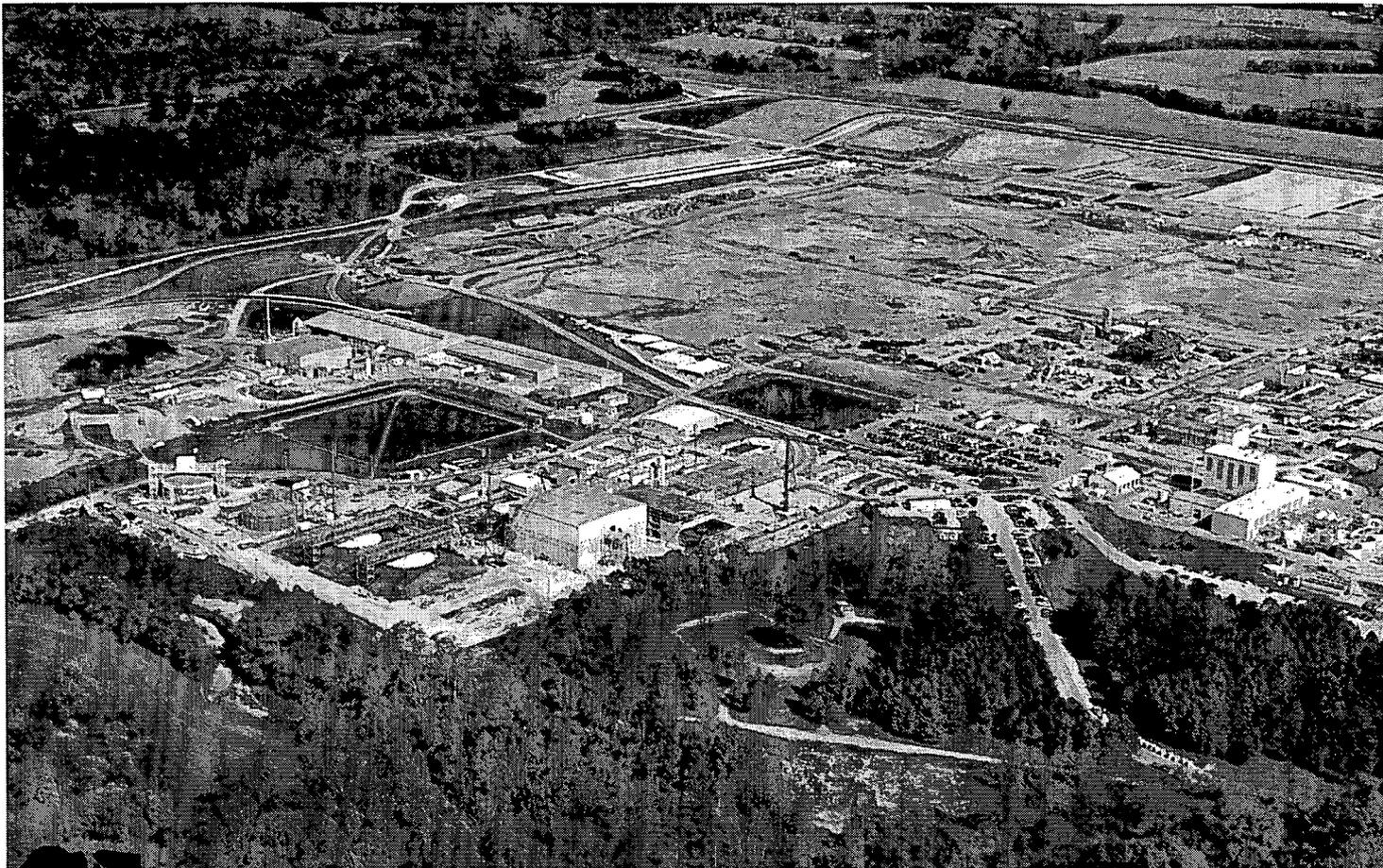


*****3-DIGIT 452
MS. DIANE RAYER
PO BOX 538704
CINCINNATI OH 45253-8704



Presorted
Standard
U.S. Postage
PAID
Dayton, OH
Permit No. 377

2 9
0583



Cleanup Review

What started out as a wet spring that delayed the start of field activities has turned into a productive construction season at the Fernald site. With only three years until site closure, dramatic changes are evident in every project. Here's a rundown on the status of our major cleanup projects at the close of fiscal year 2003, which ended September 30:

