

SHUTTING DOWN THE MOUND
Accelerating the D&D of the Mound Plan Tritium Facilities
Utilizing the DOE D&D Large Scale Demonstration and Deployment Project

Mark Mintz (LLNL), Don Krause (B&W Services, Inc.), Dick Blauvelt (Waste Policy Institute), James Johnson (DOE/MEMP)

The Mound Plant in Miamisburg OH is a former member of the DOE Weapons Complex that is now scheduled to be shut down and ultimately transferred to the local community for possible commercial activities. Clean-up of this 306 acre site with its hundreds of buildings and extensive radioactive and hazardous materials contamination represents a formidable challenge. B&W Services, Inc. was selected in 1997 as the prime contractor to accomplish this complex task. A project that is on the "critical path" for shutdown is the D&D of Mound's former tritium operations. The R/SW Building complex consists of numerous laboratories, over one hundred gloveboxes, miles of piping and other contaminated equipment. It will be completely demolished. T Building is another tritium facility with numerous gloveboxes, hoods and other large equipment contaminated with tritium requiring decontamination, dismantlement and packaging for offsite burial. This facility is completely underground. The application of the DOE EM-50 D&D Large Scale Demonstration and Deployment Project (LSDDP) holds the potential to add innovative technologies and processes to the baseline cleanup for these facilities that will accelerate the schedule and substantially reduce the cost. Areas of interest include improved technologies for characterization and monitoring, decontamination, dismantlement, waste stabilization, and packaging for disposal. There is also an interest in improving worker health and safety with, for example, improved personal protective equipment while maintaining or increasing worker efficiency.

An Integrating Contractor Team has been formed that consists of representatives from:
B&W Services, Inc.

BNFL Inc.

Foster Wheeler Environmental Inc.

IT Corp.

Westinghouse Savannah River

Florida International University

Los Alamos National Laboratory

Lawrence Livermore National Laboratory

U.S. Army Corp. of Engineers

Princeton Plasma Physics Laboratory

This team functions as a technology demonstration "Board of Directors" by providing candidate technologies from their individual corporate experiences, evaluating candidates against a pre-determined list of criteria and approving those candidates that then proceed to a full scale demonstration. Successful candidates are demonstrated in a carefully designed process in a real work environment that allows the collection of performance and cost data along side the baseline technology. The Army Corp. of Engineers is under contract to provide a consistent approach to the treatment and reporting of this data.

Detailed reports are then published and widely distributed. A comprehensive communications plan has been developed to assure that successful demonstrations are passed on to the rest of the DOE complex for evaluation and deployment.

This paper will describe the process for formation and functioning of the IC Team, the search for and evaluation of candidate technologies including the international market, the design and implementation of the demonstration process including effective data collection and the reporting and dissemination of the results. Included in the presentation will be the preliminary results from the initial set of Mound LSDDP demos which will highlight characterization technologies. Lessons learned will also be discussed.