

# fernald Report

February 1999

- Waste Pit material to be shipped soon
- Silos treatment demonstrations complete
- Welfare to Work Program works!



## **CRO plan proposes creative solutions to Fernald closure issues**

Most people will agree that Fernald's closure will have a significant impact on the regional economy.

This is the premise of the Fernald Community Reuse Organization's (CRO) draft *Community Transition Plan*

*1999-2002*, now available for public review. The CRO has worked diligently to develop

creative solutions to help workers and the surrounding communities plan for the day when our work at Fernald is complete. *The Community Transition Plan 1999-2002* proposes several programs to help stimulate the local economy and create private sector jobs for Fernald workers.

Initial funding for these programs will come from the DOE Office of Worker and Community Transition – the branch that manages work force restructuring and community adjustment issues. Since DOE funding is limited, the CRO's goal is to leverage the funding with other sources and gradually achieve financial independence. Already, the CRO has forged strong working relationships with regional economic development agencies, the Small Business Administration, the Ohio Department of Development, the Cincinnati Chamber of Commerce and others in the

business of generating or promoting jobs.

If you work at the Fernald site or reside or work in one of the surrounding communities, I recommend you take a few minutes to read through the CRO's plan and become familiar with the proposed programs.

Copies of the Fernald *Community Transition Plan 1999-2002* are available at the Fernald Public Environmental Information Center located at 10995 Hamilton-Cleves Road. The public comment period closes on March 23, and

I know the Fernald Community Reuse Organization welcomes your input.



Jack Craig  
Director, DOE-Fernald

*On the cover: Jeff Ellis (left) and Greg Peters from Waste Management brave cold temperatures while checking rolloff boxes bound for the On-Site Disposal Facility (6319-D1742).*

## Silos Project demonstration runs complete

Representatives from Fernald, the Silos Project Critical Analysis Team and regulators observed four demonstration runs during the past few weeks as part of the Silos Project Proof-of-Principle Testing process. Each vendor participating in the Proof-of-Principle testing demonstrated its ability to continuously operate its proposed technology process.

The Proof-of-Principle testing demonstrations included:

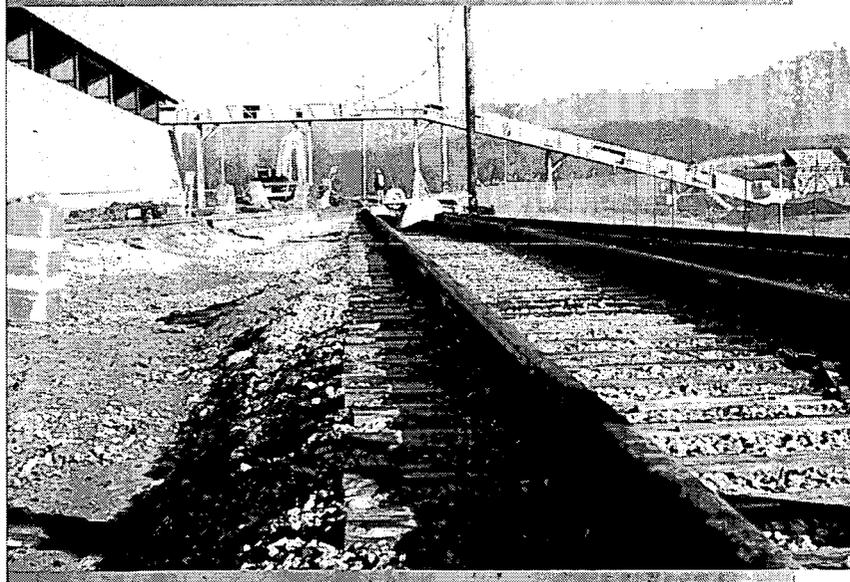
- Vortec Corporation tested its vitrification process at the University of Pittsburgh Applied Research Center in Pittsburgh, PA from Nov. 30 - Dec. 3, 1998;
- International Technology (IT) Corporation tested its chemical stabilization process at its environmental laboratory in Knoxville, TN from Jan. 12-16, 1999;
- EnVitco tested its vitrification (joule-heated) process at the Clemson University Environmental Technology Center in Anderson, SC from Jan. 18-21, 1999
- Chem-Nuclear Systems Inc. tested its chemical stabilization process at the company's consolidation facility in Barnwell, SC from Jan. 25-28, 1999.