Waste Pits - Train 97 departed for the Envirocare disposal facility in Utah. In early November, Fernald will complete the 100th safe rail shipment since shipping operations began in 1999. The project is 75 percent complete and is on pace to complete waste processing and shipping next year.

Soils and On-Site Disposal Facility - The Cell 2 cap is complete, Cell 3 is 87 percent filled, Cell 4 is 30 percent filled, Cell 5 is 8 percent filled and Cell 6 is under construction. Fernald has excavated over 1.2 million cubic yards of contaminated soil and over half of the 1,050-acre site is certified clean. The project is 45 percent complete.

Silos - Silos 1 and 2 remediation is 26 percent complete. The radon control system, which was activated in April, has reduced radon concentration in the silos headspace by 98 percent. Silo 3 remediation is 44 percent complete.

Decontamination and Demolition - Fernald has dismantled 144 of 255 structures, including eight of the 10 major uranium processing facilities and the historic West Water Tower. By December, Fernald will complete demolition of Plant 8 and the Pilot Plant. The project is 61 percent complete.

Aquifer Restoration - Since 1993, Fernald has extracted 13.2 billion gallons of water from the aquifer and removed 5,290 pounds of uranium. The project is 66 percent complete.

Overall, Fernald cleanup is mature and with seven of 15 ecological restoration projects complete. In the next Fernald Report, we'll give a projection of work to be accomplished in 2004, including the start-up of waste retrieval and processing operations for Silos 1 and 2, and the completion of waste removal from Silo 3.

On the Cover:

The demolition of Plant 2, the former uranium refinery plant, looked easy for a carpenter that stopped to watch an operating engineer use a grappler to tear sections from the building. 6383D-1516

Waste Management Project Nearly Complete

Fernald will move one step closer to safe closure in the next few weeks as the first of six major cleanup projects comes to an end when Waste Management Project, the group responsible for the disposition of uranium processing wastes and debris since the mid-1980's, will complete their mission.

Since Fernald's transition from uranium metal processing to environmental cleanup in the early 1990s, the Waste Management Project's mission has involved characterizing Fernald's waste streams to determine appropriate disposition pathways, packaging the waste for off-site transportation or on-site transfer to another project, and disposition according to regulatory approved cleanup plans.

For over a decade, Fernald stored most of its waste on a 12-acre concrete pad while working to reduce the waste inventory. At its peak, the Plant 1 Pad contained over 100,000 containers of waste and debris.

To eliminate any potential contamination source from the aging drums and reduce overhead costs associated with storage, monitoring and maintenance of the material, DOE and the U.S. Environmental Protection Agency set a goal to complete the disposition of all remaining low-level containerized legacy waste by

May 29, 2003. Fernald's final disposition plan for this legacy waste combined three disposal pathways, transferring 27,000 cubic feet to the Soils Project for burial in Fernald's On-Site Disposal Facility, 48,000 cubic feet to the Waste Pits Remedial Action Project for disposal at Envirocare of Utah; and shipping 98,000 cubic feet to the Nevada Test Site. Fernald has also shipped 163,000 gallons of low-level liquid mixed waste to the Toxic Substance Controls Act Incinerator in Oak Ridge, Tenn.

By October, Fluor Fernald workers will finish excavating the pad and will decentralize the Waste Management organization. Fluor will reassign many of the workers to support project-specific waste streams, such as the Silos 1 and 2 waste and the waste pits; others will have completed their service at Fernald as DOE and Fluor continue to readjust staffing levels to meet closure requirements.

"The Waste Management team is a great example of how Fernald is aligned to complete closure by 2006," said Glenn Griffiths, DOE-Fernald acting Closure Project director. "Workers have eliminated Fernald's nuclear material product inventory, reduced the site's waste volume by 98 percent, and cleared the way for the other cleanup projects."



