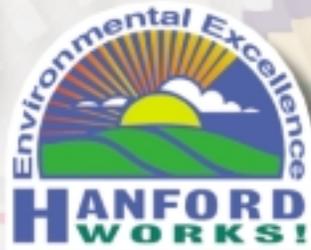




K Basins



200 East Area



200 West Area



Project Hanford Management Contract

Cleanup Progress Report

July - September 1999

400 Area



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Prime Contractor (Integrator):

- **Fluor Daniel Hanford, Inc.**

Principal Subcontractors:

- **B&W Hanford Company** (Facility Stabilization Project)
- **DynCorp Tri-Cities Services, Inc.** (Site Infrastructure)
- **Lockheed Martin Hanford Corporation** (River Protection Project)
- **Numatec Hanford Corporation** (Engineering & Technology)
- **Protection Technology Hanford** (Safeguards & Security)
- **Waste Management Federal Services of Hanford, Inc.** (Waste Management Project)



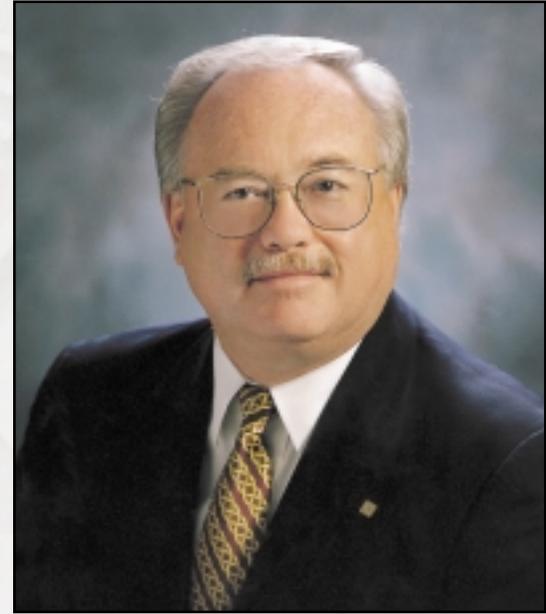
4th Quarter Fiscal Year 1999 Highlights

During the 4th quarter of fiscal 1999 we continued to build on our team's solid progress in all facets of our cleanup mission. More importantly, as our third year at Hanford came to a close, we began to see realistic, exciting opportunities to accelerate our cleanup progress. This report highlights some of those initiatives as well.

This is good news for Hanford stakeholders. Accelerating cleanup means we can:

- reduce the risk and pay off the mortgage faster
- protect the river more expeditiously
- transition Hanford's central plateau for safe management of long-term waste operations more quickly
- leverage our valuable assets – people, facilities and technology – for lasting benefit to taxpayers everywhere with a renewed sense of urgency.

Working closely with new local leadership for the Department of Energy (DOE), we developed a new business model for achieving our mission. By streamlining our operations, we will redirect more resources to targeted cleanup activities and thereby free up tax dollars to accelerate work. We have put in place a very nimble, project-focused organization.