Each contractor is expected to prepare a draft report with the results from its testing process and submit it to DOE by May 1999.



*Above: A contract is expected to be awarded later this month to accelerate waste retrieval of material from Silos 1 & 2 (7038-D0020).*

## Waste Pits Project begins loading railcars



*Above: Fluor Daniel Fernald is transferring material to IT's Material Handling Building via a 130-foot conveyor (6944-D0499).*

The Waste Pits Project has begun to load contaminated stockpiled materials into railcars, completing an EPA milestone. This is the first major step in executing the cleanup project, which includes excavation, treatment and off-site rail shipment of Fernald's six waste pits, clearwell and burn pit.

Fluor Daniel Fernald will transfer approximately 40,000 tons of material by conveyor from two soil piles to the Material Handling Building where IT Corp. will prepare (i.e., blend, as necessary) the materials to meet the requirements of the Envirocare disposal facility in Utah. The contaminated soil piles were generated as a part of various Fernald cleanup activities, including construction of the North Rail Yard.

IT will then transfer the materials to the Railcar Loadout Facility. Once the cars are loaded and covered with custom manufactured lids, Fluor Daniel Fernald will move the cars to the North Rail Yard and begin assembling a unit train (40 to 60 cars). DOE and Fluor Daniel Fernald plan to ship the first unit train in April. Excavation of the waste pits will occur later this summer.

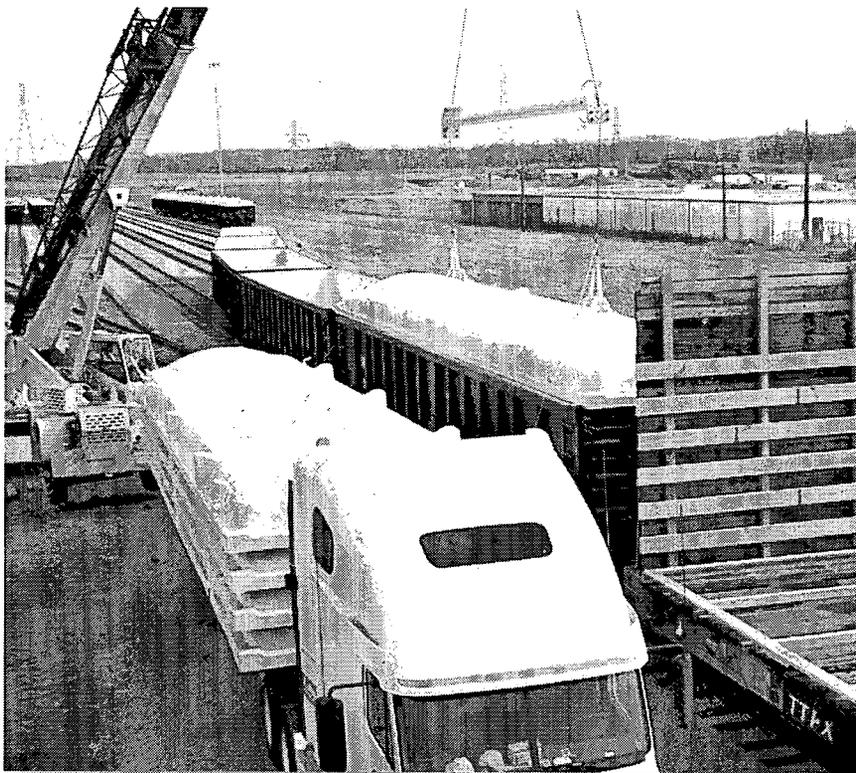
# Cleanup **Progress** Update

## Waste Pits Remedial Action Project (WPRAP)

- Railcar loading of contaminated stockpiled materials has begun meeting a EPA milestone
- Continued treatment facility operations training
- Continued waste processing facility construction

## On-Site Disposal Facility (OSDF)

- Placed crusting agent on exposed cell surfaces to protect liner during winter
- Continued preparation of *On-Site Disposal Facility Soil Borrow Evaluation*
- Continued repair on Leachate Transmission System



*Above: All 140 of the custom-made fiberglass lids for the gondola cars have been received. Here, the 3000 lb. lids are carefully being unloaded prior to use early this spring (6349-D1528).*