Project Update

5151

Waste Pits Project

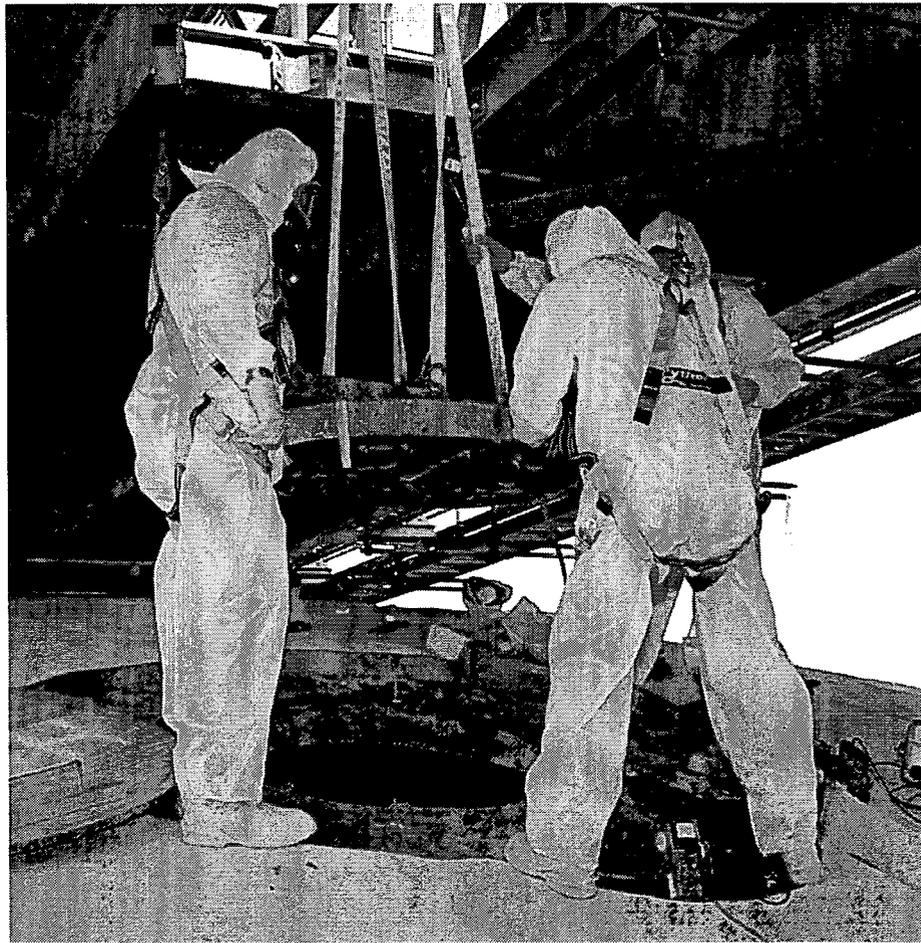
- As of October 1, 97 unit trains totaling 5,756 railcars have shipped 619,000 tons of waste to Envirocare of Utah for disposal
- Twenty-nine unit trains were shipped in fiscal year 2003; 35 trains are planned for fiscal year 2004
- Delivery of 25 additional railcars will bring the entire fleet number to 250 railcars
- Excavations are ongoing in Pits, 1, 3, 4 and 5; Pit 4 excavation will be completed by years end
- **Project 75 percent complete**



Operating engineers have removed nearly 60,000 tons of material from Pit 5 one scoop at a time. 6944D-2487

Silos Project

- Silo dome penetration activities were completed on Silos 1 and 2
- Completed demonstration on Silo 4 for cutting wall opening.
- Completed building and equipment foundations and concrete walls for the Silo 3 material handling building. Erecting structural steel, siding and roofing for process building.
- Completed major equipment procurement and installing equipment, piping, and electrical systems at Silo 3.
- The Silo 3 Record of Decision Amendment was signed by the U.S. Environmental Protection Agency and allows for the disposal of Silo 3 material at either the Nevada Test Site (NTS) or a permitted commercial facility. It also removes the requirement to meet the Toxic Characteristic Leachate Procedure performance requirement for disposal at NTS.
- **AWR is 78 percent complete**
- **Silos 1 and 2 26 percent complete**
- **Silo 3 52 percent complete**