*Ron Hanson, President and
Chief Executive Officer,
Fluor Daniel Hanford, Inc.*

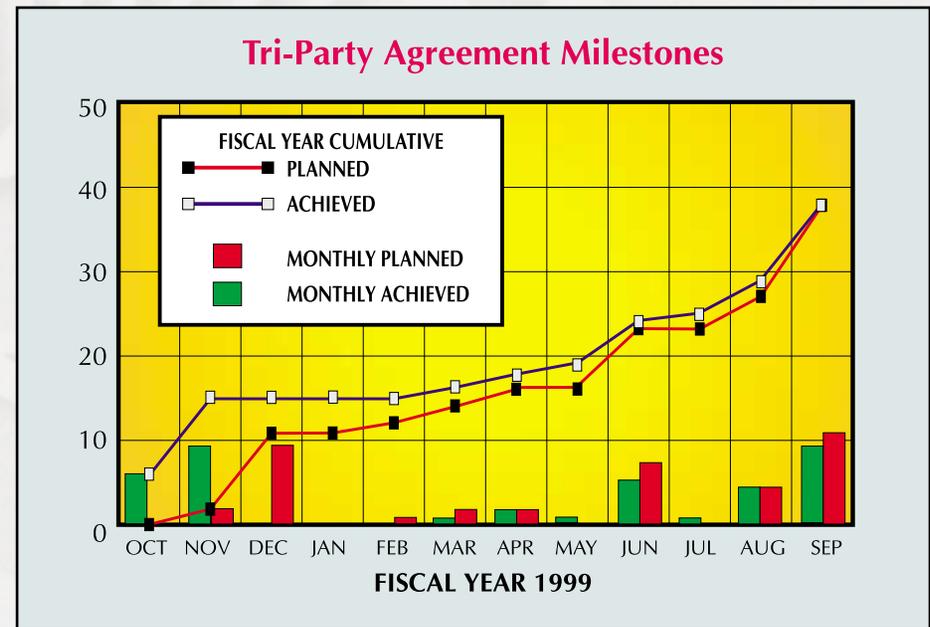
Highlights



4th Quarter Fiscal Year 1999 Highlights (continued)

We successfully unleashed greater synergies when we fully integrated our Spent Nuclear Fuel Project team a year ago. Effective October 1, 1999, we are implementing a similar integration strategy for four other major project organizations and three service-provider groups:

- Waste Management Projects, comprising most of the current Waste Management Project, plus the Waste Encapsulation and Storage Facility
- River Corridor Projects, including 300/400-Area projects and current 300-Area Waste Management projects
- Nuclear Material Stabilization Project, which primarily encompasses Plutonium Finishing Plant activities
- Fast Flux Test Facility
- Site Services, including safeguards and security, emergency preparedness, infrastructure and corrective action management
- Analytical Services, including the 222-S Lab and the Waste Sampling and Characterization Facility
- Training Services, including HAMMER.



4th Quarter Fiscal Year 1999 Highlights (continued)

Integrator activities, such as human resources, legal services, industrial relations and other business functions, will focus on policy and oversight as resources to the eight major organizational areas. The size of the integrator organization has been greatly reduced for a more efficient, project-focused business approach.

Also effective October 1, Lockheed Martin Hanford Corporation's sub-contract is withdrawn from the Project Hanford Management Contract, and assigned to the DOE's Office of River Protection (ORP). As you may know, Congress created the ORP earlier this year to oversee the River Protection Project (formerly Tank Waste Remediation System), and the privatized waste treatment plant under design by BNFL Inc.

Our new business model will help us excel in executing our work. We will place the best people in the positions where they can contribute most to the cleanup mission, regardless of their contractor affiliation. And we'll seek new expertise, where warranted, to further strengthen and enhance our performance.

