FERNALD REPORT - FEBRUARY 1997

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DOE-FEMP PUBLIC
8
FACT SHEET

Fernald Report

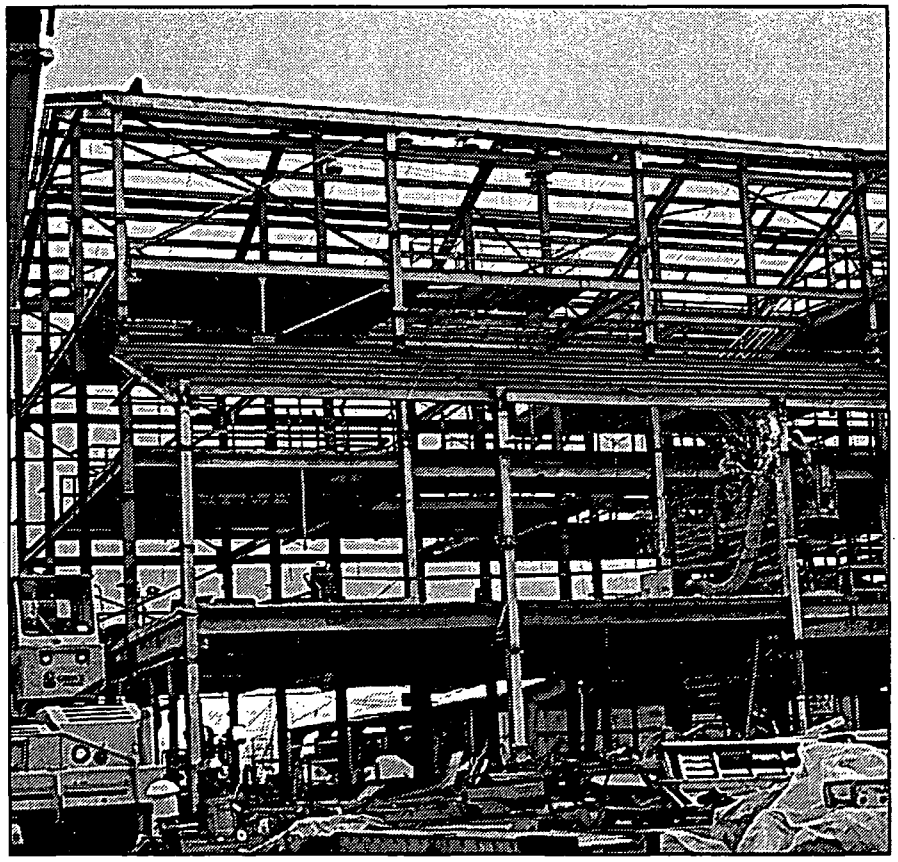
February 1997

Third FEMP Plant Scheduled for Final Demolition on Feb. 22

Babcock & Wilcox and its specialty demolition con-tractor Controlled Demolition Inc. (CDI) plan to implode the four-story Plant 1 steel structure during the late morning hours on Saturday, Feb. 22, assuming favorable weather conditions and completion of final decontamination and dismantling (D&D) activities. During the FEMP's former production years, ore concentrates and recycled materials were weighed, sampled and milled in Plant 1 for distribution to other on-site processes.

For safety reasons, on Feb. 22 only authorized personnel will be allowed in the site's administrative and former production areas. Those interested in observing the implosion may watch from either the main or west parking lots. The west construction parking lot–off the main west parking lot–is the best viewing place. However, observers may still experience difficulty seeing the implosion because of the plant's location and size. Video footage of the implosion will be available at the Public Environmental Information Center the week after the implosion.

To minimize the potential for undetonated charges/misfires, the Plant 1 detonation sequence will be faster than the Plant 4 implosion, lasting approximately three seconds. Also, CDI will use half as many charges as used to detonate Plant 4. The height of the felled structure is expected to be between 30 and 35 feet. The steel and other materials will be cut with shears and placed back on the Plant 1 foundation.



FEMP File Photo 6080-561: Plant 1 is the third of 10 major production plants to be dismantled as part of FEMP's cleanup mission. More than 220 structures, including plants, parking lots, storage pads, etc., are planned for demolition.