Six holes have been cut into Silo 1 as part of the waste retrieval process; three camera ports, two sluicing ports and the one pump port on top of the dome. Workers made circular cuts through the concrete dome and then used a crane to lift the concrete plugs from the dome. 7385D-3459

Soil and Disposal Facility Project

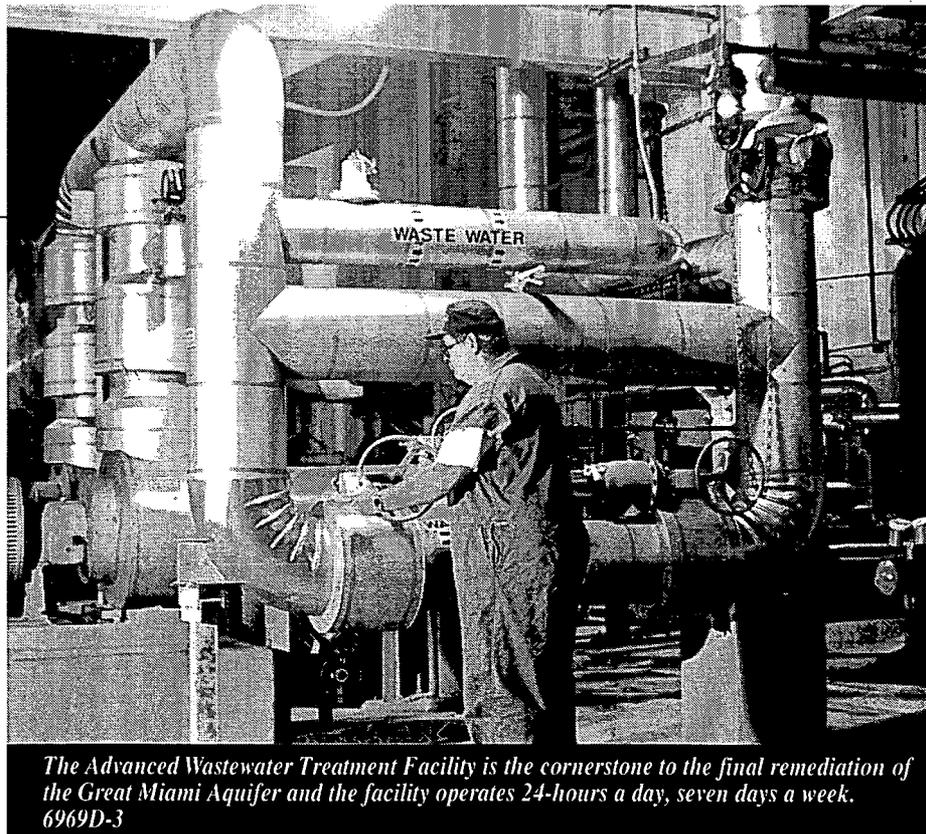
- Over 63,000 cubic yards were placed in the On-Site Disposal Facility in September bringing the cumulative total to 1.16 million cubic yards
- 70,000 cubic yards is the goal for October
- Cell 6 liner installation and Cell 2 cap construction are scheduled to be completed this fall
- The Northern Pine Restoration Project will be completed by December 2003
- Two restoration projects will begin this fall: Wetland Mitigation Phase II and Paddys Run West
- Continue excavation and concrete crushing in former production area
- **Project 45 percent complete**



The final cover on the OSDF is nearly nine feet thick and includes a biointrusion layer of six-inch rocks. This three foot thick layer of rock is designed to prevent vegetation and burrowing animals from damaging the cell. 6319D-4115

