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FACTSHEET: FMPC

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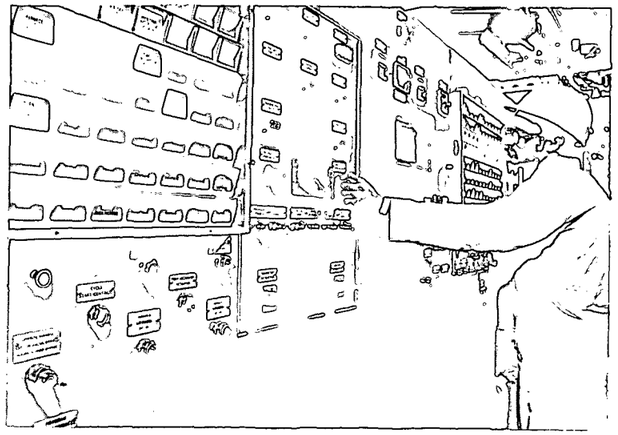
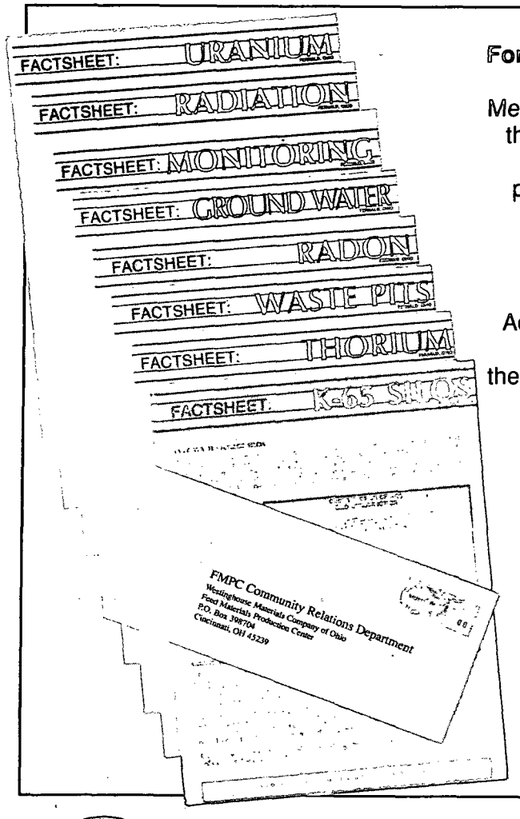
FACTSHEET

Meeting Modern Standards

A comprehensive program has been started to improve the FMPC from every aspect. The production plants are being renovated, and new environment, safety and health programs have been started to meet stricter standards. An exhaustive Remedial Investigation and Feasibility Study is being conducted in conjunction with the U.S. Environmental Protection Agency to establish other major corrective actions. Accumulated production waste is being shipped off site at a record pace, and no new waste is being stored. With a new attitude toward environmental protection, safety, and the needs of the community, the FMPC is meeting today's standards and preparing for the future.



A new panel board in Plant 5, Metals Production Plant, is used to control and monitor the remelt furnaces.



For More Information

Meeting the information needs of the public is a high priority at the FMPC. Questions and requests for information about the plant, its operations, environmental programs, emergency preparedness, waste management, plant processes, and its role in the community are all welcomed.

Numerous publications are available about the FMPC. In addition, there is a public reading room in the FMPC Administration Building which is open from 8:00 a.m. to 4:30 p.m. on weekdays. In the Lane Public Library in Hamilton there is an FMPC Reference Section that serves as an off-site repository for FMPC information.