*Right: IT construction personnel assemble roof vents that will be used in the Railcar Load Out Building (6944-D0519).*

*Far right: Waste Management has continued to make progress in staging waste for placement in the On-Site Disposal Facility (6319-D1743).*



## Facilities Closure & Demolition Project (FC&DP)

### Safe Shutdown

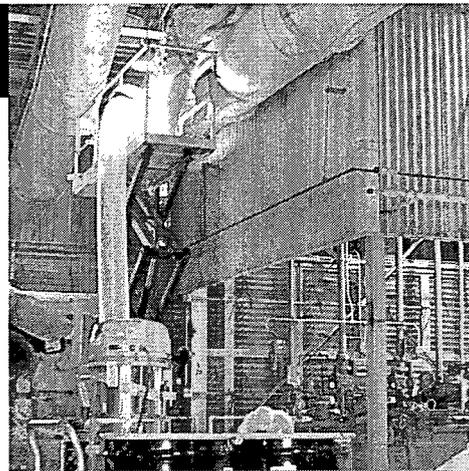
- Continued removal of material in production lines in selected areas of Plant 6; transferred 99 drums of this material to Plant 1 Pad
- Completed removal of 650 gallons of oil from Plant 6 rolling mill

### Decontamination & Dismantlement

- Thorium/Plant 9 Complex —
  - ◆ Completed equipment decontamination
  - ◆ Began preparation of Project Closeout Report
- Maintenance/Tank Farm Complex and Water Storage Tank Project —
  - ◆ Suspended water storage tank construction due to severe weather conditions
  - ◆ Issued Notice to Proceed for D&D of Tank Farm and Pipe Bridge components
- Facility Demolition/Supplemental Environmental Projects —
  - ◆ Began shipments of old rail line to Alaron Corporation for recycling
  - ◆ Began shipping boxes of copper motor windings to DOE-Oak Ridge
  - ◆ Initiated task order to free release 95 tons of scrap metal resulting from D&D of Building 38A/38B propane tanks

### Silos Project

- Issued Notice to Proceed to Rocky Mountain Remediation Services for remediation of Silo 3
- Kelchner Environmental completed trailer upgrade portion of Silos Infrastructure Project
- Completed 72-hour contractor Proof-of-Principle technology demonstration tests
- Conducted kickoff meeting with Theta Engineering, Vitrification Pilot Plant Waste Disposition contractor

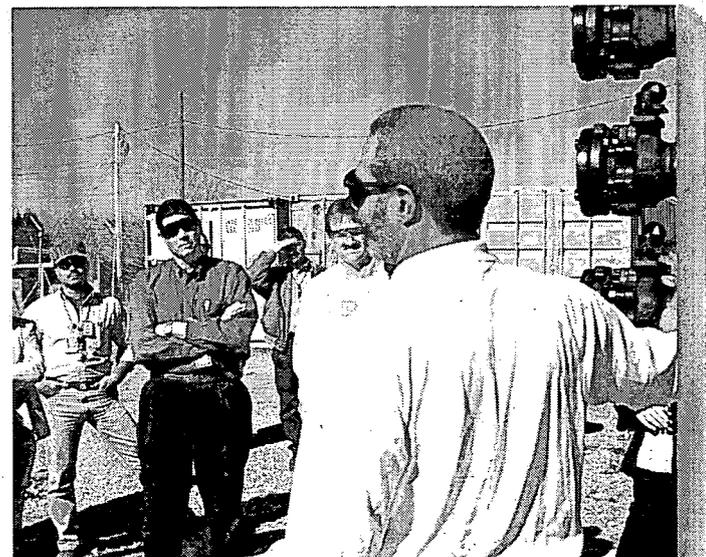


*Left: Safe Shutdown personnel use non-destructive assay equipment to check for nuclear materials heldup in Plant 6 piping. Significant time and effort can be saved by removing only those segments necessary to reach the material (6639-D0223).*

