

fernal **Report**

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- Waste Pit dryers up and running
- Plant 6 mobilizes
- Lend a "Helping Hand"

February 2000

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Glauthier impressed during first trip to Fernald

On Jan. 14, Deputy Secretary of Energy T. J. Glauthier made his first visit to Fernald. During the visit, he met with DOE and Fluor Fernald officials and also had time for a site tour.



Deputy Secretary Glauthier, who reports directly to Secretary of Energy Bill Richardson, is responsible for the day-to-day management and policy development of the Department's over 110,000 federal and contractor employees and \$18 billion annual budget. Before coming to the Energy department he served for five years in the Clinton Administration's Office of Management and Budget as the Associate Director for Natural Resources, Energy and Science.

Since coming to the Department the Deputy Secretary's focus has been on improving project management from Washington to the site level.

Deputy Secretary Glauthier was very familiar with our work at Fernald and asked some very direct questions. It was clear that he liked what we were doing in the field.

Fernald Atomic Trades and Labor Council Vice-President Gene Branham agreed. "I was impressed with his knowledge and how he handled himself. He came here to listen and not to preach."

The Deputy Secretary's goal this year is to visit each of the major DOE cleanup facilities in an effort to review their project management tools and to create a "Watch List" to flag potential issues so that they can be addressed immediately.


Jack Craig
Director, DOE-Fernald

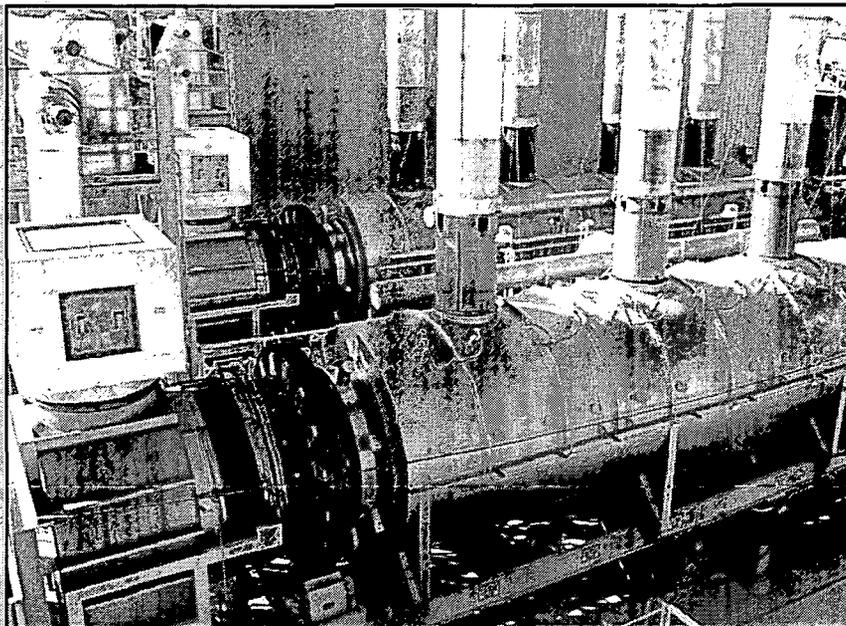
On the cover: A Waste Storage employee inspects and secures uranium cores in preparation for future shipments to Portsmouth, Ohio for storage (7269-d21).

Waste Pit treatment operations begin

In December, the Waste Pits Project team started processing material through the two rotary dryers to remove excess moisture.

"With the initiation of drying operations, we have completed all start-up actions for the project," said Dave Lojek, DOE Waste Pits Project manager. "All systems are now in place to cleanup the six waste pits by 2005." In 1999, the Waste Pits Project team successfully initiated railcar loading operations, completing an EPA enforceable milestone; initiated rail shipments to Envirocare, the commercial disposal facility located in Utah; and started excavating the waste pits.

As the pits are excavated, Waste Pits Project remediation subcontractor, The IT Group, feeds material containing a high moisture content into rotating cylinders inside the dryers, where heat circulates around the material, removing the excess moisture. The gas cleaning and wastewater treatment systems clean the gases and treat the water generated during the drying operation.



Both dryers are capable of processing approximately 24 tons of material per hour combined. Over the course of the five-year project, nearly 300,000 tons of moisture will be removed from the waste to meet the disposal facility's waste acceptance requirements.

Above: The dryers are used to remove excess moisture from the pit waste to meet the disposal facility's waste acceptance requirements. (6944-d959).