Aquifer Restoration/Waste Water Project

- The Steam Heat Replacement project is scheduled for completion by November 1
- Finished geoprobng in the South Plume area south of Willey Road
- Completed field construction of the South Field Phase II infrastructure
- Began operation of South Field Phase II extraction and injection wells
- Maintained compliance with uranium discharge limits for fiscal year 2003
- June through August totals: extracted 645,892,000 gallons of groundwater; treated 281,356,000 gallons of groundwater; removed 297 net pounds of uranium from aquifer
- **Project 41 percent complete**



The Advanced Wastewater Treatment Facility is the cornerstone to the final remediation of the Great Miami Aquifer and the facility operates 24-hours a day, seven days a week. 6969D-3

Project Update



Asbestos workers remove transite panels from Plant 2 as part of the demolition process. 6383D-1330

Decontamination & Demolition Project

- Twenty-four buildings have been demolished in 2003. Notable facilities recently taken down include the West Water Tower, Plant 2A and Plant 1 Complex
- All former production buildings will be on the ground by the end of 2003
- Ongoing activities include asbestos abatement, debris loadout, and removal of equipment, piping and transite
- **Project 61 percent complete**

Waste Management Project

- In fiscal year 2003 a total of 163,134 cubic feet of low-level waste was shipped to the Nevada Test Site (NTS)
- Approximately 3,000 containers remain on site
- Remaining low-level waste will be shipped to NTS by the December/January time frame
- **Project 98 percent complete**

Fernald Shipments – May through August 2003

Contents	Shipment Mode	# of Shipments	Monthly Totals	FY03	Project Totals
Low-Level Waste:		126	65,190 cu. ft.	152,142 ft.	6.3 million cu. ft.
Mixed Waste:		8	7,212 cu. ft.	15,951 cu. ft.	26,047 cu. ft.
Liquid Mixed Waste		1	4,172 gal.	6,810 gal.	168,084 gal.
Nuclear product			COMPLETE		9,083,388 net lbs.
Soil and Debris		N/A	152,633 in-place cubic yards	220,809 in-place cubic yards	1,099,169 in-place cubic yards
Waste Pits		12 unit trains	122,487 tons (743 railcars)	190,663 tons	599,835 tons

Demolition of a landmark

Something was missing when Fernald workers arrived for work on Monday morning, August 25.

Over the weekend, demolition contractor MCM Management Corporation from West Bloomfield, Mich., imploded the 350,000-gallon, 269-foot high West Water Tower, one of the last historic structures from Fernald's production-era skyline.

Constructed in 1963, the water tower supported Fernald's industrial and fire protection needs during most of its uranium metal production mission and its transition to environmental remediation. With its red and later blue-checked pattern, the tower could be spotted miles from the site and was a landmark in the community.

"For Fernald workers and neighbors, the West Water Tower was a symbol of Fernald's role in the nation's weapons production program during the Cold War," said Glenn Griffiths, DOE-Fernald acting site director, "but its demolition is also a symbol of our progress toward achieving site cleanup and closure in 2006."

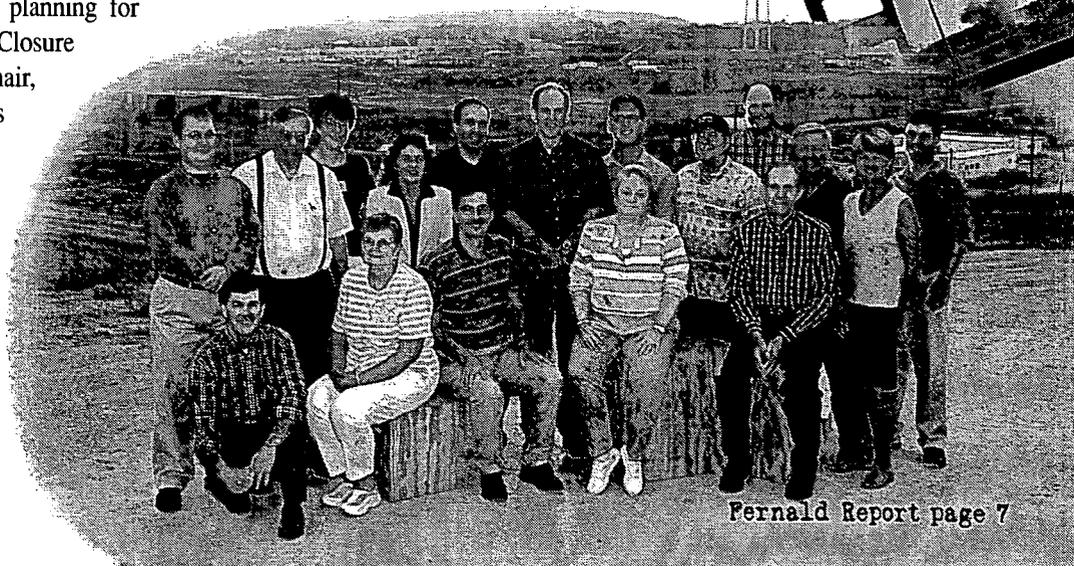
MCM attached small explosives to key structural joints on the tower to raze the structure, and cut the demolition debris into smaller pieces for disposal in Fernald's On-Site Disposal Facility.