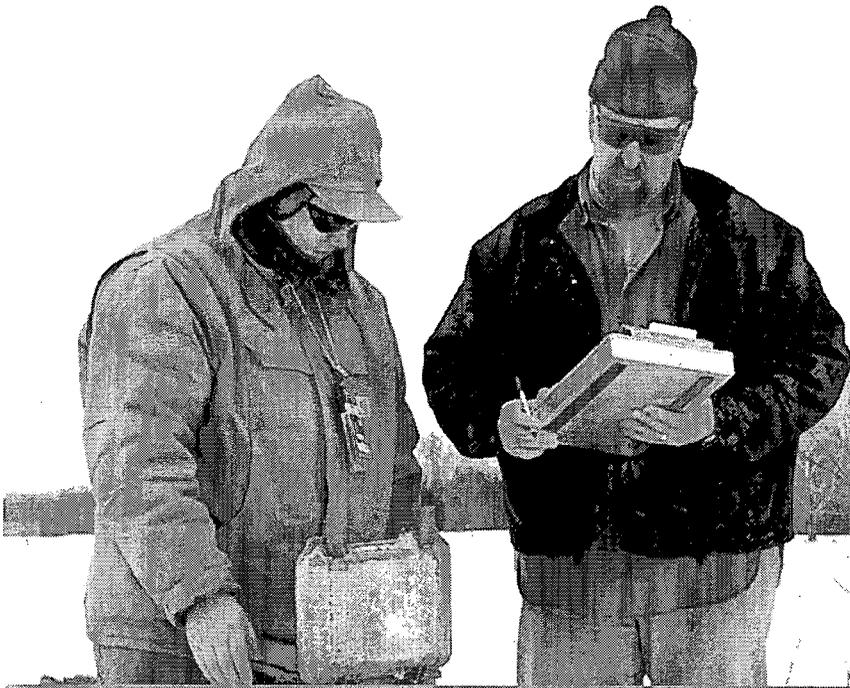


*Below left: An Industrial Hygiene technician checks his monitoring equipment while testing for volatile organics in Plant 6 (6639-D0227).*

*Below: Claude Griffin, Silo 3 manager, shows a group of visitors the ports used to extract samples from Silo 3. (6759-D0325).*



# Cleanup **Progress** Update



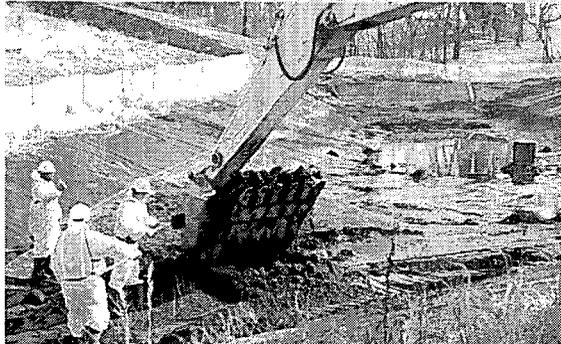
## **Aquifer Restoration/ Wastewater Project**

- Issued Certified-for-Construction Drawings for Advanced Wastewater Treatment Facility Laboratory Expansion Project
- Continued construction of Biosurge Lagoon Ozone Injection System
- Issued Notice to Proceed to Staver Group for construction of Sludge Removal System
- Initiated geoprobings activities in South Field area in support of groundwater remedy performance monitoring program

## **Soil Characterization & Excavation Project**

- Awarded Trap Range Stabilization subcontract to Severson Environmental Services
- Continued construction of twin 48-inch culverts under the South Access Road
- Natural Resource Restoration
  - ◆ Continued discussions with Natural Resource Trustees regarding settlement of State of Ohio's 1986 claim against Fernald
  - ◆ Continued preparation of final Phase I Wetland Mitigation design
  - ◆ Continued preparing responses to public comments on *Environmental Assessment for Proposed Final Land Use at the Fernald Environmental Management Project*

*Top:  
Despite the frigid conditions  
Water Sampling Technicians,  
Doug Gels (left) and Gary  
Haynes, monitor about a  
dozen wells a month to ensure  
the system is operating as  
planned (6860-D0043).*



*Center:  
Sediment and flyash collected in a retention  
basin are removed and await eventual  
placement in the OSDF  
(6734-D1021).*

*Bottom:  
The RTRAK radiation detection system has  
traveled many miles while monitoring  
Fernald's South Field  
(6876-D0041).*



## Waste Management Projects

- **Thorium Legacy Waste Project** —Repackaged nine boxes for shipment to the Nevada Test Site; total of 36 boxes repackaged to date
- **Nuclear Materials Disposition** —Continued repackaging 14,500 10-gallon cans of depleted uranium tetrafluoride (UF<sub>4</sub>) for eventual off site shipment; 36 of an estimated 500 boxes have been packaged to date. Shipped 645,355 lbs. of enriched UF<sub>4</sub> in support of contract for sale of low enriched uranium