Call 648-6272 for Latest Plant 1 Implosion Information

For up-to-date information on the Plant 1 implosion, stakeholders are encouraged to call the FEMP Community Access Line, 648-6272 throughout February. Fluor Daniel Fernald will update this line regularly as the D&D project progresses. The line is available 24 hours daily.

Technology to be Demonstrated as Alternative to Thermal Waste Treatment

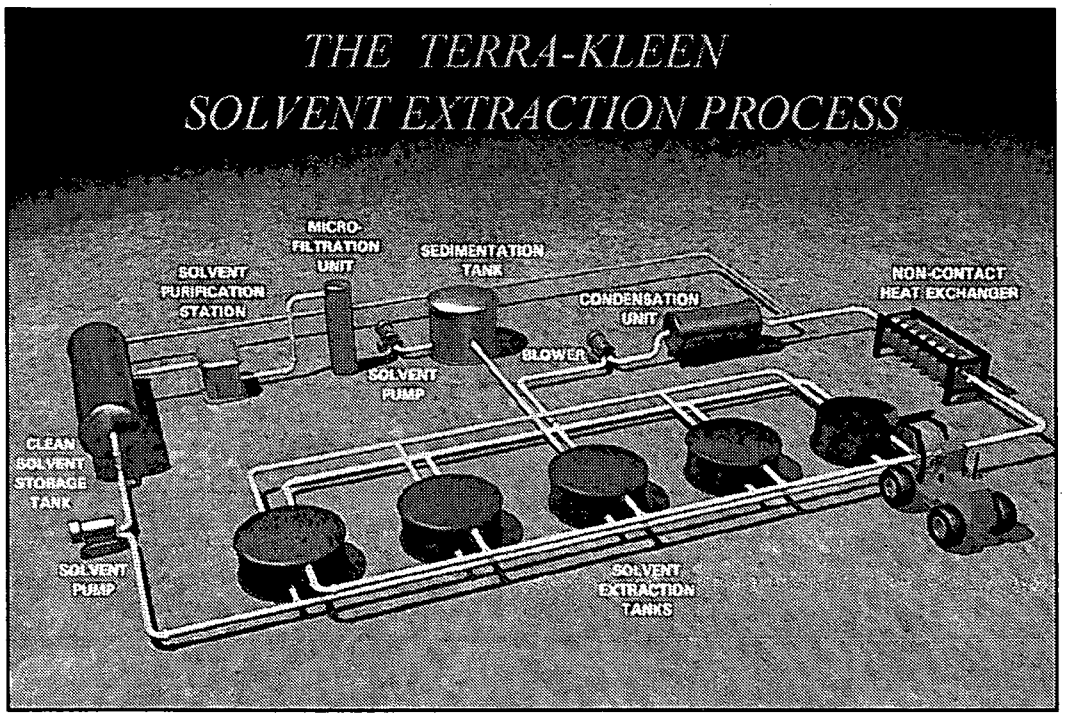
A new Presidential environmental strategy called Rapid Commercialization Initiative (RCI) has been established to bring new technologies into commercial use and to verify their effectiveness. Under RCI and in conjunction with DOE and Fluor Daniel Fernald, Terra-Kleen Response Group Inc. is demonstrating a new technology at the FEMP. The DOE complex has long been challenged by the difficult prospect of treating mixed waste, but recently the FEMP has made some major steps in mixed waste treatment which have enabled it to move closer to meeting final remediation goals.

The new technology–called Mobile Solvent Extraction–treats both mixed (hazardous constituents and low-level radioactive) waste and tri-mixed (low-level waste containing hazardous constituents along with polychlorinated biphenyl [PCBs]) waste by using a nonhazardous solvent to wash hazardous organics from soils, sludges, and debris. After contaminated materials are washed with the solvent, the contaminated solvent passes through a recovery unit, where contaminants are separated from the solvent and concentrated, reducing the contaminant volume for disposal.

The Terra-Kleen process holds the only nationwide Toxic Substance Control Act (TSCA) permit for a non-thermal process to remove PCBs. The Terra-Kleen process, a non-thermal technology, is a response to local citizens' opposition to the use of thermal treatment systems, such as incineration processes, at the FEMP. Non-thermal treatments eliminate the potential for hazardous emissions associated with thermal processes and are, therefore, considered safer for the environment.

