

An aerial photograph of the Hanford River Corridor. The image shows a wide river in the upper half, with a large industrial complex in the lower half. The industrial complex includes several large, rectangular buildings, some with flat roofs and others with more complex structures. There are also parking lots with many cars and some smaller buildings. The surrounding landscape is a mix of open fields and some vegetation. The overall tone is blue and monochromatic.

# HANFORD 2012:

Accelerating Cleanup and  
Shrinking the Site

restore the

# RIVER CORRIDOR

## Outcome One:

# Restore the River Corridor

Under our proposal, Hanford's **River Corridor** consists of about 210 square miles beginning at the shores of the Columbia River and extending inland toward the Central Plateau in the middle of the Hanford Site. While one-quarter mile along the river is included in the Hanford Reach National Monument, the Monument is primarily composed of the Fitzner-Eberhardt Arid Lands Ecology Reserve and the North Slope.

Cleanup of the River Corridor will allow us, in consultation with area Tribal Nations, regulators, and stakeholders, to make land available for other uses, conservation of ecological resources, and protection of historic cultural resources. We can then shrink the footprint for active Hanford cleanup operations to approximately 75 square miles.

### Cleanup Challenges Include:

- ◆ Nine former plutonium production reactors and dozens of associated structures
- ◆ Nearly 900 waste sites spread over 210 square miles
- ◆ About 150 unneeded and aging facilities/structures in Hanford's 300 Area, including two complex radiological laboratories

The plan is simply to get on with the work of remediating most sources of radiological and chemical contamination that threaten the air, groundwater, or Columbia River. Much of that work has already begun (digging up contaminated soil, taking down the old reactor complexes, moving spent fuel away from the river, etc.), and nearly all can be completed by 2012, with two notable exceptions.

First, we have yet to make decisions on which groundwater contamination plumes need to be remediated and which technologies to use. Second, we will meet the Tri-Party Agreement requirements to establish a schedule for remediation of 618-10 and 618-11 burial grounds by 2002, but because of technical complexity and safety concerns will not complete remediation until after 2012. If ongoing studies and monitoring determine earlier action is required, we will work with our regulators to establish a path forward.

## Our Progress

### By December 31, 2000:

- ◆ The U.S. Fish and Wildlife Service is managing the majority of the newly designated Hanford Reach National Monument, shrinking the DOE-managed portion of the Hanford Site from 560 square miles to about 260 square miles
- ◆ Began moving spent nuclear fuel from the K Basins into safe storage away from the Columbia River
- ◆ Removed more than 2.6 million tons of contaminated soil from rivershore waste sites
- ◆ Moved 667 metric tons of uranium trioxide to Ohio



Shipments of Uranium Trioxide



## Our Plan

### *By December 31, 2002:*

- ◆ Issue a new type of closure contract to drive early, effective completion of cleanup along the Columbia River
- ◆ Move 370 metric tons of uranium materials out of the 300 Area
- ◆ Collaborate with U.S. Fish and Wildlife Service to develop a management plan for the Hanford Reach National Monument
- ◆ Move 50% of Hanford's spent nuclear fuel into safe storage away from the Columbia River
- ◆ Remove 3.3 million tons of contaminated soil from rivershore waste sites
- ◆ Clean up and make available an additional 21 miles of rivershore property
- ◆ Make a decision on the remediation approach and schedule for the 618-10 and 618-11 burial grounds



K-East and K-West Reactors

### *C Reactor Complex Before and After "Cocooning"*



### *By December 31, 2005:*

- ◆ Move all spent nuclear fuel into safe storage on Hanford's Central Plateau
- ◆ Remediate 436 waste disposal sites (about 50%)
- ◆ Cocoon 5 of 8 reactors (B Reactor will become a museum)
- ◆ Demolish at least 15% of the 150 buildings/structures in the 300 Area
- ◆ Establish a scientifically-sound, comprehensive strategy to control 100 Area groundwater contamination sources
- ◆ Clean up and make it available for other uses 65% of the Hanford Site

300 Area Today



300 Area in 2012  
Artist Rendition

### *By December 31, 2012:*

- ◆ Complete 300 Area cleanup and remove all excess buildings
- ◆ Remediate all solid waste sites in the River Corridor, except 618-10 and 618-11 burial grounds
- ◆ Complete cocooning of all 8 remaining reactors (B Reactor will become a museum)
- ◆ Complete restoration of the River Corridor, ensuring that most of the 100 and 300 Areas can be deleted from the U.S. Environmental Protection Agency's National Priority List
- ◆ Have long-term monitoring measures in place on the River Corridor to ensure remediation activities are effective and to verify assumptions regarding residual contamination