*Above:  
Kelley Blair and Judy Kraus from Waste Management wrap and band pallets with segmented steel from old rail lines prior to being sent out for recycling (6868-D0078).*

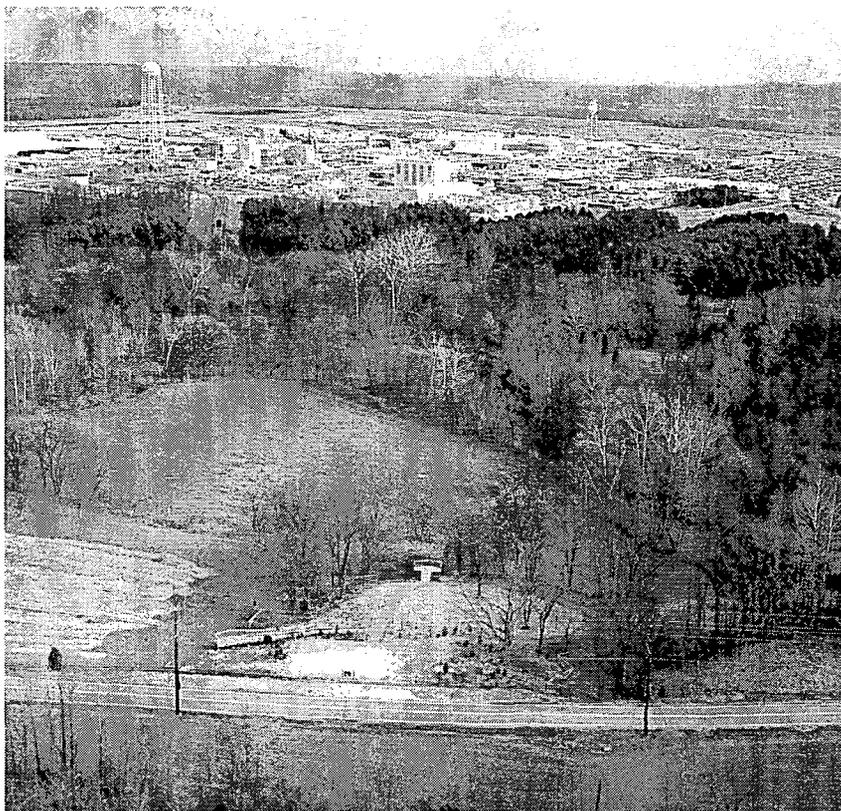


*Left:  
Removing 5-gallon drums of enriched restricted material was critical to starting Safe Shutdown work in Plant 6 (7045-D0018).*

## Public weighs in on proposed land use

The Department of Energy (DOE) received a total of 80 comments from the public on two documents: the *Environmental Assessment (EA)* for Final Land Use and the *Natural Resource Restoration Plan (NRRP)*. Most of the comments received have been supportive of DOE's final land use proposal. Many contained detailed questions and recommendations regarding specific aspects of the *NRRP* and most were agreeable with the sequenced approach to restoration outlined in the plan. Responses to these comments have been drafted by DOE in conjunction with the Fernald Natural Resource Trustees and are currently being reviewed. The response package and a *Finding of No Significant Impact* document will be issued to the public in March.

Specific recommendations were also received regarding public use of the site once remediation and restoration work is complete (i.e., hiking, hunting). The types of specific uses that DOE will consider on this property is outside the scope of the Final Land Use *EA* and the *NRRP*. However, DOE and the Trustees will consider these comments in developing an *Institutional Control Plan* for the site which will be available in 1999. This plan will outline access restrictions and permissible uses of the site once remediation and restoration work is complete.



Above: The Fernald Ecological Restoration Park on Paddys Run Road is the first of four supplemental environmental projects to be completed (7021-120).



## Advisory board has a new look

In an effort to continue meeting the needs of the site as cleanup progresses, the Fernald Citizens Advisory Board (FCAB) is changing the way it does business. The FCAB recently reorganized its committee structure to include two working committees, the Remediation Committee and the Stewardship Committee. The Remediation Committee will address specific and immediate cleanup issues such as waste transportation, the Silos Project, and the On-Site Disposal Facility. The Stewardship Committee will give feedback to DOE and regulators on issues such as ecological restoration, potential reinterment of Native American remains, and preservation of historic artifacts and cultural resources.