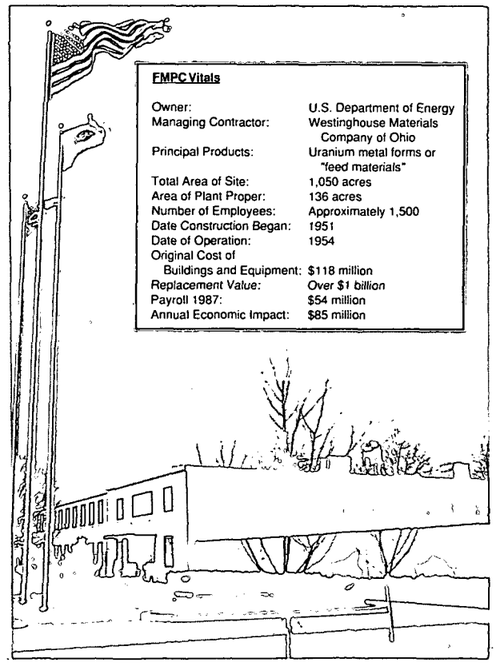
Top management and a 24-member Speakers' Bureau are also prepared to make presentations for your organization.

If you would like to use any of these public services, call us at (513) 738-6934 or write to

FMPC Community Relations Department
Westinghouse Materials Company of Ohio
P.O. Box 398704
Cincinnati, OH 45239-8704

United States Department of Energy

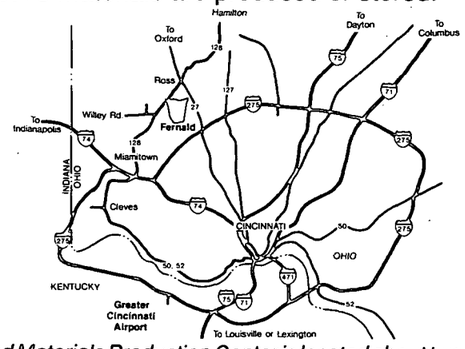
FACTSHEET G-000-1006.1 FMPC Fernald, Ohio



FMPC Vitals

Owner:	U.S. Department of Energy
Managing Contractor:	Westinghouse Materials Company of Ohio
Principal Products:	Uranium metal forms or "feed materials"
Total Area of Site:	1,050 acres
Area of Plant Proper:	136 acres
Number of Employees:	Approximately 1,500
Date Construction Began:	1951
Date of Operation:	1954
Original Cost of Buildings and Equipment:	$118 million
Replacement Value:	Over $1 billion
Payroll 1987:	$54 million
Annual Economic Impact:	$85 million

The Feed Materials Production Center (FMPC), the only uranium metal processing facility of its kind in the United States, is owned by the U.S. Department of Energy (DOE) and operated by the Westinghouse Materials Company of Ohio. The uranium metal products, or "feed materials," manufactured at FMPC are an integral part of the Nation's security and defense program. At FMPC, however, no explosive weaponry, devices, or highly radioactive materials are produced or stored.



The Feed Materials Production Center is located about twenty miles northwest of Cincinnati, Ohio.

The FMPC Site

Construction began on the FMPC in 1951, and full production started in 1953 under the Atomic Energy Commission. National Lead of Ohio (NLO) was the contractor from 1951 to 1985, and Westinghouse Materials Company of Ohio has been the contractor since January 1, 1986. DOE became the government agency in charge of the site in 1977, succeeding the Energy Research and Development Association.

The FMPC reached peak employment of 2,978 in 1956 but fell to 536 in 1979. Today, Westinghouse employment is approximately 1,500. Rust Engineering Co. and other subcontractors bring the total employment on site to almost 1,700.

The FMPC consists of nine plants, each responsible for a step in making uranium metal products. Many of the environmental and health safeguards that are now routine were nonexistent over 35 years ago when the plant first began production. Today, a $600 million program to renovate the facility and improve environmental health and safety is under way.

Shaped like a man's derby hat, "derbies" are produced at FMPC and used to make final uranium products.

Feed Materials Production Center
Operated for U.S. Department of Energy by Westinghouse Materials Company of Ohio

