

CP-5 Large Scale Demonstration Project

Objective to Demonstrate New D&D Technologies

DAWP PERFORMANCE

- 2000 hours operation time and several tons of material dismantled and removed, including:
 - 3000 lb graphite
 - 1400 lbs lead sheeting
 - 620 lbs boral
 - 2000 lbs carbon steel
 - untorqued and removed 38 carbon steel studs
 - size reduced and dismantled much of Al reactor tank
 - removed 400 lbs Al plate
- Permitted smaller crews, reduced unproductive time, reduced rad exposure
- 15 person-rem exposure savings
- Savings of 50% over baseline technologies



CP-5 D&D named among the 100 best scientific and technological accomplishments of the Department of Energy during the past century...

"The decontamination and decommissioning (D&D) of Chicago Pile 5 Reactor (CP5), led at Argonne by the Technology Development Division, provided an excellent opportunity for government and industry to collaborate in the D&D of nuclear facilities. The project refined and demonstrated a number of new D&D methods and technologies.

According to DOE, the U.S. has more than 13,000 buildings and facilities that must be decontaminated of chemicals or radioactive materials before they can be reused or safely decommissioned. It will require more than 40 years and in excess of \$100 billion to clean up these sites. Many of these facilities are extremely dangerous to work in, raising concern for worker safety, and they may eventually present health and safety risks to the public. The rapid, cost-effective development of new technologies, followed by repetitive application, represents the nation's best hope for reducing these burdensome issues."