At a recent full board meeting, the FCAB welcomed four new members who are uniquely suited to help the group meet its long-term goals. They are: Sandy Butterfield (local resident/landowner); Ken Moore (retired businessman); Fawn Thompson (Ohio Department of Transportation); and Mike Keyes (Fernald employee, representing the International Guards Union of America).

Above: The newest CAB members met on February 10. (from left to right) Mike Keyes, Fawn Thompson; Doug Sarno, CAB technical consultant; Sandy Butterfield; and Ken Moore (6932-D11).



Above: Kaye Lewis was honored at the Indiana Capitol earlier this month: (from left) Yvonne Gale, Silos Project Human Resources coordinator; John Bradburne, president and CEO of Fluor Daniel Fernald; Kaye Lewis, secretary Silos Project and State Representative, Robert Bischoff (7060-2).

## Fernald employee honored by Indiana Lt. Governor

Fernald's Welfare to Work Program, which started in 1997, has created a surge in confidence and the realization of personal dreams for over fifteen men and women from the tri-state area. Kaye Lewis, a team member in the Silos Project at Fernald, is an excellent example. For many years, Lewis was on welfare and trapped by poverty. With her husband forced out of work because of a disability and Lewis without a high school diploma, she was caught in a cycle of financial distress with little confidence or hope of entering the business world.

All of that has changed thanks to initiative on Lewis' part, a caring adult education instructor, and an opportunity provided by Fluor Daniel Fernald.

Lewis' story is so unique that earlier this month, she was honored for her achievement by the Indiana Workforce Development system. At a ceremony held in the Indiana Capitol in Indianapolis, Lt. Governor Joe Kernan praised the courage of Lewis and the other honorees, along with the willingness of the Department of Energy and Fluor Daniel Fernald to take a chance.

"The people at Fernald have really made me feel welcome. They have supported me from the day I arrived and continue to guide and mentor me as I work on new jobs within the Silos Project. I couldn't ask for better co-workers or friends," said Lewis.

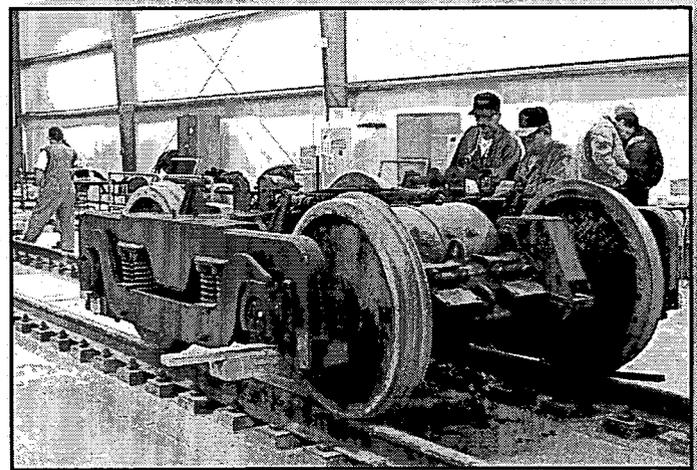
## CRO releases draft economic development plan

The Fernald Community Reuse Organization's (CRO) draft economic development plan is now available for public review. *The Community Transition Plan 1999-2002* proposes several programs to help Fernald workers and local communities adjust to Fernald's closure once cleanup is complete and will serve as the CRO's grant application to DOE for implementation funding. The total project budget request will be approximately \$4 million annually over a three-year period.

The programs include:

- a revolving loan fund to provide financing to new businesses;
- marketing/promotional partnerships to generate commercial interest in the region and in Fernald's labor pool;
- expanded entrepreneurship projects to provide management consultation services to new businesses during critical growth phases;
- Fernald employee-owned businesses;
- a local development corporation to increase the volume of local retail sales by 25 percent over a three-year period; and
- a business center for new firms to share resources.