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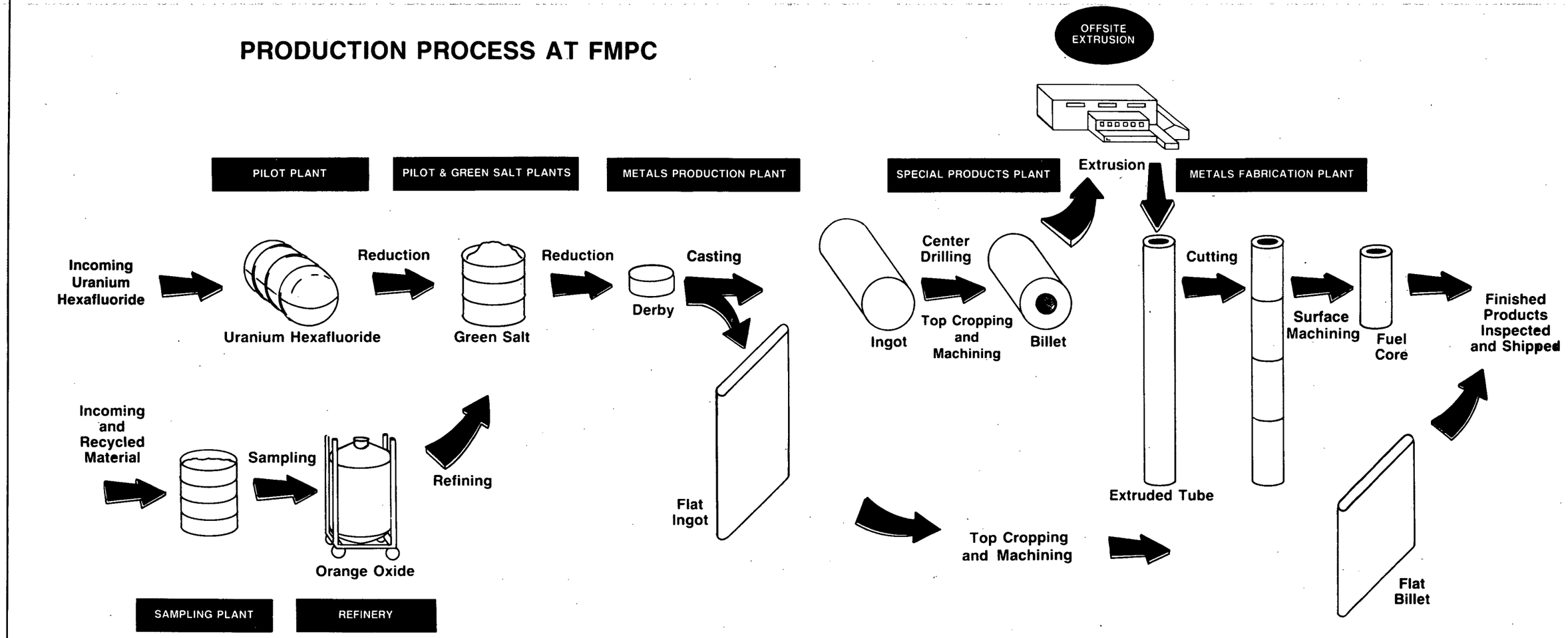

The Production Process

The production process begins with materials that are recycled from production and received from other DOE sites. These materials are sampled and analyzed for their uranium content at the Sampling Plant. After undergoing a refining and purification process, the uranium is left in the form of orange oxide.

Orange oxide is reduced to brown oxide by treating it with hydrogen. Brown oxide is then converted to green salt. Some incoming material arrives as uranium hexafluoride and does not require purification but rather can be reduced directly to green salt. Green salt is the key compound in producing uranium metal.

To produce uranium metal from green salt, a chemical reaction must occur at high temperatures inside an electric furnace. The green salt is mixed with magnesium metal and heated to produce molten uranium metal. The molten metal solidifies into a 300- to 400-pound form called a derby. Some of these derbies are sent directly to other DOE sites. Most, however, are cast into ingots at the FMPC.

Ingots are formed by melting derbies and recyled uranium metal scrap in a graphite crucible inside a furnace. Once the molten metal reaches the proper temperature, it flows into graphite molds to form ingots. Ingots are machined and cropped to form billets.

Billets vary in weight, size, and shape according to how they will be used. Since the late 1960s most cylindrical billets have been center drilled at the FMPC and sent off site for extrusion *(the process of forming metal into tubes)*. Most of these extruded tubes are returned to the FMPC for heat treatment and final machining into fuel cores before they are inspected and again shipped off site for use at other DOE facilities.