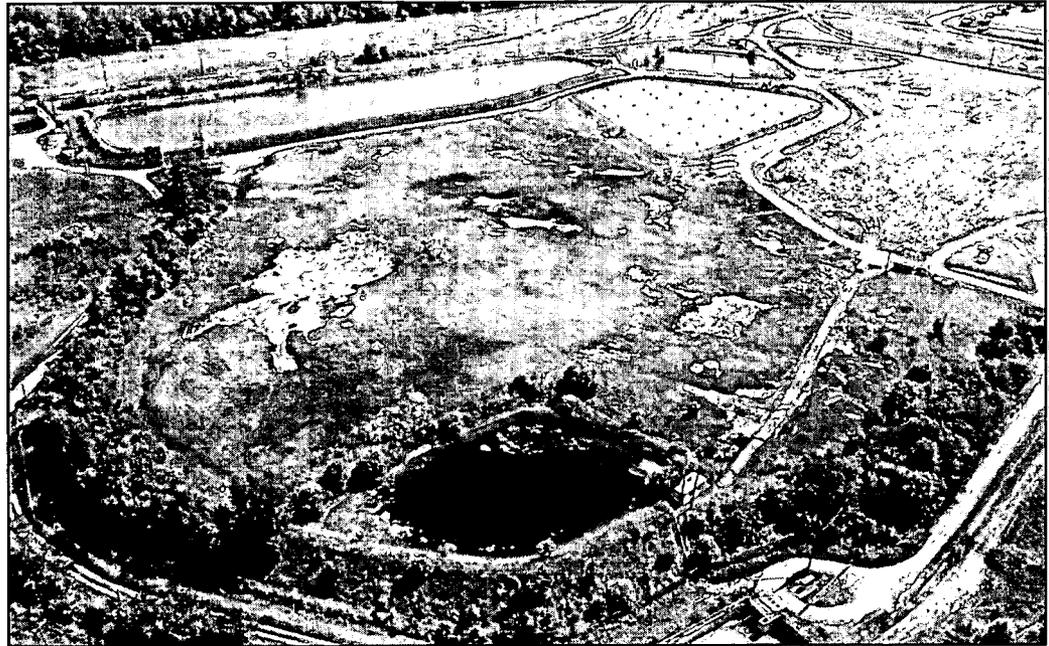


## Fernald Waste Pits Project: Initiation of Operations & Waste Shipping



*Fernald's six waste pits range in size from one to five acres and vary in depth from 10 feet to 40 feet. About a million tons of contaminated waste and soils will be excavated, processed and transported offsite for disposal (6901-110).*

### **Cleanup Summary**

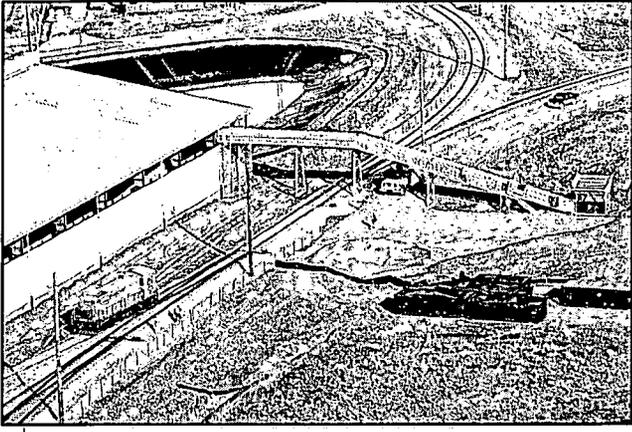
The Waste Pits Remedial Action Project involves the cleanup of approximately one million tons of waste stored in six waste pits, a burn pit and clearwell located at the U.S. Department of Energy's (DOE) Fernald Environmental Management Project.

The pits contain low-level radioactive waste originating from Fernald's 37-year uranium production period. Fernald's cleanup plan includes excavating the pits and surrounding contaminated soils, preparing and treating the waste, as necessary, to remove excess moisture, and transporting the waste by rail to the disposal facility in Utah.

In 1997, DOE's cleanup contractor, Fluor Daniel Fernald, awarded an eight-year, \$122 million subcontract to IT Corp. to excavate the pits, treat the waste, and load the waste into railcars for off-site shipment. IT Corp. will use personnel from the Fernald Atomic Trades and Labor Council and the Greater Cincinnati Building and Construction Trades Council during its operation.

