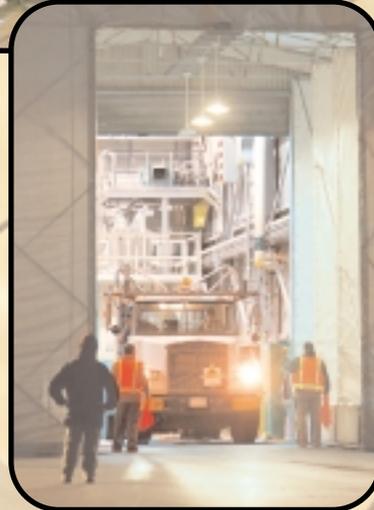
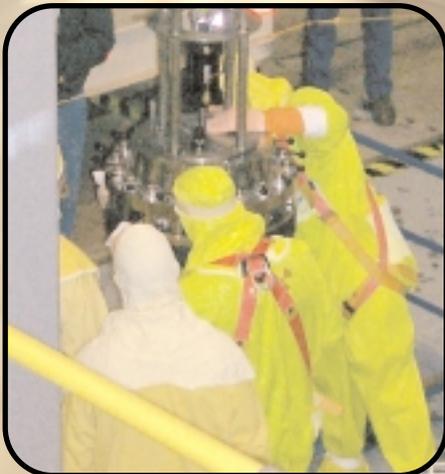


# RESTORING THE RIVER CORRIDOR

## Spent Nuclear Fuel Project

December 7, 2000, was an historic day for Hanford, when the first batch of spent nuclear fuel was successfully removed from the K West Basin, 400 yards from the Columbia River, and transported to the nearby Cold Vacuum Drying Facility. Following a successful drying cycle, the multi-canister overpack, or MCO, with its six baskets holding 288 fuel elements, was transported to the Canister Storage Building eight miles away in central Hanford. There, the MCO was placed in safe, long-term storage in a steel tube in a below-ground vault.



CONTENTS

HIGHLIGHTS

RESTORING  
THE RIVER  
CORRIDOR

TRANSFORMING  
THE  
PLATEAU

PREPARING  
FOR THE  
FUTURE

SUPPORT  
& SERVICES

ENVIRONMENT,  
SAFETY &  
HEALTH

WHAT'S  
NEXT?

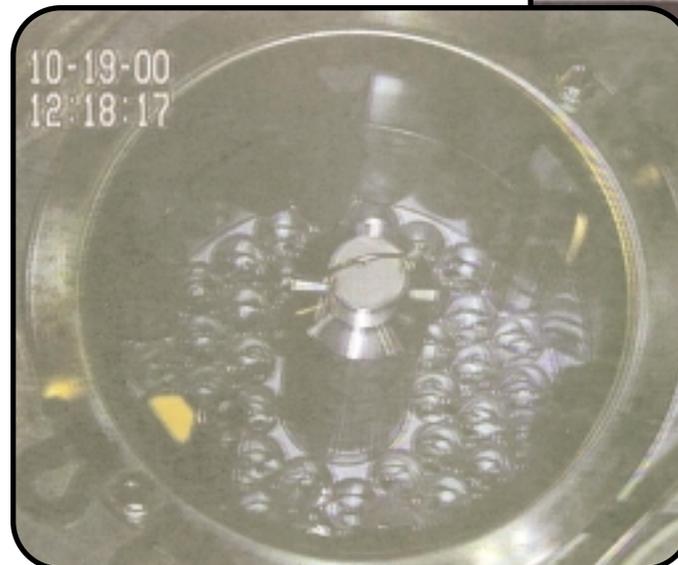
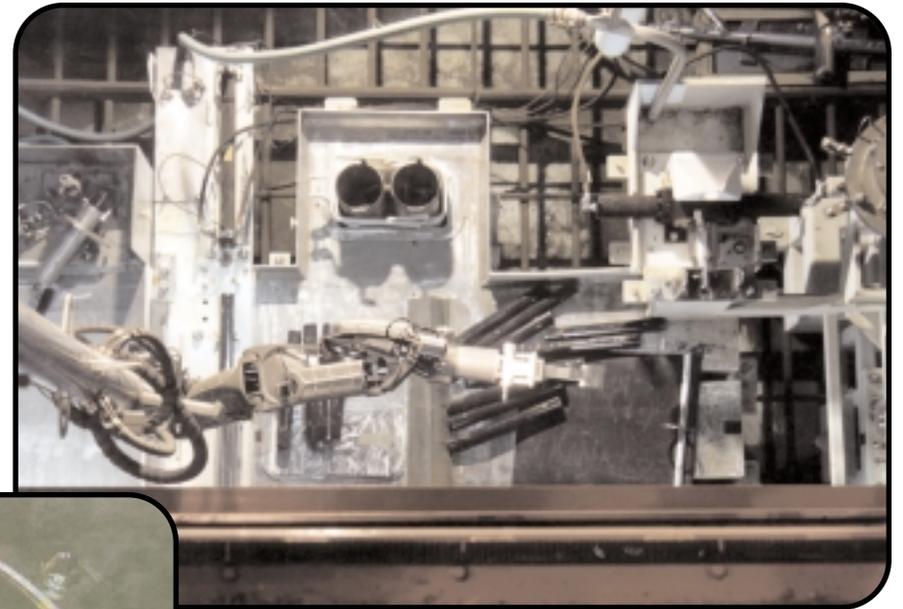
HANFORD  
SITE MAP

