

176

FACTSHEET: WASTE PITS

04/15/89

WMCO/PUBLIC

2

FACTSHEET

FACTSHEET

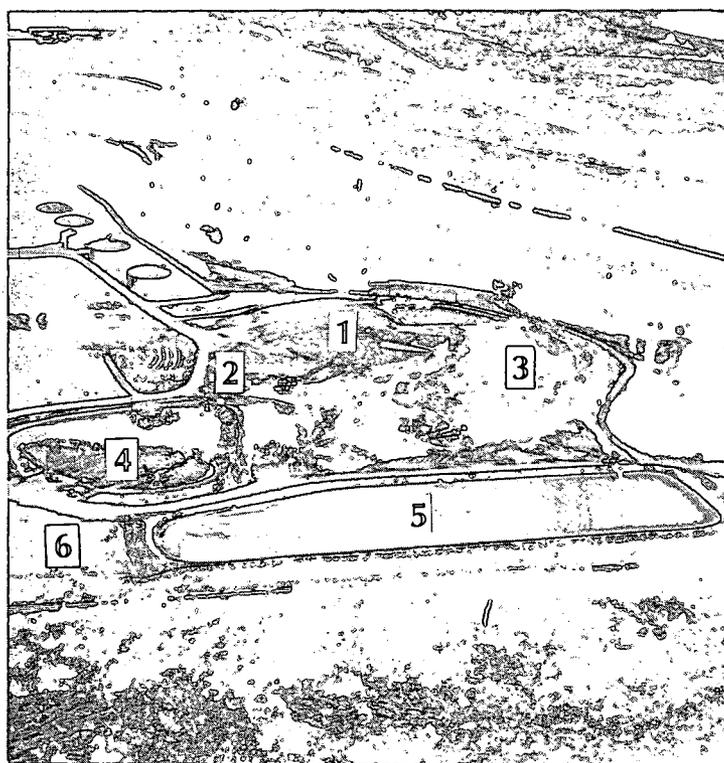
Waste Pits

The Feed Materials Production Center (FMPC) has begun an extensive program to ensure the safe management and final disposal of waste materials. Past waste management practices included the storage of low-level radioactive wastes in six shallow-ground waste pits. At the time, the use of pits for waste storage was consistent with environmentally acceptable standards. However, because of the pit design, the nature of the waste involved, and their potential to affect ground water, these pits are not considered permanent disposal facilities. Today, wastes are no longer being placed in the pits, and studies are under way to determine how to best manage and ultimately dispose of the materials now stored there.

About The Waste Pits

The six waste pits at FMPC range in size from that of a football field to a baseball diamond and vary from 13 to 30 feet deep. Most of the waste materials in the pits contain small amounts of uranium resulting from the FMPC production process. These materials had uranium and thorium concentrations that were considered too low to be economically recovered for recycling. There are approximately 475,000 tons of this waste in the pits.

Waste Pits 1, 2, and 3 have been covered with topsoil and are not in service. Pit 4 is a dry waste storage pit that is out of service and covered with water-resistant bentonite clay as an interim closure method. The interim closure will be completed in 1989 with the installation of a synthetic cover. Pit 5, a rubber-lined pit, is a wet chemical storage area and is filled to capacity. Pit 6, also a rubber-lined pit, was used primarily for dry waste storage and is now out of service. Pit 6 is approximately 75 percent full.



Waste Storage Pits

Waste Pit	Type	Waste Quantity (Metric tons)	Status	Contents
1	Dry	40,500	Out of service	Misc., Dry
2	Dry	13,000	Out of service	Misc., Dry
3	Wet	255,000	Out of service	Misc., Wet
4	Dry	64,970	Out of service	Abrasives, Metals, Dry
5	Wet	88,603	Out of service	Misc., Wet
6	Dry	9,309	Out of service	Wet and Dry

In addition to cleaning up the waste pits, new technology and approaches are being used to minimize the waste that is generated. Currently, low-level radioactive waste from production is packaged in drums or other containers and stored at FMPC or shipped off site. Steps are now being taken to reduce the amount of production waste, and a greater emphasis is placed on waste recovery and recycling.

Engineering studies have been initiated to identify solutions for waste pit material management and disposal. Two independent environmental and analytical firms have been enlisted to evaluate problems and to help develop solutions.



Dames and Moore, contracted to perform hydrological studies at FMPC, concluded in early 1986 that the waste pits present a potential for ground water contamination in the FMPC area. A waste pit area surface water runoff task force was formed to recommend interim measures to control surface water infiltration that may contribute to this problem. These measures include diverting, collecting, and treating stormwater runoff through the Stormwater Retention Basin.

Another contractor, Roy F. Weston, Inc., analyzed the chemical, physical, and radiological contents of the waste pits and the area surrounding the pits. A report on this Characterization Investigation Study was completed in December 1987.

Under a Federal Facilities Compliance Agreement by the Department of Energy, the FMPC site will comply with regulatory standards of the Environmental Protection Agency.

As part of the pit study, Weston analyzed Pit 4 in order to comply with the Resource Conservation and Recovery Act. This pit contains some low-level radioactive waste that is also contaminated with various hazardous materials. Therefore, additional regulations now govern the measures to be taken when the waste from this pit is removed.

Now and The Future

The overall objective for all FMPC operations is to prevent the recurrence of past problems and to avoid new problems. The U.S. Department of Energy, in cooperation with State and Federal regulatory agencies, is developing plans to improve the environmental protection at the site. The goal is to transform this 38-year-old facility into a site that is in step with present and future environmental requirements.