Silos 1 and 2 Draft Revised Feasibility Study released

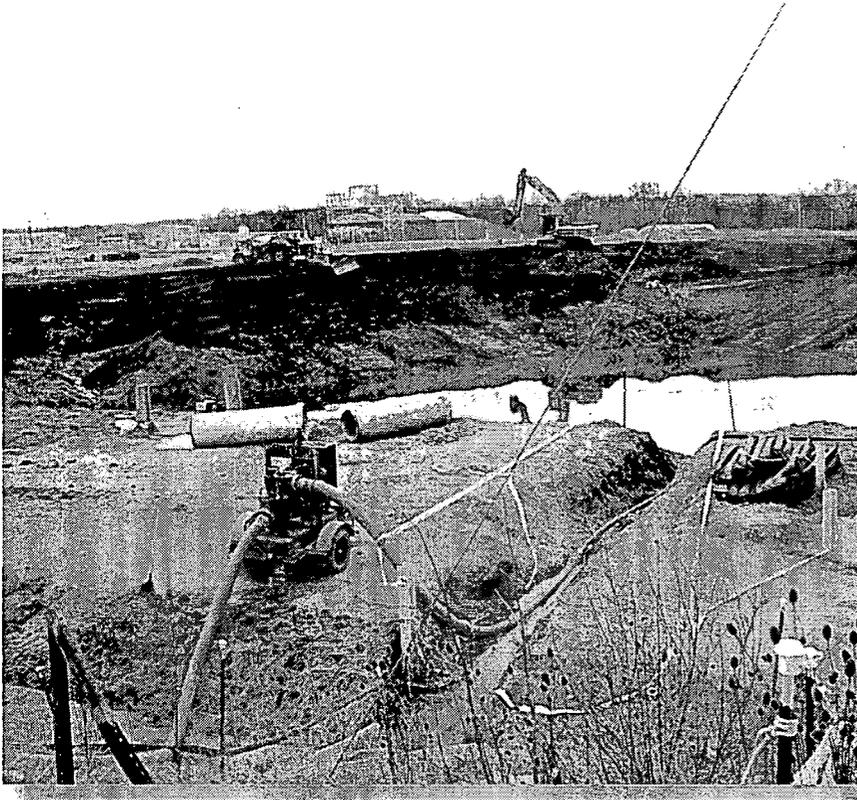
Copies of the draft *Revised Feasibility Study/Proposed Plan (FS/PP)* for Silos 1 and 2 are now available for public inspection, in advance of the formal comment period, at the Fernald Public Environmental Information Center (PEIC), 10995 Hamilton-Cleves Highway, Harrison, Ohio, 513-648-7480.

DOE and Fluor Fernald have made a concerted effort over the last six months to involve the public and regulators in preparation of the *FS/PP* through DOE-sponsored public meetings, briefings for the Fernald Citizens Advisory Board (CAB), and special sessions with the regulators. Particular attention was paid to familiarizing the public with the detailed and comparative analyses of the four technology options — joule-heated vitrification, non-joule-heated vitrification, cement-based stabilization, and non-cement-based stabilization — that were chosen for Proof-of-Principle Testing as candidates for the remediation of Silos 1 and 2. Independent review and input was also obtained from the Silos Project Critical Analysis Team and a DOE Independent Review Team on the preparation of the *FS/PP* to ensure the document was fair and balanced in its evaluation, and adequately supported by sound technical and cost data.

The draft *Revised FS/PP* was submitted to the U.S. Environmental Protection Agency on Dec. 21, 1999, in advance of the Feb. 1, 2000, enforceable milestone date. After regulatory comments are received and responded to, and additional final comments are received from the Nevada Test Site CAB, the *FS/PP* will be finalized, sent back to the regulators for approval, and once again placed in the PEIC. A formal public comment period of approximately 45 days will ensue, during which public hearings will be held both here and in Nevada. Additional public notice of release of the final version of the document and the opening of the comment period will be issued upon finalization of the document.