The Mixed Waste Focus Area joined DOE, Fluor Daniel Fernald and Terra-Kleen in funding the RCI demonstration. This funding enabled the work to begin some 18 months ahead of schedule and saved the FEMP thousands of dollars in waste storage costs. Several federal agencies including DOE, U.S. EPA, the Department of Commerce, the Department of Defense, have come together to support the FEMP in making the RCI program a success.

The Mobile Solvent Extraction project is being performed at the FEMP in three phases. Phase I–preparation of documents and work plans–has been completed. Phase II–the demonstration phase–is scheduled to begin in March. Following successful demonstration, Phase III could begin as early as April 1997 and will include deployment of the technology for full-scale treatment of the remaining organic contaminated mixed waste inventory at the FEMP.



The Terra-Kleen process maximizes its waste reduction potential by:
- *recycling the extraction solvent as part of the routine system operations;*
- *maintaining a closed-loop process to reduce volatile emissions; and*
- *concentrating organic contaminants.*

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Message from John Bradburne:
New Opportunities for FEMP Employees

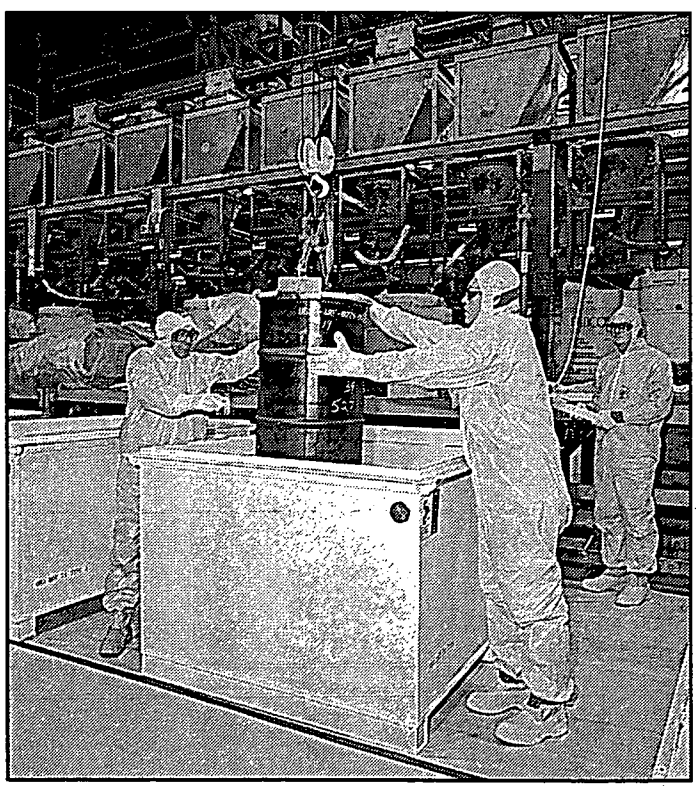
FEMP File Photo 6404-08: John Bradburne, Fluor Daniel Fernald president

I am pleased to announce that DOE and Fluor Daniel Fernald have received approval from the State of Ohio Department of Labor to implement a new apprenticeship training program at the FEMP. The apprenticeship program is designed to apply the craft skills of current wage employees with specific cleanup needs and activities that need to be completed at the FEMP. The apprenticeship program opens the door to career development opportunities and forges an increased professional bond between the wage apprentices, the craft worker, DOE, and Fluor Daniel Fernald.

Overall, the apprenticeship program provides an opportunity for non-craft personnel to obtain a certification that is widely recognized in the construction and maintenance industries nationwide. Employees approved to participate in this four-year program will be able to enhance their skills and, in turn, make themselves more marketable for future career opportunities. Apprentices selected to participate will develop their education interests, receiving training in specific trades. The program is completely voluntary and self-paced to better meet the needs of interested apprentices.

Congratulations to the committee members responsible for developing this unique program, including representatives from the Fernald Atomic Trades and Labor Council (FAT&LC), DOE, and Fluor Daniel Fernald. The apprenticeship program is truly an example of a win-win opportunity for all parties involved.

John Bradburne
President, Fluor Daniel Fernald



FEMP File Photo 5422-3: FEMP workers load drums into white metal boxes for off-site shipping and burial.