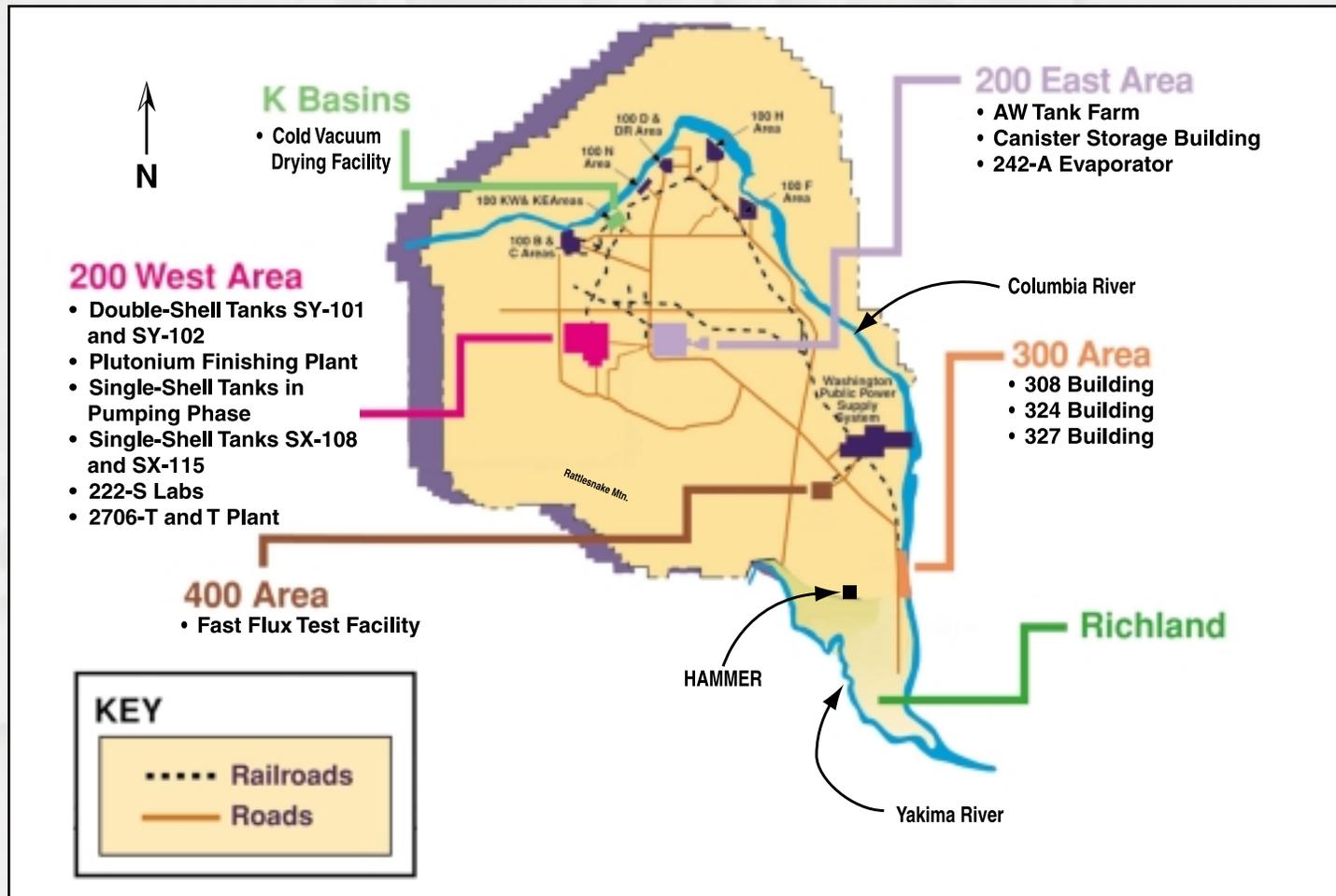
On behalf of the entire Fluor Daniel Hanford team, I look forward to sharing with you more exciting progress in our next quarterly report.

Ron Hanson

Highlights



These Hanford areas and facilities are cited in this report....



Facility Stabilization Project

Expectation:

Safely deactivate contaminated buildings to reduce risk to workers and the environment while decreasing cost to taxpayers.

Plutonium Finishing Plant Update:

- Thermal stabilization of plutonium-bearing materials is about five months ahead of the original 1995 commitment to the Defense Nuclear Facilities Safety Board.
- To increase the processing rate, we'll add three furnaces in January, about 4 months ahead of schedule.
- We plan to accelerate the stabilization of plutonium polycubes by more than two years, beginning next September, well ahead of the January 2003 target start date.
- We collected samples from Tank 361, a settling tank once used for PFP effluents, and conducted a non-destructive assay of the tank to learn more about its contents.

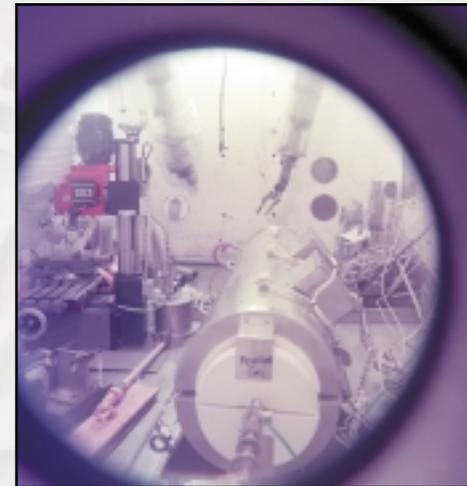


In September, a prototype calciner at the Plutonium Finishing Plant began converting corrosive plutonium solutions to a stable, dry powder for safe storage. The primary method for stabilizing solutions – a magnesium hydroxide precipitation system – will be operational next July. The calciner will then become a backup system. In the meantime, a significant quantity of solutions can be stabilized.

