

## 3.2 Richland Operations Office Summary

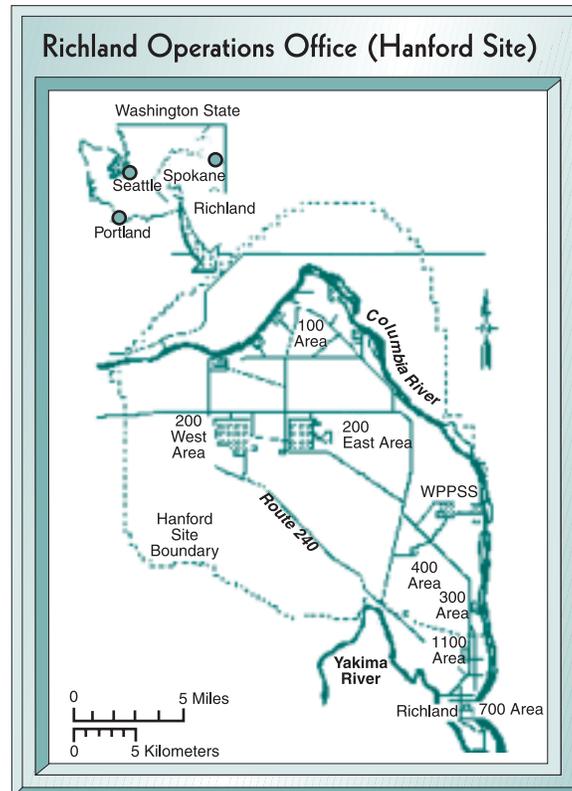
The Richland Operations Office manages the cleanup work at the Hanford Site. The Hanford Site occupies 560 square miles in southeastern Washington State. It was acquired by the federal government in 1943 for the first full-sized plutonium production operation. The Hanford Site has been used for a variety of purposes, including plutonium production, chemical processing, waste management, and research and development activities.

The current mission of the Hanford Site is to manage the facilities and inventories of special materials, remedy the environmental contamination caused by decades of activities related to the production of plutonium, and support national research efforts in the areas of environmental cleanup and other sciences. The major Hanford Site cleanup mission areas include the Tank Waste Remediation System (TWRS) project, the Waste Management project, the Facility Transition project, the Environmental Restoration project, the Science and Technology project, and other supporting projects.

After the defined Environmental Management cleanup mission is completed at the Hanford Site, the federal government will continue in a caretaker role due to disposed waste remaining on site. Ongoing missions at the Hanford Site will also continue primarily in the areas of science and technology development.

### 3.2.1 End State

Alternatives for potential future use of the Hanford Site lands were developed through a cooperative effort with the U.S. Department of Energy (DOE); the Confederated Tribes of the Umatilla Indian Reservation; the Nez Perce Tribe; the United States Department of the Interior; the City of Richland; and Benton, Franklin, and Grant Counties. These alternatives are being analyzed in the Hanford Remedial Action Environmental Impact Statement (HRA-EIS) and Comprehensive Land Use Plan for the potential environmental impacts resulting from the proposed future land uses associated with each alternative. As mandated by



Public Law 104-201, Section 3153, the land-use plan will address a 50-year planning period. Once established, the land-use plan will provide a framework for making land-use and facility-use decisions while DOE manages the land.

The selection of the appropriate land uses for the Hanford Site will be made following the decision-making processes described earlier in Section 1.3. When sites are certified as complete, any CERCLA and RCRA requirements for long-term surveillance, monitoring, and maintenance will be identified along with the appropriate institutional controls to protect human health and the environment. The planning end state of the Hanford Site will be developed in the Comprehensive Land Use Plan.

Currently, the assumption is that the federal government will remain the landlord of the site after cleanup is complete. Cleanup levels and disposal standards will be established that are consistent with projected long-term uses; and remediation will be performed to ensure the protection of human health, the environment, and the Columbia River. Groundwater use remains restricted indefinitely.

The 100 Area of the site lies along the Columbia River and is comprised of over 400 waste sites, nine retired plutonium production reactors, and their ancillary facilities. Residential cleanup standards have been established for remediation in the area. The C-Reactor was placed into Interim Safe Storage, with plans to place seven of the other reactors into safe storage. The B-Reactor structure is expected to remain as a National Historic Landmark. Groundwater remediation is being performed to protect the Columbia River.