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Cleanup **Progress** Update



Waste Pits Remedial Action Project (WPRAP)

- Shipped trains seventeen and eighteen to Envirocare of Utah (see Fernald shipments table for details)
- Continued Pit 3 excavation and dryer operations

On-Site Disposal Facility (OSDF)

- Continued OSDF Phase III design package preparation and procurement
- OSDF is shut down through February for the winter
- Conducted 90 percent review of the new Leachate Transmission System Detail Design Package

*Above:
Excavation of Pit 3
progresses. In excess of
50,000 cubic yards of
material has been excavated
(6944-d1005).*

*Right:
An example of the type of
stone that is being used at the
OSDF to control erosion
around the cell
(6310-d2339).*



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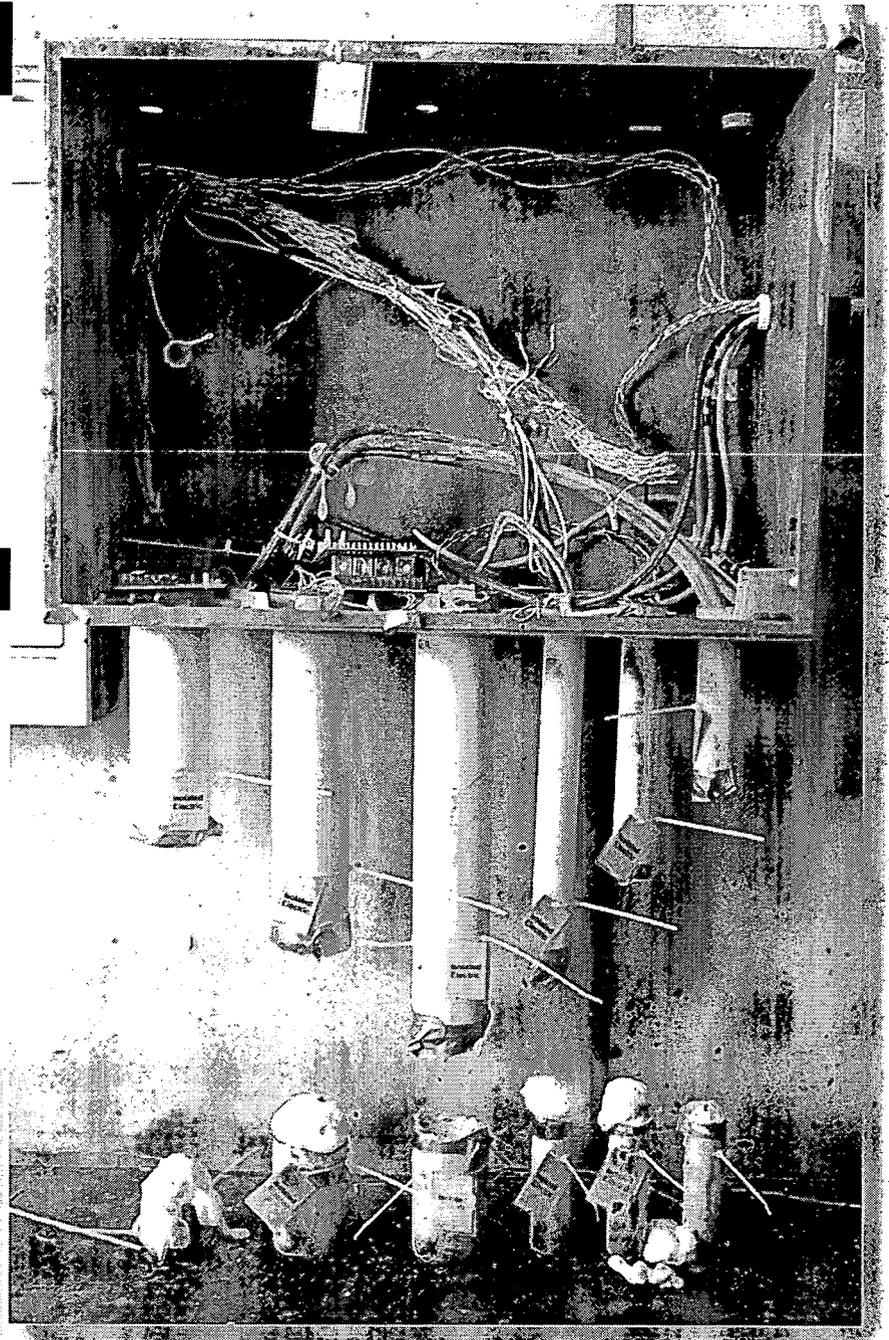
Demolition Projects

Decontamination & Dismantlement (D&D)