DOE Obtains Volume Price Reduction and Saves Taxpayers $100,000

Due to the volume of waste materials being shipped to commercial disposal facility Envirocare of Utah, DOE has been able to obtain a substantial per-cubic-foot price reduction–saving taxpayers $100,000. By reaching the higher volume plateau, DOE obtained the substantial per-cubic-foot price reduction. Approximately one month ahead of schedule, FEMP Mixed Waste Projects personnel finished transporting approximately 10,750 cubic feet of mixed waste to Envirocare of Utah for final disposition. This waste stream is composed of petroleum- and solvent-contaminated soils; sediment; and inert debris generated during the closure action at the Fire Training Facility Burn Pond remediation. The waste met universal treatment standards and land disposal restrictions without requiring additional treatment.

Fluor Daniel Fernald Sponsors First Career Expo for Employees

On Jan. 14, FEMP employees who attended the Fluor Daniel Fernald Career Expo experienced, first-hand, some of the many services the Career Development Center offers. Twenty-five exhibitors, including representatives of the area's major universities, participated in the Career Expo. "I'm very impressed with the set-up here," said Jane Link, from Xavier University's Center for Adult and Part-Time Students.

Career Development Center staff estimated approximately 750 team members attended the Career Expo. "It was nice to see so many people taking an interest in their careers," Sybil McGee, Career Development Center staff member, said. The Career Development Center plans to hold the Career Expo annually.

The Career Expo also received kudos from DOE. "It was evident a lot of planning and execution went into this event," said Glenn Griffiths, DOE-FEMP deputy director. "The mix of organizations represented was excellent–great job!"

FEMP File Photo 6518-14: Fluor Daniel Fernald employee Will Marg discusses education opportunities with Xavier University representative Jane Link.

"There was a lot of good literature and some very informative people," said Jim Stone, a hazardous waste worker. "I also think it did a lot to raise awareness on this site that we need to start thinking about life after Fernald."

The Career Development Center is housed at 25 Merchant Street, Fluor Daniel Fernald's Springdale location. For more information about Career Development Center services, please call 648-6301.

Fluor Daniel Fernald Supports Future Leaders

Fluor Daniel Fernald management believes one of the best ways to ensure a qualified work force for the future is to encourage and support young people along the way. Examples of this commitment include a donation to the 1997 American Society of Mechanical Engineers Region V Student Conference. The conference will involve leadership training courses, tours of local universities and industries, presentation of technical papers, and design competitions for the 600 student attendees. Hosted by the University of Cincinnati, the meeting is an opportunity for local student leaders to gain beneficial insight into the working world and make valuable contacts for the future.

Another event supported and attended by Fluor Daniel Fernald representatives was the Annual Martin Luther King Jr. Scholarship Fund-Raiser, sponsored by the African-American Forum (AAF). Since the fund's inception, AAF has awarded 21 scholarships to outstanding Cincinnati-area African-American high school seniors. This year's event recognized five young people who are moving on to college careers.

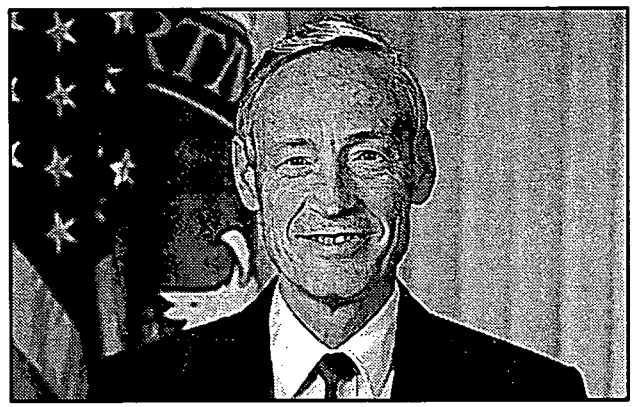
Other Sites Interested in FEMP Technology Program's Experiences

In late January, Fluor Daniel Fernald Technology Programs personnel shared their experiences and results obtained in technology demonstrations conducted at the FEMP with other project managers and vendors at the Chicago Pile Reactor Large-Scale Demonstration Project open house. This forum provided an opportunity to exchange information about and identify potential technologies that could be applied at other D&D projects.