Since 1994, Fluor Fernald has demolished 155 of 255 structures and facilities at the site and has completed over 60 percent of the Decontamination and Demolition Project. Fluor will complete most site demolition activities in 2004, including the four remaining uranium processing plants: Plants 2 and 3 (the Ore Refinery), Plant 8 (the Scrap Recovery Plant), and the Pilot Plant (the UF6 to UF4 Reduction Facility).

A Decade of Making a Difference

Present and former Fernald Citizens Advisory Board (FCAB) members, DOE, Fluor Fernald and spouses recently gathered to recall 10 years of making a difference at Fernald. The group of citizens was formed in 1993 to provide advice to DOE on cleanup decisions and planning for long-term stewardship of the Fernald Closure Project. Following dinner former FCAB Chair, Dr. John Applegate reflected on the progress that had been made during the past decade. Current FCAB Chair, Jim Bierer talked about the challenges still ahead as the site nears closure.

"Never doubt that a small group of thoughtful, committed people can change the world. Indeed, it is the only thing that ever has." - Margaret Mead



New documents added to the Public Environmental Information Center

5151

Waste Pits Remedial Action Project

- DOE-Fernald - Project Specific Plan for Predesign Sampling in Area 6 SP-7 / Operable Unit 1 Stockpile Area

Soil and Disposal Facility Project

- USEPA Approval - Area 6, Phase I Responses to Comments on Certification Design Letter and Certification Project Specific Plan
- DOE- Fernald - Project Specific Plan for Area 6, Phase I Certification Sampling
- DOE-Fernald - Excavation Plan for Area 1, Phase IV
- OEPA Approval - Construction Quality Assurance Report On-Site Disposal Facility Phase IV, Cells 4 and 5 Construction
- USEPA Approval - Area 1, phase IV Excavation Plan

Silos Projects

- USEPA Approval - Review of the Revised Remedial Design Package for Silos 1 and 2 Remediation Facility
- OEPA Approval - Remedial Action Work Plan for Silos 1 and 2 Waste Retrieval Operations

Aquifer Project

- DOE-Fernald - Area 8, Phase III Natural Resource Restoration Design Plan
- OEPA Approval - Treatment Plan for Removal of TCE (Trichloroethylene) from Soils
- USEPA Approval - Advanced Wastewater Treatment Brine and Eluate System Tie-In



Congratulations

Congratulations to Fernald Residents for Environmental Safety and Health (FRESH) for receiving the Lifetime Achievement Award from the Ohio Environmental Council. A quote from the press release states "their steadfast advocacy for the community led to the shutdown of Fernald and the ongoing cleanup and restoration of the entire site."

Fluor Fernald Fernald Report

Gary Stegner, Public Affairs Officer
U.S. Department of Energy
Fernald environment Management Project
P.O. Box 538705, Cincinnati, OH 45253-8705
Telephone: 513-648-3153
E-Mail: gary.stegner@fernald.gov
Fernald Web site: www.fernald.gov