CONTACTS



## Spent Nuclear Fuel Project

The start of fuel removal from the K West Basin was the culmination of intense readiness reviews of the Basin, the cask transportation system, the drying facility and the storage building, plus careful, repeated testing of equipment and training of operators over the past several months.



CONTENTS

HIGHLIGHTS

RESTORING  
THE RIVER  
CORRIDOR

TRANSFORMING  
THE  
PLATEAU

PREPARING  
FOR THE  
FUTURE

SUPPORT  
& SERVICES

ENVIRONMENT,  
SAFETY &  
HEALTH

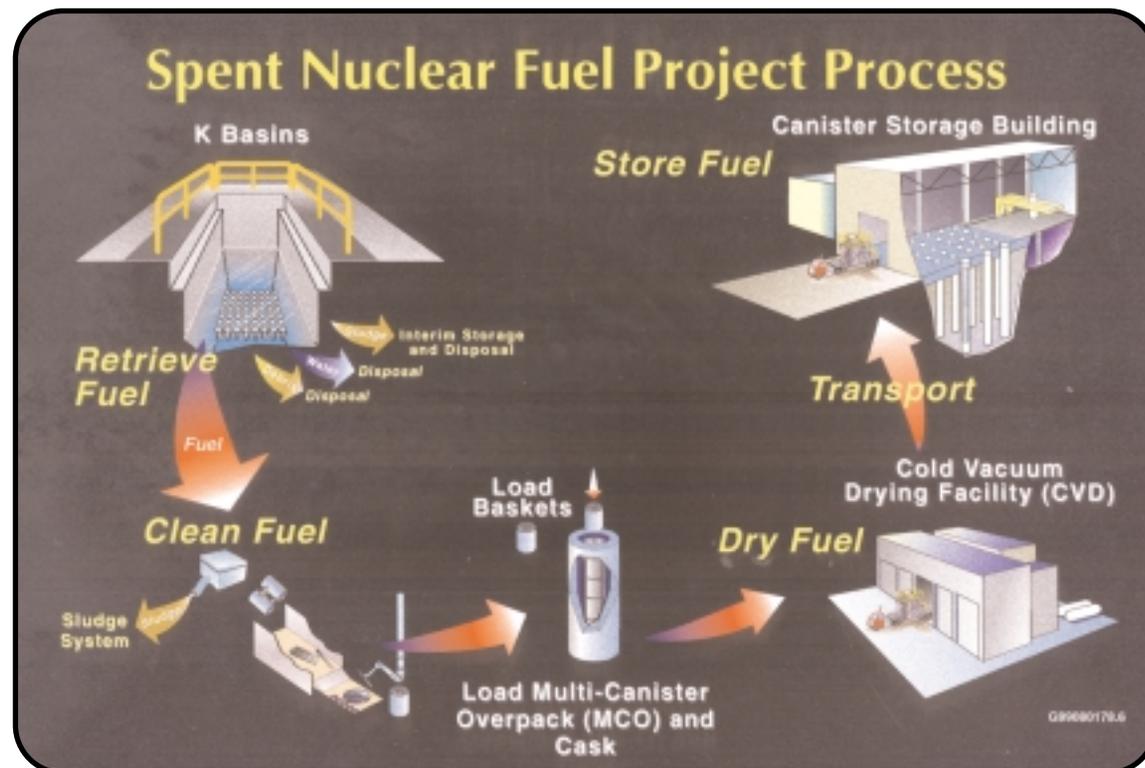
WHAT'S  
NEXT?