Through the FEMP's Large-Scale Technology Demonstration Plant 1 D&D Project, several technologies have been successfully demonstrated, including: the oxy-gasoline torch, remote pipe inspection, vacuum insulation removal, sponge jet decontamination, and laser-induced fluorescence. These demonstrations were partially funded by the DOE Office of Science and Technology.

Ohio Field Office Director to Retire in March

The end of an era approaches for a man whose career has centered on some of the nation's most visible nuclear projects. J. Phillip "Phil" Hamric, known as the manager who has turned around the cleanup efforts at the Ohio Field Office, will retire from federal service on March 31, after a federal civilian career spanning 26 years. Hamric has served as DOE's Ohio Field Office manager since June 20, 1994. Before that appointment, he was the DOE-FEMP manager and deputy manager of the Richland Field Office at DOE's Hanford site in Washington.



FEMP File Photo 6171-167: In March, Phil Hamric will retire from his position as director of DOE's Ohio Field Office.

Since its inception in 1994, the Ohio Field Office has grown to encompass five sites in two states– Ashtabula, Columbus, Fernald, and Miamisburg in Ohio; and West Valley, in New York. "Things have really jelled and come together since the creation of the field office (Ohio)," Hamric said. "There are three things that I'm proud that have happened: an increased emphasis on our safety program, improved stakeholder relations, and being able to make positive accomplishments while the budget has been continually reduced. It's been a good run."

Under Hamric, the Ohio Field Office lead the DOE complex's integration of the *10-Year Plan.* Many facets of the *10-Year Plan* are incorporated into the Ohio Field Office's *Strategic Plan*, which serves as a "living" document for ongoing projects. Hamric has been active in stakeholder meetings to hear all concerns about DOE operations at the five sites.

Hamric served two years as an officer in the U.S. Army. In 1960, he received a bachelor of science degree in physics from Virginia Military Institute, and has completed graduate work at the University of Washington. In 1963, Hamric began his nuclear career at Hanford, Wash., working in reactor physics for General Electric Corp. He entered government service in 1971 and earned DOE's Meritorious Service Award in 1988 and 1990. When retired, Hamric plans to spend more time fishing in mountain lakes and streams.

DOE'S Public Environmental Information Center Plans Move In Spring

DOE's Public Environmental Information Center (PEIC), which houses the Administrative Record and the Public Reading Room, is tentatively scheduled to be moved this spring. The PEIC will move to the Delta Building, located at 10995 Hamilton-Cleves Highway (less than a half-mile from the JAMTEK building where the PEIC is currently located). After the move, the public will still be able to receive assistance from PEIC staff by calling 513-738-0164.

At this time, the exact date for the PEIC move is unknown. Prior to the move, stakeholders will be notified of the date via newspaper and postcards. The PEIC will be closed to visitors for approximately one week during the move; however, stakeholders can still call with requests during that time.

PEIC Hours

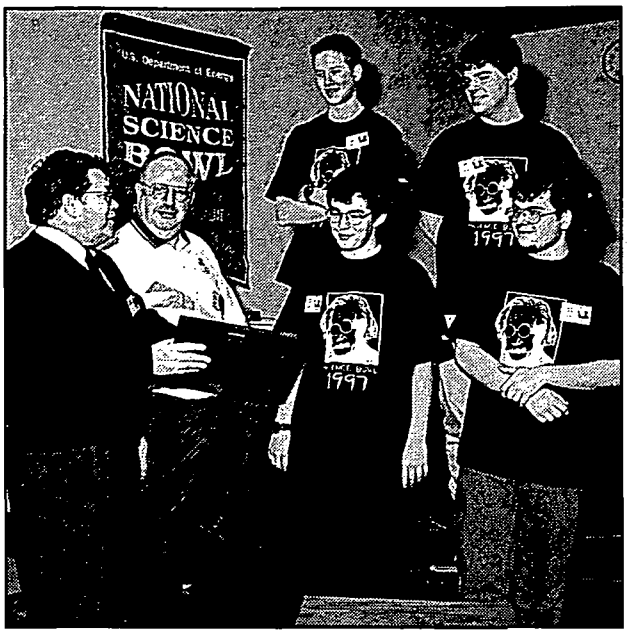
Monday	7:30 a.m. - 7 p.m.
Tuesday, Wednesday & Thursday	7:30 a.m. - 5 p.m.
Friday	7:30 a.m. - 4:30 p.m.