Facility Stabilization Project

324 and 327 Building Updates:

- Dismantled the largest two-story equipment rack inside the highly contaminated 324 Building B Cell. This three-story heavily shielded concrete room once held 12 such racks. The final rack has been disconnected in preparation for dismantling.
- Completed cleanup of 327 Building hot cells F and G two months ahead of schedule.
- Shipped 20 drums of legacy waste buckets from the 327 facility to compliant storage in central Hanford. Another 30 to 40 drums of buckets will be packaged and shipped in fiscal 2000 as part of an accelerated deactivation initiative.



Fast Flux Test Facility Update:

- Energy Secretary Richardson authorized the next step in determining the future of the FFTF: a review of the environmental impacts associated with the reactor.
- Meanwhile, employees maintaining the reactor in standby mode have worked 1.2 million safe hours and three years without a single skin or clothing contamination.

The 327 Building's G Cell, before and after cleanup. We finished cleanup in three of the facility's eight hot cells this year.

Facility Stabilization Project



River Protection Project

Note: This Project's workscope, and its lead contractor, Lockheed Martin Hanford, transfer from the Project Hanford Management Contract to DOE's new Office of River Protection effective October 1, 1999.

Expectation:

Protect the Columbia River, our workers and the public by safely storing and disposing of high-level radioactive tank waste.

Single-Shell Tank Pumping Update:

- Another 103,000 gallons of liquid wastes were removed from seven tanks this quarter, and an eighth tank went into pumping phase at the end of September.
- Estimates of the waste volume contained in the 29 tanks covered by the consent order signed by DOE and the State of Washington last year have been lowered from 6.18 million gallons to 4.01 million gallons.
- Since pumping resumed in June 1998, more than 480,000 gallons – or about 12 percent of the estimated 4-million-gallon total – have been pumped out. All pumping is to be completed by September 30, 2004.



Workers install the pump for S-103, one of the most recent single-shell tanks to enter the pumping phase. By June, pumping must start on at least three more tanks, although as many as six more could be started during fiscal 2000.

River Protection Project



River Protection Project

Cross-Site Transfer Update:

- In the second use of the new cross-site line, more than 500,000 gallons of liquid tank wastes were transferred from 200 West to double-shell tanks in 200 East, completing the scheduled transfers for the fiscal year with about 1.2 million gallons transferred.

Tank SY-101 Update:

- A transfer pump was installed, the major step toward pumping out more than 100,000 gallons of waste this fall.

Groundwater/Vadose Zone Update:

- Decommissioned a borehole near Tank SX-108. Samples from this borehole, still under analysis, are believed to be the most radiologically contaminated taken from Hanford soil.
- A new borehole was drilled near Tank SX-115. Preliminary results show that some layers in Hanford soil may retard the downward flow of water and contaminants.



Crews install the transfer pump and related equipment for SY-101 and conduct the first flush of the pump. This fall, about 100,000 gallons will be transferred from SY-101 into nearby SY-102.

Spent Nuclear Fuel Project

Expectation:

Protect the Columbia River by safely moving more than 2,100 metric tons of deteriorating spent nuclear fuel from the aging K Basins to safe, dry, interim storage in the center of Hanford.

K Basins Update:

- A Record of Decision was signed by DOE, Washington State and the Environmental Protection Agency bringing K Basins cleanup under the Comprehensive Environmental Recovery, Compensation & Liability Act.
- Two key components for removal of the spent fuel canisters next year – the fuel retrieval and water treatment systems – are now in place.
- We're implementing a phased approach to accelerate testing of the equipment, increase worker proficiency prior to fuel removal, and enhance our ability to meet a tight timetable. Cold testing will begin this December; hot testing will start in March, well ahead of the baseline November 2000 date.



Workers install the “Konan Arm,” a robotic device built and tested at Hanford specifically for the K Basins fuel retrieval system. Installation of the fuel retrieval and water treatment systems advances cleanup progress by allowing operational tests of these systems to go forward later this year, 11 months earlier than planned.