HANFORD  
SITE MAP

CONTACTS



The process that got under way this quarter initiated an important commitment to remove 2,300 tons of spent nuclear fuel from the river corridor and store it safely in Hanford's central plateau. Each MCO full of spent, or irradiated, fuel that leaves the 100 Area moves about 150,000 curies of radioactivity away from the shoreline. When the project is complete in 2007, about 95 percent of the radioactivity will have been removed from the river corridor.



CONTENTS

HIGHLIGHTS

RESTORING  
THE RIVER  
CORRIDOR

TRANSFORMING  
THE  
PLATEAU

PREPARING  
FOR THE  
FUTURE

SUPPORT  
& SERVICES

ENVIRONMENT,  
SAFETY &  
HEALTH

WHAT'S  
NEXT?

HANFORD  
SITE MAP

CONTACTS



## River Corridor Project

Cleanup work at the 324 Building this quarter included loading out two steel waste disposal boxes of mixed waste from the floor of B Cell, and shipping one of the boxes to the 200 Area for storage. To date, four of the planned 14 steel waste boxes have been shipped from the 300 Area, each of them moving up to 50,000 curies of radioactive material away from the nearby Columbia River, representing a major reduction in public risk. A grout container was also filled with pieces of B Cell's racks, equipment and other low-level waste needing removal so the remaining mixed waste on the cell floor can be cleaned out. Unexpected technical and mechanical issues kept the Project from completing the B Cell cleanout by November 30. The task is now scheduled for completion by the end of March.



CONTENTS

HIGHLIGHTS

RESTORING  
THE RIVER  
CORRIDOR

TRANSFORMING  
THE  
PLATEAU

PREPARING  
FOR THE  
FUTURE

SUPPORT  
& SERVICES

ENVIRONMENT,  
SAFETY &  
HEALTH

WHAT'S  
NEXT?

HANFORD  
SITE MAP

CONTACTS



## River Corridor Project

Plant Engineer Dave Schermerhorn used existing computers and modems to implement a timesaving, no-cost method to get data faster and prevent loss of important information at the 300-Area Treated Effluent Disposal Facility (TEDF). Data from monitors for air and wastewater from several 300-Area buildings now combine with real-time data at the TEDF to give a clearer and quicker picture of what has happened should a monitor alarm go off. About 17.5 million gallons of non-radioactive wastewater, enough to fill about 22 Olympic-size swimming pools, were treated at the TEDF this quarter. This is a fairly typical quarterly treatment volume for the Facility.



CONTENTS

HIGHLIGHTS

RESTORING  
THE RIVER  
CORRIDOR

TRANSFORMING  
THE  
PLATEAU

PREPARING  
FOR THE  
FUTURE

SUPPORT  
& SERVICES

ENVIRONMENT,  
SAFETY &  
HEALTH

WHAT'S  
NEXT?

HANFORD  
SITE MAP

CONTACTS



## Environmental Restoration Along the River

Along with Fluor Hanford's river corridor cleanup, eight reactors along the river shore are scheduled to be "cocooned" for interim safe storage of the reactor cores for up to 75 years. This work, performed by the Bechtel Hanford-led environmental restoration team, is 80 percent complete at the DR Reactor and F Reactor cocooning is 75 percent complete. Demolition has begun on the D and H reactor projects. Cocooning of C Reactor was complete in fiscal 1998.



CONTENTS

HIGHLIGHTS

RESTORING  
THE RIVER  
CORRIDOR

TRANSFORMING  
THE  
PLATEAU

PREPARING  
FOR THE  
FUTURE

SUPPORT  
& SERVICES

ENVIRONMENT,  
SAFETY &  
HEALTH

WHAT'S  
NEXT?

HANFORD  
SITE MAP

CONTACTS



## Environmental Restoration Along the River

The environmental restoration team also continues to remove contaminated materials from near the river. Most of the more than 2.5 million tons excavated to date consists of low-level and mixed-waste soil from liquid waste sites associated with Hanford's former production reactors. The materials have been safely disposed in the

**E n v i r o n m e n t a l  
Restoration Disposal  
Facility (ERDF) near cen-  
tral Hanford. A 270-by-1,450-  
foot interim cover recently was  
placed over the first filled portion  
of the ERDF, then topped with eight  
inches of soil and planted with grasses  
to prevent wind and water erosion.  
The ERDF bottom is lined with multi-  
ple layers of plastic, other impermeable  
materials and a system to catch any liquids  
that drain from the waste materials.**