### **Initiation of Operations**

During the first phase of operation, Fernald will focus on establishing a safe track record in the handling, loading and shipment of waste which are vital to the long-term success of the project. IT Corp. began loading railcars with stockpiled materials from two contaminated soil piles on February 23, 1999, completing a regulatory milestone. The soil piles were generated during site preparation activities for the Waste Pits Project. Once the cars are loaded and covered with custom manufactured lids, IT Corp. will transfer them to Fluor Daniel Fernald for shipment.



*Fluor Daniel Fernald will transfer about 40,000 tons of materials from two contaminated soil piles to IT Corp.'s Material Handling Building via a 130-foot conveyor (7053-59).*

## Waste Shipping

Fernald's waste shipping operations will be in full compliance with Department of Transportation (DOT) requirements. After inspecting the loaded railcars from IT Corp., Fluor Daniel Fernald will move the cars to the North Rail Yard to begin assembling a unit train, which will consist of 40 to 60 railcars. DOE and Fluor Daniel Fernald selected unit trains over other shipping options because the trains will remain intact along the whole rail route, receive priority right-of-way and expedited switching.

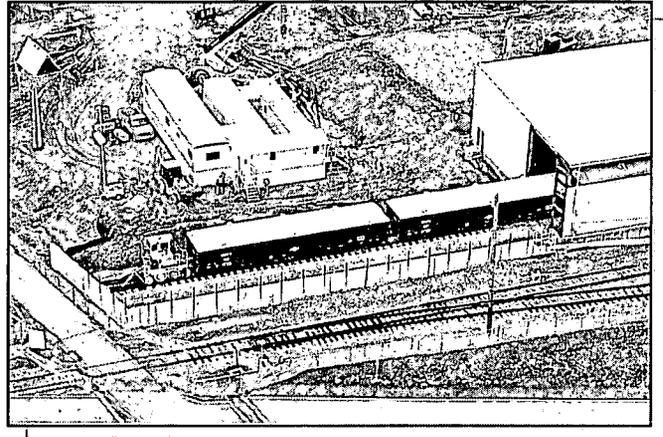
Prior to departure, DOE and Fluor Daniel Fernald will conduct thorough surveys of the unit train for radiation and contamination to ensure the cars meet DOT shipping requirements for travel. Commercial rail carrier CSX Transportation will then ship the train from Fernald to East St. Louis, Ill, where transport responsibility will transfer to Union Pacific Railroad. Union Pacific will then transport the unit train to the disposal facility, Envirocare of Utah. The one-way trip from Fernald to Envirocare is expected to take about five days. The train will remain at Envirocare for another five days while the cars are emptied and cleaned before the return trip back to Fernald.

Waste shipments will begin in the spring of 1999 and continue for five years, through 2004. During the first year, Fluor Daniel Fernald expects to ship about one train per month and increase to two trains per month during full-scale operations.

## Full-Scale Operations

IT Corp. will begin excavating material from the waste pits in the summer of 1999. The current plan is to start with pit materials which do not require thermal drying. Full-scale operations using the two 155,000 pound rotary dryers will begin later in the year. Pit waste with high moisture content will be fed into a rotating cylinder inside the dryers. Heat will circulate around the cylinders, removing the excess moisture. During the operation, the heat source will not be in direct contact with the waste. IT expects to remove approximately 350,000 tons of moisture from the waste to meet Envirocare's requirements. The emissions from the drying process will be treated in the off-gas cleaning system to ensure air quality standards are met.

IT Corp. is scheduled to complete operations, including above-ground decontamination and dismantlement of the equipment and treatment facilities, in May 2005.



*Each railcar contains a permanent liner to prevent leakage and a disposable liner for extra protection. The cars will also be equipped with a special fiberglass lid to enclose the material during transport. Fully loaded, each railcar will contain about 100 tons of waste (7053-40).*

## Public Involvement

DOE and Fluor Daniel Fernald are fully committed to the safe processing and transport of the waste to Envirocare. Fernald's cleanup decisions have been based first on safety and included a rigorous public involvement process. Each month, Fernald holds a public forum to discuss cleanup progress and plans. The *Cleanup Progress Briefings* are held at the Fernald site on the second Tuesday of the month at 6:30 p.m.

## For More Information...

For more information about the Waste Pits Project, contact DOE Project Manager Dave Lojek at 513-648-3127, email address: [dave\\_lojek@fernald.gov](mailto:dave_lojek@fernald.gov), or visit Fernald's Web site at [www.fernald.gov](http://www.fernald.gov).