Spent Nuclear Fuel Project

Supporting Facilities Update:

- Construction of the Cold Vacuum Drying facility is complete, along with installation of process skids in the first two bays and the water conditioning system.
- Nearly all of the required equipment has been placed in the completed Canister Storage Building.

Multi-Canister Overpack (MCO) Update:

- A \$20.6 million contract was awarded to a New Jersey firm to fabricate 400 MCOs to stringent “N-Stamp” standards of the American Society of Mechanical Engineers.
- It’s a major step in the Project’s path forward and the largest current competitive fabrication contract in the US nuclear industry.
- The stainless-steel 14-foot-long MCOs will hold baskets of cleaned fuel assemblies from the K Basins, be placed in water-filled casks, sealed and cold vacuum dried for safe, dry, interim storage in the Canister Storage Building.



The first process skid is installed in the Cold Vacuum Drying facility.

Waste Management Project

Expectation:

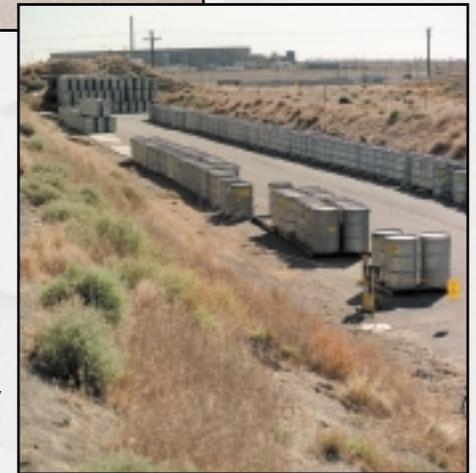
Safely treat, store and dispose of solid wastes and liquid effluents, and provide analytical, generator, environmental, transportation and packaging, and waste-minimization services.

Waste Retrieval Update:

- We accelerated the retrieval of transuranic (TRU) waste drums by nearly 14 months (July 1999 vs. September 2000).
- Conducted non-destructive assay of 269 drums, against a first-batch target of 200. Of those, 224 were characterized as TRU waste.
- First phase involves 1,400 uncovered drums to develop sound cost and safety plans for thousands of buried drums.
- Current schedules call for retrieving 10,000 TRU drums by 2004.



Uncovered drums of transuranic waste in this large trench are among the first retrieved more than a year early. Earlier retrieval of older drums provides for greater worker safety and minimizes the risk of failure of thousands more containers that are now buried, which would add to cleanup costs.



Waste Management Project

Waste Treatment and Disposal Update:

- Months of preparation paid off in a successful evaporator campaign, processing 1.1 million gallons of high-level waste from various Hanford tanks. This process cost-effectively reduces the Site's volume of contaminated liquids, recovering critical storage space in the waste tanks. Waste for the next campaign was staged and sampled.
- Completed secondary containment upgrades at the 222-S Lab and 2706-T facility near T Plant, making those waste streams compliant with the Resource Conservation and Recovery Act.
- Disposal of mixed low-level waste began in a trench in the 200 Area more than a year and a half ahead of the Tri-Party Agreement target date. We also began shipping 560 meters of other mixed low-level waste for non-thermal treatment offsite.
- Feedback from the DOE's Carlsbad Area Office audit in July on our preparations to ship TRU waste to the Waste Isolation Pilot Plant in New Mexico was encouraging. Corrective actions have been addressed. Certification to ship is expected after a joint DOE/EPA audit in fiscal 2000.



Process operations inside the 242-A Evaporator are monitored in the condenser room. The evaporator process boiled off 84 percent of the liquid from the waste in the latest campaign. The condensate was then processed through the Effluent Treatment Facility, and the rest, a concentrated slurry of high-level waste, transferred back to the AW Tank Farm.

Site Infrastructure

Expectation:

Optimize the Hanford Site infrastructure, reduce site inventories and be more cost effective.