Thorium Overpacking Project Continues Ahead of Schedule

The thorium overpacking project continues ahead of schedule. As of Jan. 31, a total of 3,470 drums had been packaged into 593 thorium over-packing containers since the project began May 6, 1996. During January, 120 thorium overpacking containers were shipped to the Nevada Test Site (NTS).

Turpin High School Claims DOE's Regional Science Bowl Title

On Feb. 1, Turpin High School defeated 31 teams from Indiana, Kentucky and Ohio and became the 1997 champion of DOE's sixth annual science bowl. The Turpin team adeptly responded to questions regarding mathematics, chemistry, computer science, astronomy, biology, and earth science. The team will travel to Washington, D.C., from May 2 through May 5, to compete against 50 regional winners from other DOE sites in DOE's National Science Bowl®.

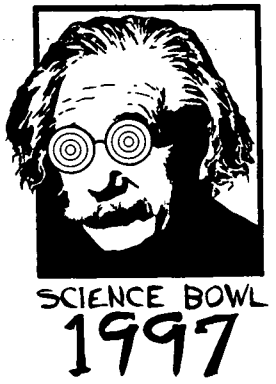


FEMP File Photo 6526-46: Turpin High School won DOE's 1997 Greater Cincinnati Regional Science Bowl. From left are: Ken Morgan, DOE Field Office Public Information officer; Walt Comstock, Turpin coach; Nick Anderson; and Andy Cassidy. In the back row, from left, Jason Schlaback and Nathan Cullen are pictured.

Turpin team members–Andy Cassidy, Jason Schlaback, Nate Cullen and Nick Anderson–defeated Summit Country Day twice to earn the championship title. "I knew from the beginning of the year that our strength was science," said coach Walt Comstock, who has taught science at Turpin for more than 20 years. "We came to play because we love to compete, and of course, it's fun to end up winning."

DOE Ohio Field Office Public Information Officer Ken Morgan, who served as moderator for the final rounds, was impressed with the knowledge level of the students. "Watching these young minds compete and excel is exciting and rewarding," Morgan said. "These students will certainly have a leading role in the country's future."

Also finishing at the top in the competition were teams from Summit Country Day, which finished in second place; Moeller, which finished in third place; and Cincinnati Country Day, which finished in fourth place. Prizes for the top four national teams include international trips to various science forums.



FEMP Employees Assist Area Schools by Judging Science Fairs

For several years, area schools have relied on the FEMP as a resource from which their programs and students could benefit. From January through March, FEMP employees, along with personnel from other companies and organizations in the community, assist area schools with their science fairs by serving as judges.

This year, 15 FEMP employees served as judges at the Hamilton Rotary Club science fair, which featured more than 250 projects and/or experiments in 12 scientific categories. More than 510 students from 19 different schools participated in the science fair, which was held at Garfield Junior High School.

On Jan. 22, Fluor Daniel Fernald employees also judged St. Joseph School's science fair, which featured more than 40 exhibits in several categories including: environmental, computers, electrical and human behavior. On March 18, FEMP employee volunteers will serve as judges at Hopewell Junior School, Woodford Padeia School and Madeira Junior and Senior High School.

Innovative Aquifer Restoration Technology Could Save $60 Million

Through computer model simulations, DOE's aquifer restoration team has determined the use of a promising innovative technology–groundwater reinjection–could help reduce the time required to restore the Great Miami Aquifer to approximately 10 years. Originally, as outlined in the Operable Unit 5 feasibility study report, aquifer restoration was estimated to require about 27 years to complete. The time frame is now expected to be reduced to approximately 10 years, after the new wells and associated equipment have been installed. These improvements are expected to reduce overall Aquifer Restoration Project costs by about $60 million.

FEMP File Photo 6385-458: The Advanced Wastewater Treatment Facility (AWWT) currently treats contaminated groundwater at a rate of approximately 30 million gallons per month.