- Plant 5 Complex —
 - ◆ Continued asbestos abatement and interior transite removal in Plant 5
 - ◆ Completed release cleaning of Building 55A
- Plant 6 Complex —
 - ◆ Continued initial mobilization activities for plant demolition including installation of trailers, washdown areas and fences

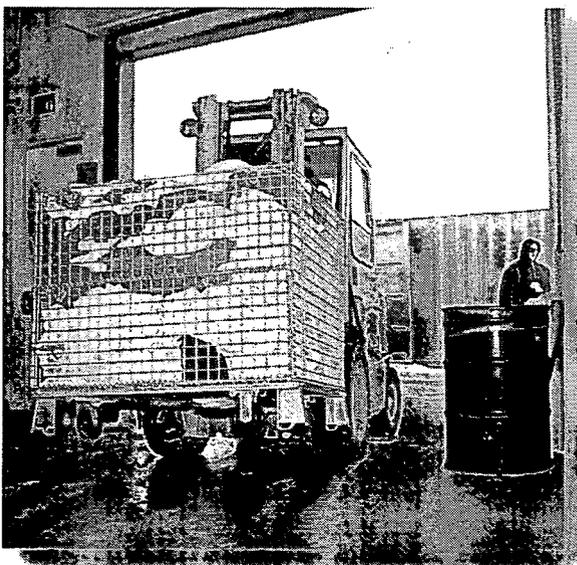
Silos Project

- Initiated preparation of *Commerce Business Daily* (CBD) notice requesting expressions of interest in future *Request for Proposal for Silos 1 and 2 Full-Scale Remediation Facility*; draft CBD notice was provided to regulators, Fernald Citizens Advisory Board members and other stakeholders for review and comment
- Received initial comments from Ohio EPA regarding Silo 3 Project Site Preparation Package and Pre-Operational Environmental Control Plan



Above: An electrical pull box after Safe Shutdown isolation in Plant 5. Isolation activities must be performed prior to demolition (6401-d338).

Left: A Fluor Fernald team member prepares to load the first container of protective clothing into a sealand container for off-site shipment to Professional Laundry Management in Gardner, Illinois (7303-02).



Cleanup **Progress** Update



Aquifer Restoration/ Wastewater Project

- Continued construction of two new extraction wells in South Field Area
- Continued pre-design profile sampling of aquifer contamination in Waste Storage Area

Soil Characterization and Excavation Project

- Areas 3, 4 and 5 — Former Production Areas
 - ◆ Submitted 90 percent Title I/II design to DOE
- Area 9, Phase I — Off-Property area adjacent to northeast portion of site
 - ◆ Initiated pre-certification real-time scanning for contaminants
 - ◆ Completed pre-certification physical sampling

Top:
Two new extraction wells went on-line in February and are currently pumping 200 gallons-per-minute (7207-d076).

Right:
A subsurface investigation is being conducted to locate, identify and map underground features using an electromagnetic surveying tool (7298-d07).



Waste Management Projects

- Nuclear Materials Disposition —
 - ◆ Continued preparation of 1,477 boxes of uranium cores for overpacking and shipment to Portsmouth, Ohio



Right: A Waste Storage employee re-weighs containers of enriched green salt to determine enrichment classifications prior to relocating the material to the TS-4 structure on Plant 1 pad (6731-d110).

Fernald Shipments — January-2000

Contents / Destination	Shipment Mode	No. of Shipments	Monthly Total	FY00 Total
↓ Low-Level Waste (Nevada Test Site)		0	0 cu. ft.	0 cu. ft.
Liquid Mixed Waste - Toxic Substance Control Act Incinerator at Oak Ridge		0	0 gal.	0 gal.
Nuclear product/materials (Portsmouth)		0	0	1,455,393 net lbs. or 583.5 metric tons uranium
Waste Pits Project (Envirocare of Utah, Inc.)		2 unit trains (120 railcars)	12,918 tons	53,313 tons (496 railcars)