Status Update:

- Established a dedicated shop to fabricate multi-canister overpack baskets for the Spent Nuclear Fuel Project. Optimizing machinery and process flow and consolidating the related design, quality and receiving functions will save the Project \$2 million.
- Completed 400 phased office and personnel moves related to the new DOE Office of River Protection and October 1 restructuring of the Project Hanford Management Contract team in 34 days. *(See "Highlights" on Page 2.)*
- A fuel cask car was sampled, characterized, weighed, packaged and loaded for shipment to an offsite vendor for recycling, saving approximately \$200,000 in disposition costs. The cask car was originally scheduled for disposal in the Hanford Site burial grounds.

Volpentest HAMMER Training and Education Center

Expectation:

Host, broker and provide training to the Hanford workforce with hands-on use of realistic props and settings to save lives, reduce injuries and increase worker productivity, and serve as a catalyst for regional training.

Hanford Support Update:

- Student-day totals for the fiscal year rose 45 percent to 33,605, up from 23,227 in fiscal 1998. Most of the students were Hanford workers in Hazardous Waste Operations, Respiratory Protection, Rad Worker, and other Site-based courses.
- Delivered 454 classes this quarter. This included 360 classes for Hanford workers; many were part of the well received Worker-Training-Worker program.
- Staged a highly successful tank farm leak-detection emergency preparedness drill for the River Protection Project. By conducting the exercise at HAMMER, tank farm operators, health physics technicians, operating engineers, building emergency directors and shift managers could all take part.



For the full fiscal year, HAMMER student-day totals were up 45 percent over the previous year. Customer satisfaction averaged 4.5 on a 1-to-5 scale. The photo shows members of the Operative Plasterers' & Cement Masons' International Association learning techniques to erect safe scaffolds.



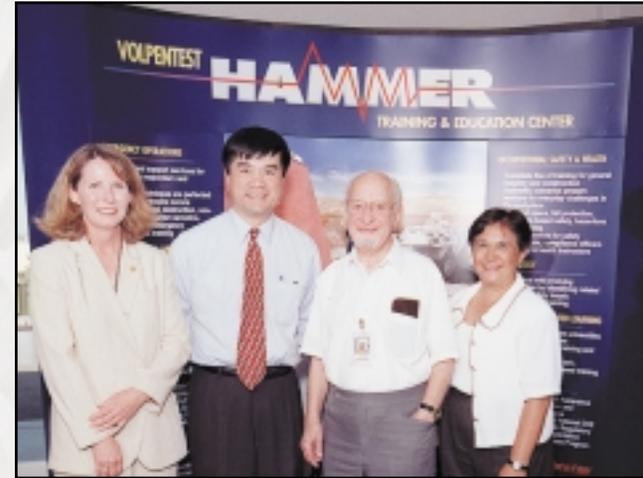
Volpentest HAMMER Training and Education Center

DOE Complex-Wide Support Update:

- 68 classes of National Transportation Program Regulatory Compliance Training were conducted by HAMMER this fiscal year, compared to 24 classes the prior year. Attendance increased 210 percent at a significant cost reduction to the program and DOE sites. Five sessions this coming year will take advantage of HAMMER's distance learning capabilities.

Regional Training Update:

- HAMMER contributes to regional economic diversification by hosting local, state, national and international training. Its National Counternarcotics Center development program was initiated in July.
- Income is brought to the region by helping host events such as the International Aerial Robotics Competition, an International Atomic Energy Agency conference and Washington's Capital for a Day program.



Washington Governor Gary Locke (second from left), a champion of education, conducted his Executive Cabinet Meeting at HAMMER when the Tri-Cities was Capital for a Day this summer. With him are Fluor Daniel Hanford HAMMER Director Karen McGinnis, community leader Sam Volpentest, for whom the Center is named, and DOE Richland HAMMER Director June Ollero.

