

## **Project Location:**

Los Alamos National Laboratory  
Los Alamos, New Mexico

## **Client:**

AREVA  
(formerly Framatome ANP)

## **Project Scope:**

Planning and Decommissioning  
of the Omega West Reactor and  
Ancillary Facilities

## **Period of Performance:**

July 2002 to April 2003

MOTA Corporation was contracted to perform all radiological demolition and decontamination activities associated with the decommissioning of the Omega West Research Reactor. Project activities included:

- Preparation of component removal and demolition operating procedures;
- Complete thermal removal of the reactor internals using remote plasma cutting methods as a predecessor to removing the tank and bioshield;
- Design and use of a shielded personnel work station placed on top of the reactor vessel during internals removal to achieve personnel ALARA;
- Design and deployment of secondary containment and HEPA filtration system to accommodate the use of large demolition equipment in the removal of the reactor and reactor systems;
- Thermal column segmentation and removal;
- Bioshield removal consisting of over 7,000 ft<sup>3</sup> of high density concrete, embedded lead shielding and piping;
- Decontamination and demolition of reactor support systems;
- Decontamination of outlying rooms and structures;
- Packaging of all radioactive and mixed radiological and hazardous waste for transport and disposal.

## **Project Performance Features:**

- ◆ Reactor decommissioning planning, field operations management, oversight, and performance of Greater Than Class C (GTCC) reactor internals removal and reactor decommissioning activities.
- ◆ Implementation of innovative, practical approaches to solve complicated challenges. Specific examples include: design and fabrication of a shielded work platform to allow remote thermal segmentation of reactor vessel internals; reduction of the overall time required to demolish reactor tank and bioshield - actual demolition time was 75% less than baseline.
- ◆ Thermal segmentation and removal of reactor internals.
- ◆ Compilation of project records and preparation of final reports to confirm and document accomplishment of customer and regulatory agency project objectives.
- ◆ Actual project cost was \$2.1 M less than baseline target cost. This savings is a direct result of implementing alternate and innovative approaches to reactor vessel internals removal and bioshield and reactor tank demolition.



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