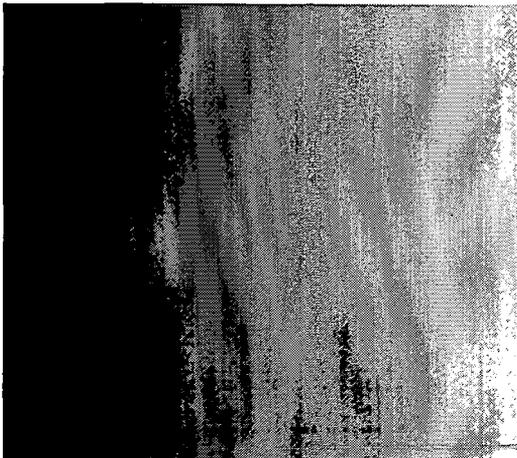
Fernald Health Effects Subcommittee

A Citizens' Advisory Forum on Public Health Issues

Since 1996, the Fernald Health Effects Subcommittee (FHES) has served as an advisory group to the Centers for Disease Control and Prevention (CDC) and agencies engaged in research and public health activities surrounding the Fernald site. The task of the FHES is to look into issues to determine if historic releases from the former Feed Materials Production Center (FMPC) adversely affected the health of workers and nearby communities.

A campaign for members is currently underway. The new members will serve either two-year or four-year terms as the charter of the group has now been extended.

Meetings are held four times per year and are open to the public. The next meeting will be at The Plantation in Harrison, Ohio on March 22-23, 2000. For more information, contact Sue Walpole at (513) 648-4026.



Mobilization underway at Plant 6

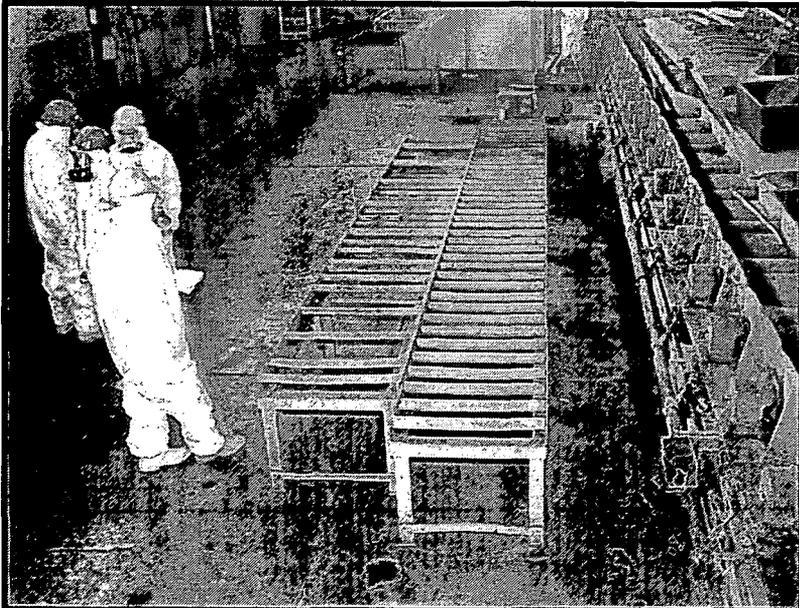
In January 2000, Fluor Fernald issued a mobilization notification to NSC Energy Services, the contractor hired to demolish Plant 6. After completing all training, NSC personnel will start sealing the building, establishing laydown areas and centrally located wash down areas, and conduct engineering surveys of the plant and all ancillary facilities.

As part of their D&D strategy, NSC has divided the building into eight major areas and then combined areas requiring similar cleanup into zones. Using this approach, NSC will be able to transition into D&D by late summer 2000 and keep on schedule until completion in April of 2002.

Art Murphy, DOE-FEMP Plant 6 project manager, said, "I am confident this project will be successful because of the technical expertise of the Plant 6 team. As mobilization begins, our top goal is to be committed to a Safety First work ethic, not just on the project, but 24 hours a day."

Plant 6, located on the eastern side of the former production area, is the largest (223,000 sq. ft.) facility of all the former uranium processing plants. Once called the Metals Fabrication Plant, it housed the rolling mill which was the only one of its kind throughout the DOE Complex and was used until 1971 to shape cylinder ingots into rod stock. Out of the nine original processing plants, Plant 6 is sixth in line to be demolished.

Left: During production days, Plant 6 was the last stop in the processing sequence for some of the product. From Plant 6, the finished product was checked for quality then packaged and shipped to other DOE production sites (6639-d262).