The 30-day public review period will end March 23. The plan will be available on Fernald's Web site at [www.fernald.gov](http://www.fernald.gov) and in the Public Environmental Information Center, 513-648-7480. Stakeholders should send comments to: Fernald Community Reuse Organization, P.O. Box 38, Ross, OH 45061, or call Curt Paddock, CRO economic development consultant, 513-527-3150, [paddockmgt@aol.com](mailto:paddockmgt@aol.com)

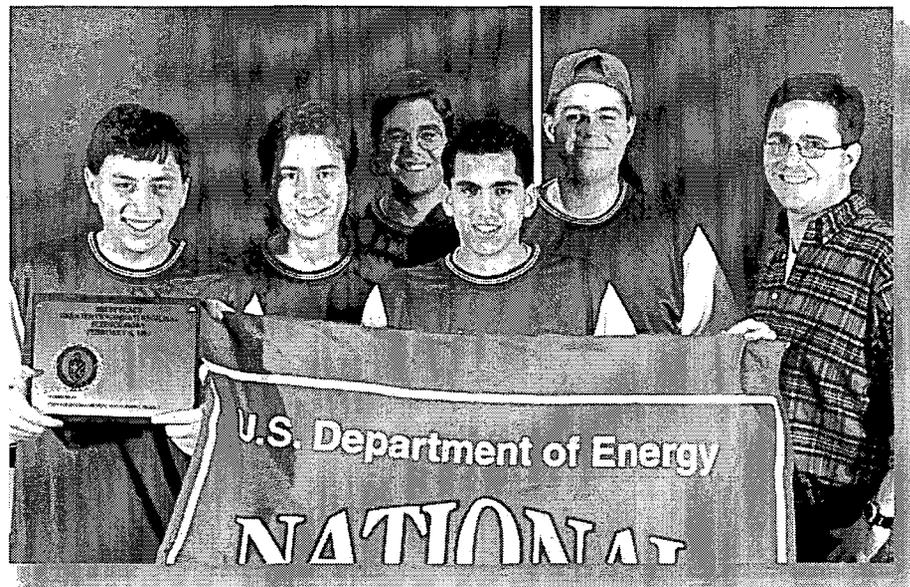


Above right: Fernald garage mechanics have received additional training and certification in order to work on locomotives (6349-D1520).

## Sycamore remains undefeated!

"How can the expression 7 to the power of the square root of 2 be calculated?" asked Ken Morgan, Science Bowl moderator from the Department of Energy. With lightning speed, Jonah Knobler, Sycamore High School senior, buzzed in with the correct answer, "as a limit of other powers of 7." This pivotal point tied the score with long-time rivals, Lakota West. The contest was on! Sycamore dominated the second half of the 8th annual Science Bowl and won the match, 144 to 90. Their victory over Lakota West permitted Sycamore to retain the title of "undefeated champions" for the second year.

Competitors from 21 schools in Ohio and Kentucky battled it out using the double elimination format of 13 question-and-answer rounds on Saturday, February 6, 1999. Buzzers rang, captains challenged, and the tension mounted as everyone worked hard to claim the grand-prize of an all-expense paid trip to Washington D.C. and a chance to compete in the nationals to win a two-week trip to the International School of Physics in Sidney, Australia.



Above: Sycamore High School students will travel to Washington D.C. this spring to compete in the National Science Bowl as the regional winner. Team members include: (from left to right) Jonah Knobler, Kevin Inderhees, Brian Miller, David Bender, Soren Harward and advisor Scott Norman (7052-D0017).

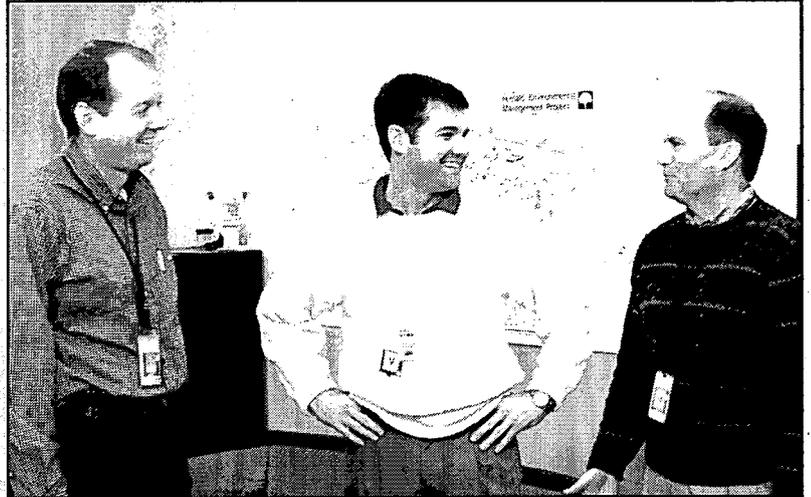
## Resource guide for the science classroom a "best seller"