The aquifer restoration team has been working on tests to further improve remediation of the Great Miami Aquifer. Acceleration of the Aquifer Restoration Project is made possible by reinjection of clean water and more extraction wells installed under a new technology deployment effort sponsored–in cooperation with the DOE-FEMP–by the DOE Office and Science and Technology and its Subsurface Contaminants Focus Area. DOE Office of Science and Technology research and development initiatives are being integrated with the Aquifer Restoration Project in an effort jointly funded by DOE-Headquarters offices of Environmental Management (EM-40) and Science and Technology (EM-50).

Strategically located injection wells will be added to confine and extract the contamination plume more efficiently. The goal is to continually reduce the size of the South Plume until all groundwater contamination is contained to FEMP property, and all sources of contamination from the FEMP are controlled. The remaining portion of the plume on FEMP property can then be remediated more efficiently until target cleanup goals are achieved. "We want to eliminate the off-property South Plume as the highest priority and, at the same time, restrict any further contaminant migration off site. Through a series of strategically placed injection wells and more extraction wells, the aquifer can be remediated faster and at less cost," said Jack Craig, DOE-FEMP Office Director. The groundwater will be reinjected following extraction and treatment to remove uranium and other contaminants of concern.

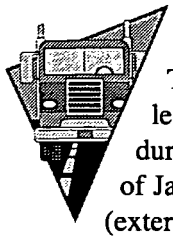
The FEMP's Advanced Wastewater Treatment (AWWT) facility continues to remove uranium from contaminated groundwater being extracted from the aquifer. The AWWT also treats contaminated water from other site effluent streams. DOE and Fluor Daniel Fernald currently treat contaminated water at a rate of approximately 30 million gallons per month. This rate will be significantly increased once the 1,800-gallon-per-minute AWWT expansion is brought on-line to support the aquifer restoration.

Waste Pits Remedial Action Project To Seek Remediation Subcontractor

The Request for Proposals (RFP) for a portion of the Waste Pits Remedial Action Project (WPRAP) was issued Jan. 31. Proposals are due by March 19. The proposals will be evaluated, and the contract is expected to be awarded by Fall 1997.

The selected subcontractor will be responsible for excavating the waste pit materials and surrounding soils; preparing the wastes for treatment (sorting, crushing and shredding activities); treating the waste by a thermal drying process; and loading the treated waste onto gondola rail cars for transportation to a permitted commercial disposal facility. The subcontractor will be working with the Fernald Atomic Trades and Labor Council and the Greater Cincinnati Building and Construction Trades Council, both of which will provide labor power during the project. Waste processing/loading is anticipated to begin in March 1999. The WPRAP is scheduled for completion in 2005.

FEMP Waste Shipping Report



The volume, in cubic feet (cf), of low-level radioactive waste shipped to NTS during January was 31,754 (external). As of Jan. 31, the FEMP had shipped 74,762 cf (external) of low-level radioactive waste to NTS for fiscal year (FY) 1997.

Low-level radioactive waste volume reduction includes approximately 973 containers of legacy low-level uranium residue and 2,121 containers of thorium oxalates/hydroxides identified in *FY 1996 Inventory Reduction Plan for Legacy Wastes at the FEMP.*

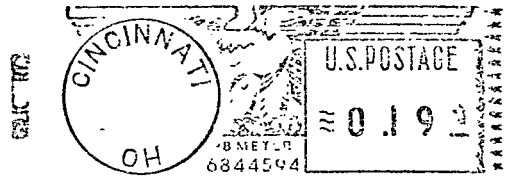
During fiscal year 1997, the FEMP will direct efforts toward reducing legacy uranium residue and asbestos inventories, as well as the thorium oxalate/hydroxide inventory in Building 65.

The volume of low-level radioactive waste materials shipped to NTS per waste stream in January 1997 follows:

Waste Stream	External Vol. (cf)
Process Area Scrap	0
Thorium	19,302
Residues	8,669
Contaminated Trash	3,784
Construction	0

The volume of low-level radioactive waste materials per waste stream shipped to NTS in fiscal year 1997 (as of Jan. 31) follows:

Waste Stream	External Vol. (cf)
Process Area Scrap	1,109
Thorium	45,345
Residues	16,615
Contaminated Trash	7,567
Construction	4,126



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