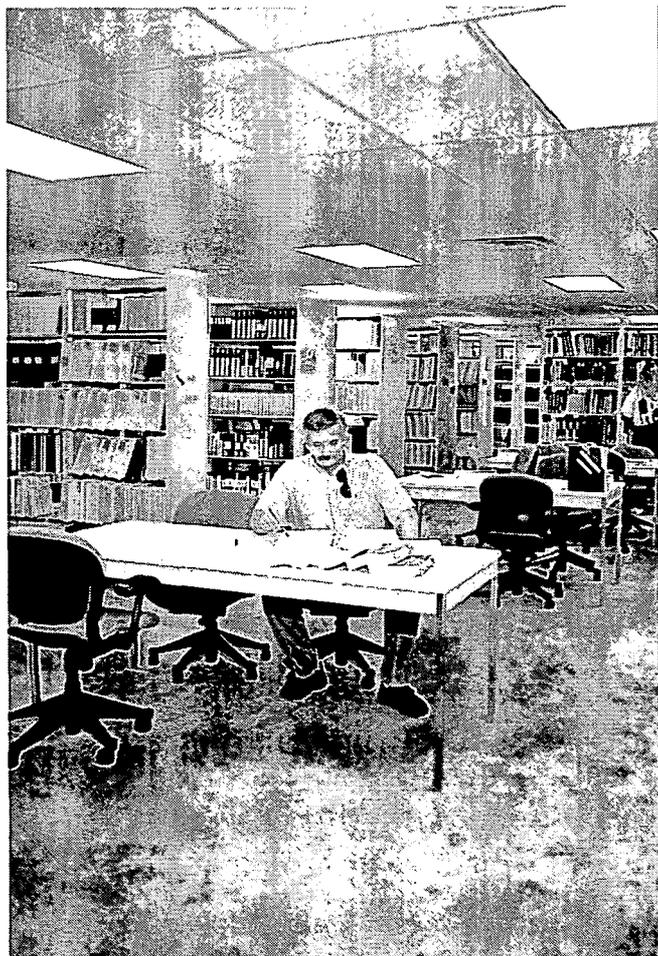
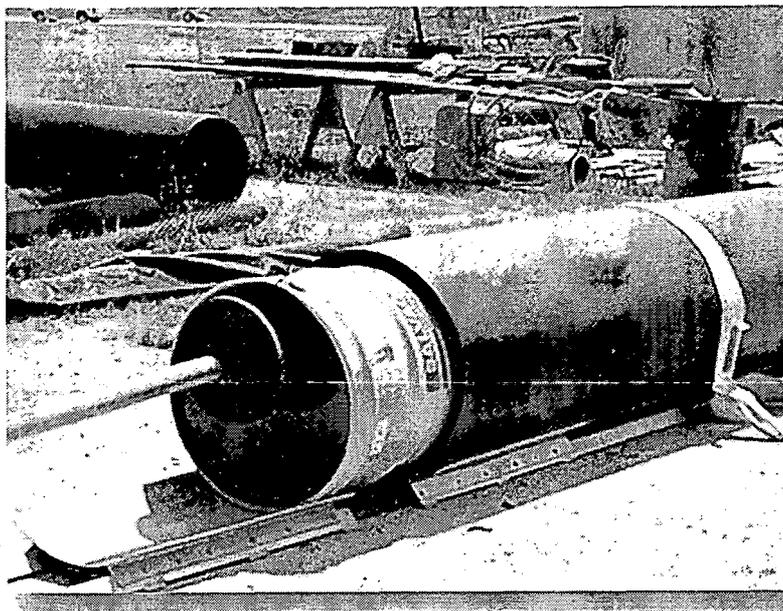
Future technology needs are prioritized

In the fall of 1999, the Fernald Site Technology Coordination Group (STCG) Steering Committee addressed a list of Fernald's technology needs. Together, local stakeholders, representatives from the Ohio EPA, the Citizens Advisory Board and Fernald's Technology Programs Division prioritized Fernald's future needs.

The long-term stewardship for On-Site Disposal monitoring and the leachate collection system were identified as the sites top technological priorities. Items that were chosen as high priorities included, a jacketed macro-encapsulation that is used for mixed waste, material transfer processes and real-time personnel monitoring. All of the priorities have been submitted to DOE's Office of Science and Technology (OST) for review and approval.

The priority needs are used to determine the level of future research efforts, funding for demonstrations and technology deployments. The steering committee's ranking results are used to assist in OST's consideration for Fernald's technology needs.

Right: The jacketed macro-encapsulation that is used for the treatment of mixed-waste is being proposed as a deployment activity at Fernald along with assisted funding from the OST (7308-d1).



What's happening at the Public Environmental Information Center?