HAMMER



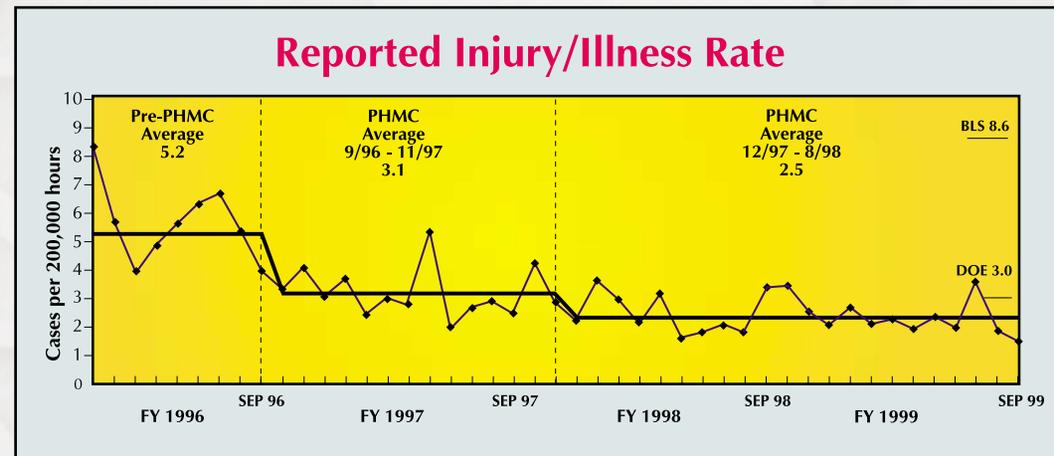
Environment, Safety, Health and Quality

Expectation:

Achieve safe, compliant, quality performance by implementing an integrated environment, safety and health management system.

Status Update:

- More than 1,000 employees participated in a worker-developed workshop on the Integrated Environment, Safety and Health Management System and safe work planning.
- Fluor Daniel Hanford administrative staff surpassed the 4-million mark for safe hours worked.
- Numatec Hanford, the Fast Flux Test Facility team, and enterprise companies Fluor Daniel Northwest and Lockheed Martin Services, Inc., each continue to build on million-hour-plus records.



Since October 1996, workplace injuries are down 52 percent.

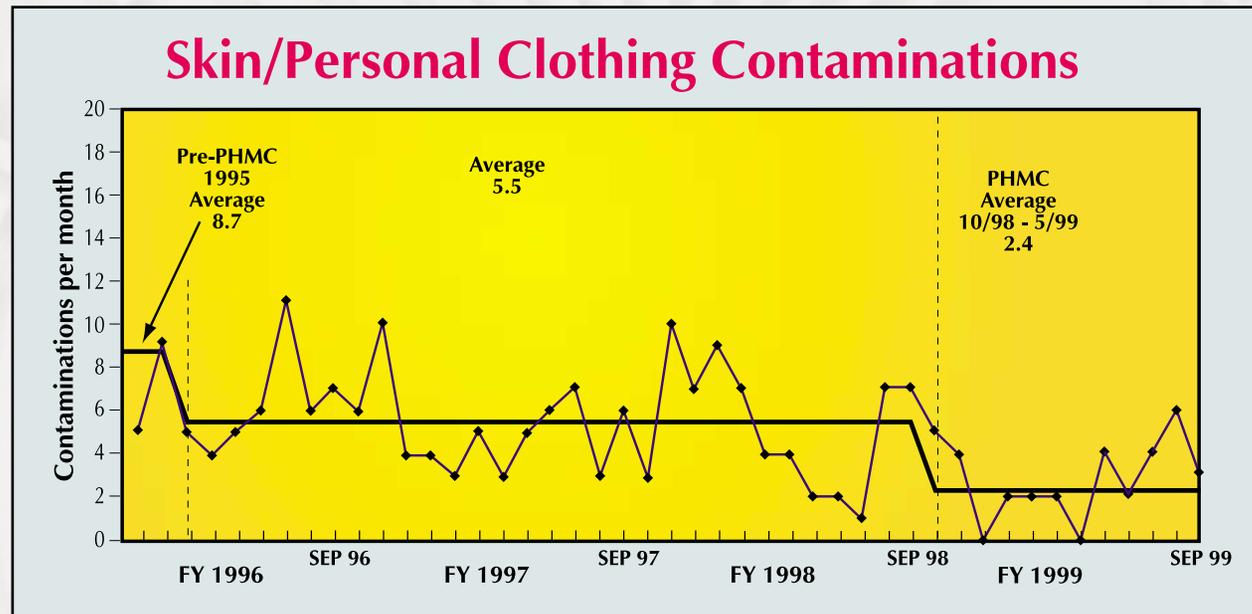
Environment, Safety, Health and Quality



Environment, Safety, Health and Quality

Status Update (continued):

- Workers' skin and clothing contaminations, on average, are down 72 percent since 1995.