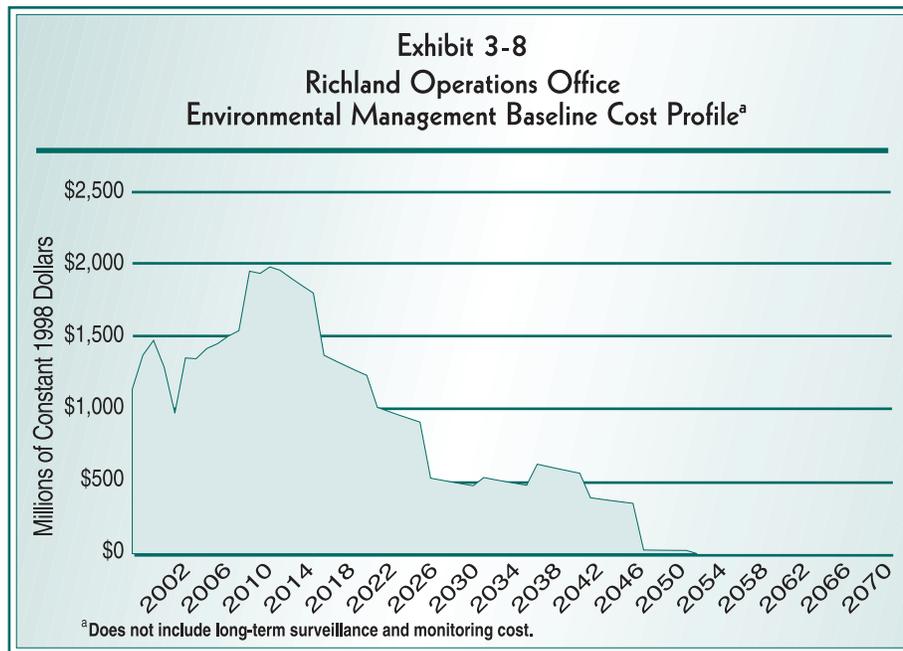
The 200 Area of the site is expected to be maintained as a waste management area. Waste from on-site and off-site sources will be stored and disposed in the 200 Area. The Environmental Restoration Disposal Facility (ERDF) will accept waste that meets acceptance criteria from all Hanford CERCLA sites, and will be expanded to have a capacity of more than 4 million cubic yards of waste. Approximately 700 waste sites will be remediated in the 200 Area. Remediation is expected to be completed through a combination of waste excavation and placement of soil barriers over waste sites. Tank waste will be retrieved and immobilized from the 177 high-level waste tanks. The low-level waste burial grounds will be stabilized and the RCRA storage facilities will be RCRA clean-closed unless required for the ensuing caretaker mission.

The 300 Area is being remediated to meet industrial cleanup standards. Soil remediation is being performed to remediate over 100 waste sites. Facilities which will not be turned over to the private sector for further use will be demolished.

Though final end states have not been set for the site, it is anticipated that the land near the Columbia River would be remediated for recreational use. Additional information about Richland end states and long-term stewardship can be found in the Richland Operations Office version of *Paths to Closure*.

### 3.2.2 Cost And Completion Dates

The Richland Operations Office has divided its environmental management work into 45 discrete projects. A Project Baseline Summary (PBS) exists for each project and contains detailed programmatic information, including cost, schedule, scope, end state, and interim milestones. The projected cost profile associated with the Richland Operations Office is developed by combining the cost estimates from each PBS. Exhibit 3-8 displays the resultant baseline cost profile. A summary of the cost and schedule information for each project is illustrated in Exhibit 3-9. For additional information about these projects, see each PBS.



The estimated life-cycle cost for cleanup of the Hanford site is \$50.3 billion (constant 1998 dollars). This estimate does not include \$500 million (constant 1998 dollars) in non-EM costs or the costs associated with federal oversight (i.e., program direction). This baseline cost profile does not reflect any potential effects of budgetary funding constraints which will likely affect the overall life-cycle cost of Hanford Site cleanup. The current baseline supports the completion of EM work (excluding long-term surveillance and monitoring) by 2046.