The Public Environmental Information Center (PEIC) located at 10995 Hamilton Cleves Highway (St. Rt. 128) is much like your local public library. The PEIC is the place to go if you need information related to Fernald. The center houses information such as: the CERCLA Administrative Record; all post record of decision (ROD) documents; information on other DOE sites; journals; newspapers; videotapes; and historical information regarding Fernald. In 1999 alone, over 2000 people used the PEIC including graduate students, business representatives, Fernald employees, DOE employees and local schools. There is also a reading room, a place to view videotapes and internet work stations. It also serves as a polling location during the election season for Crosby Township.

The hours of operation for the PEIC are: Monday 7:30 a.m. to 7:00 p.m.; Tuesday through Thursday 7:30 a.m. to 5:00 p.m.; and Friday 7:30 a.m. to 4:30 p.m.

If you have any questions regarding the PEIC, please call 648-7480 or e-mail any requests to diane_rayer@fernald.gov.

Left: The PEIC was opened in 1990 to allow the public easy access to information on Fernald (6625-30).

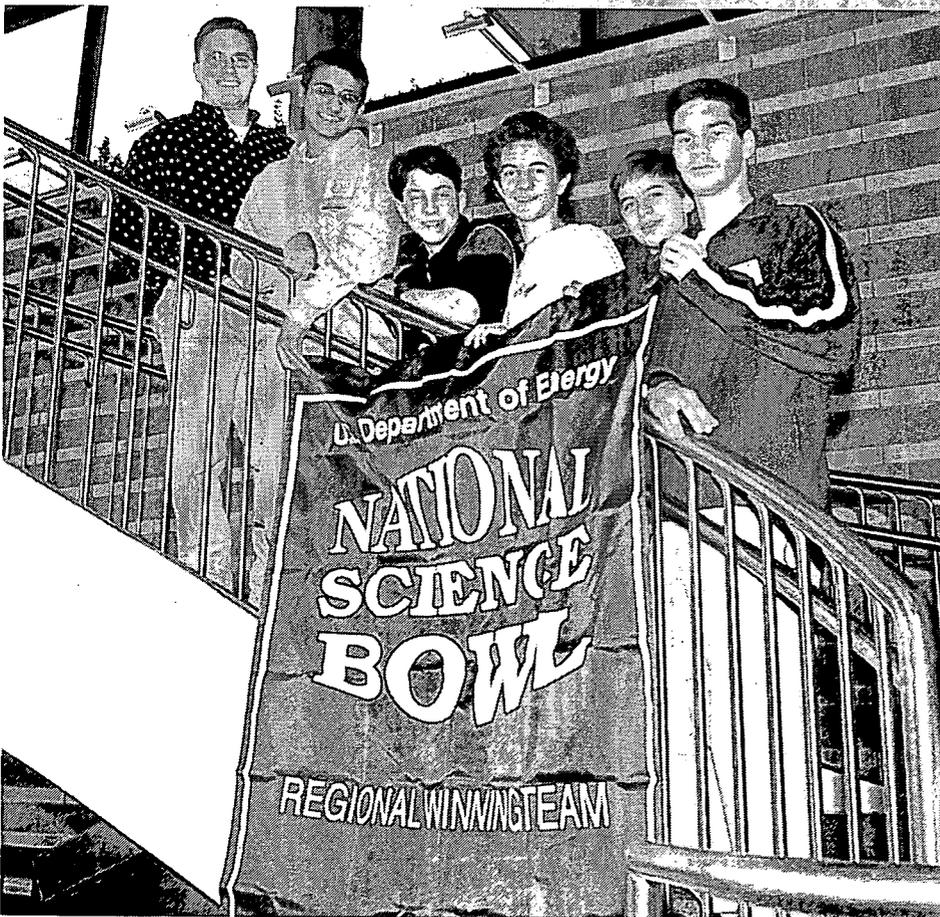
Fluor Fernald receives "Helping Hand Award"

The Middletown Area United Way presented Fluor Fernald with the bronze "Helping Hand Award" at their annual luncheon on Feb. 2. Fluor Fernald's employees contributed more than \$151,000 to the United Way in 1999. A portion of the money raised was earmarked for the Middletown community. It was with these dollars that the Middletown Area United Way was able to surpass their goal of \$1,667,701.

"Helping the communities in which our stakeholders live is important to Fluor Fernald," said John Bradburne, president and CEO. "This is just one way that we can give back to the Cincinnati area. We are not just here to clean the site and leave, we are a part of this community."