Have you ever needed a speaker, wanted to take an educational tour, or searched for information? *The Web: A Resource Guide for the Science Classroom* might provide the answers. The fourth edition of the guide has just been printed and is being circulated among teachers, parents, scout troops and other youth organizations. You will find entries for nearly 100 organizations in Hamilton and Butler Counties who are willing to supply useful information pertaining to science, math and technology education for grades K through 12. To get a copy for your favorite teacher or scout leader, call Sue Walpole, 513-648-4026.

## Recent Tours

**O**n February 9, Tom Ross, staff assistant for Congressman Rob Portman, visited Fernald. Accompanying him were Gary Stegner, DOE Public Affairs and Dennis Carr, Fluor Daniel vice president, Soil and Water Project. Ross attended the monthly Cleanup Progress Briefing later that evening.

*Right: Tom Ross (center) is welcomed by Jack Craig (left), DOE-Fernald director, and Glenn Griffiths (right), DOE-Fernald deputy director (6810-D0176).*



**S**everal residents from southwest Nevada accompanied Kevin Rohrer from the DOE Nevada Office to Fernald. They also attended the monthly Cleanup Progress Briefing, met with several DOE and Fluor Daniel Fernald managers, spoke with members of local fire departments and took a tour of the site.

*Left: As part of the tour, Johnny Reising, DOE-Fernald associate director, (fourth from left) explained how the waste is characterized and managed at the Plant 1 Pad and the process for placing contaminated soil and debris in the On-Site Disposal Facility (7058-D0011).*

**O**n March 22, 1999 Secretary of Energy Bill Richardson will deliver the keynote address at a ceremony marking the completion of Safe Shutdown at Fernald. Over 250 team members participated in this project which involved isolating electricity and utilities in the major production plants and removing nuclear material in old production lines and tanks. In all, 700,000 tons of material was removed from these buildings. The project was completed 2 years ahead of schedule and millions of dollars under budget. After a ceremony recognizing the efforts of this team, visitors will be able to walk through Plant 6, see demonstrations of the completed work and take a site tour.

# New documents added to the Public Environmental Information Center

The following information was recently 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
  - ◆ Final First Loadout Work Plan, February 1999
- Soils Characterization & Excavation Project
  - ◆ Revised Project Specific Plan for Area 9, Phase I Precertification Physical Sampling
  - ◆ Revised Project Specific Plan for the Area 9, Phase I Precertification Real-Time Scan
  - ◆ Waste Acceptance Criteria Attainment Report for Area 7 Soils (Silos Project Area)
  - ◆ Addendum to the Waste Acceptance Criteria Attainment Report for Area 7 Soils (Silos Project Area)
- Facilities Closure and Demolition Project
  - ◆ Operable Unit 3 Plant 5 Complex Implementation Plan for Above-Grade Decontamination and Dismantlement
- Silos Project
  - ◆ Silo 3 Project Remediation Contract Award
- Aquifer Restoration Project
  - ◆ Operating Report for the Re-Injection Demonstration
- Miscellaneous
  - ◆ U.S. Environmental Protection Agency (EPA) response to issues regarding the National Emission Standards for Hazardous Air Pollutants and Air Monitoring Stations
  - ◆ The Integrated Environmental Monitoring Status Report for the third quarter of 1998
  - ◆ Resource Conservation and Recovery Act/Comprehensive Environmental Response, Compensation and Liability Act Integrated Closure Implementation document for the Crane Incinerator, UNH Tanks and Hot Raffinate Building
  - ◆ Site Treatment Plan Annual Update
  - ◆ DOE responses to U.S. and Ohio EPA comments on the Draft Integrated Environmental Monitoring Plan
  - ◆ Information from the January Fernald Cleanup Progress Briefing
  - ◆ Ohio Environmental Protection Agency Discharge Monitoring Report for Fernald
  - ◆ Fernald Community Reuse Organization Community Transition Plan 1999-2002



## Fernald Report

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