Above: Dan Billingsly (left), Tina Mefford-Craig (center), and Jeff Wagner (right), accepted the "Helping Hand Award" on behalf of the site for outstanding participation and support during the 1999 United Way campaign (7219-d62).



Winning Becomes a Tradition!

For the third year in a row, Sycamore High School will represent Cincinnati in the U.S. Department of Energy's National Science Bowl in May after winning the regional contest held Feb. 5, at Cincinnati State. Following a day of tough competition Sycamore was declared the victor by defeating unbeaten Walnut Hills High School twice in the final round. Thirty-two area teams competed in the ninth annual competition.

Test your knowledge: Do you know what an assemblage of nucleic acid and proteins that is an obligate intracellular parasite is called?

Answer: (Virus) How'd you do?

(7306-327)

Recent Tours



DOE has created the new Office of Long-Term Stewardship within the Office of Science and Technology to institute a coordinated approach to long-term stewardship within the Department of Energy. Jim Werner, Director of the new office, visited Fernald in January to attend the Fernald Citizens Advisory Board meeting.

Left: Kathi Nickel (left), DOE-FEMP representative on long-term stewardship and Terry Hagen (center), Fluor Fernald Vice-President of Site Closure accompanied Mr. Werner (right) on the tour (6810-d286).

On Jan. 14, 2000, Deputy Secretary of Energy T.J. Glauthier came to Fernald for his first visit. Glauthier directs the day-to-day management and policy development of DOE's federal and contractor employees and an \$18 billion annual budget.

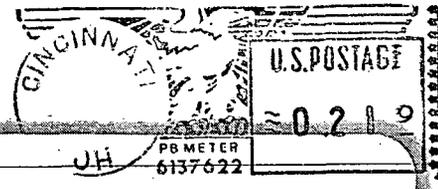
Right: Johnny Reising (far right), DOE-FEMP Associate Director explains how the OSDF is designed to hold 2.5 million cubic yards of waste. Others include (left to right) Jack Craig, DOE-FEMP Director, Myrna Hurd, DOE Special Assistant, and Glauthier (6810-d295).



What do you get when you combine over 160 years of experience at Fernald? The Process Knowledge Review Panel. The panel will be acting in an advisory role to assist in the characterization of legacy waste and the Waste Pits Project.

Left: The panel met with the Waste Pits Remedial Action Project team members to discuss the history of the waste pits. Bob Kispert (standing) is the chairman of the panel and is a part-time team member with the Soil and Water Projects Division (7287-d04).

PRE-SORTED
STANDARD



New documents added to the Public Environmental Information Center

The following information was added to the Public Reading Room, Administrative Record files and Post Record of Decision files at DOE's Public Environmental Information Center (PEIC):

- Waste Pits Remedial Action Project
 - ◆ DOE Letter: Processing Pit Material through the Dryer and Performance Testing
 - ◆ Final Non-Typical Waste Management Plan for Waste Pits Remedial Action Project
- Soil Characterization & Excavation Project
 - ◆ Permanent Leachate Transmission System – Conceptual Design Report
 - ◆ USEPA Letter: On-Site Disposal Facility Borrow Area Strategy
 - ◆ Construction Quality Assurance Final Report – On-Site Disposal Facility Phase II Cell 3 Volumes 1-7
- Demolition Projects
 - ◆ USEPA Letter: Approval of the “Task Order #432 Completion Report for the Above-Grade Decontamination and Dismantlement of Miscellaneous Small Structures”
- Silos Project
 - ◆ Remedial Design Work Plan for the Silos 1 & 2 Accelerated Waste Retrieval Project
 - ◆ DOE Letter: Revised Silos 1 and 2 Accelerated Waste Retrieval Project Regulatory Deliverables Schedule
- Aquifer Restoration Project
 - ◆ OEPA Letter: July Re-Injection Report and Notification of > 20 PPB Injectate
- Miscellaneous
 - ◆ Fiscal Year 1999 Site Treatment Plan Annual Update
 - ◆ OEPA Letter: Comments: Master Plan for Public Use of the FEMP
 - ◆ OEPA Letter: Fernald Citizens Advisory Board Priorities for Calendar Year 2000

Note: This does not represent the complete list of new documents added to the PEIC for the month of January. Contact the PEIC, 513-648-7480 for a complete list of new documents.



Fernald Report

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