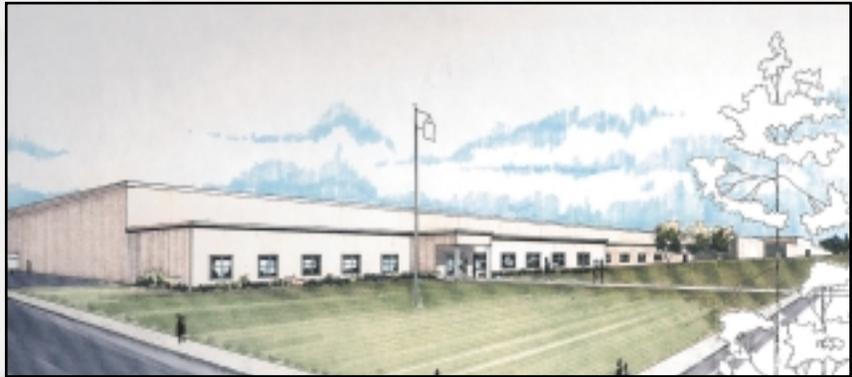
Economic Development

Expectation:

Support economic diversification in the Tri-Cities and surrounding six counties near the Hanford Site.

Status Update:

- Launched a target market recruitment program for the Tri-Cities with the Tri-City Industrial Development Council (TRIDEC), using corporate Fluor Global Services.
- Committed to finance a \$3.5-million, 100,000-square-foot industrial building available to firms considering relocation to the Tri-Cities.
- Shifted the focus of our venture-capital firm, Columbia Basin Ventures (CBV), to maximizing non-Hanford job creation in the Tri-Cities.
- Supporting TRIDEC by subsidizing a fulltime recruiter and assistance from corporate Fluor Global Services.
- Providing \$35,000 toward a \$90,000 feasibility study for an inland port in Pasco.



Artist's rendering of proposed 100,000-square-foot facility to assist local industrial recruitment. Seventy percent of relocating firms place readily available space above all other considerations.

Economic Development

Status Update (continued):

- Our team is on track to meet its commitment for 3,000 new non-Hanford jobs in the region. The cumulative job-creation total of more than 1,400 exceeded the target of 1,000 through fiscal 1999; more than 800 are in Benton and Franklin counties.
- Our local corporate subsidiaries have had a measurable economic impact of about \$50 million on the community since their startup in October 1996.
- Waste Management Northwest experienced an 82-percent growth in revenue since its formation in 1996. The local corporate subsidiary has been given expanded scope, marketing and management resources, and a new name: Waste Management Technical Services.



Thanks to this three-ton bridge crane being removed from the deactivated 308 Building and a quarter-ton jib crane, the local Durametal Brake Company can start production with 32 employees – a number expected to grow to 50 within the year. In all, eight cranes from the former fuels development lab are being made available to local businesses.

Other Significant Cleanup Progress at Hanford

- Decontaminated and decommissioned the 108-F Laboratory.
- Expanded the Environmental Restoration Disposal Facility, doubling its size.
- Demolished the D and DR Reactor stacks using explosives.
- Completing cleanup at the Environmental Restoration Project's first major soil remediation site along the Columbia River in the 100 Area near B and C Reactors.
- Aggressive design work continues for the tank waste treatment plant. The contract also covers development of a financing plan and firm, fixed-price for waste delivery. Authorization to proceed is expected next August.



Environmental restoration progresses at the 108-F Laboratory in this sequence of before, during and after photos. D&D of the Lab, not used since 1970, is another step in eliminating potential contamination sources near the Columbia River.

Other Hanford Cleanup



For More Information...



- **U.S. Department of Energy**
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Richland, WA 99352
(509) 376-5742



- **Fluor Daniel Hanford, Inc.**
Office of Communications
& Media Relations
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Richland, WA 99352
(509) 376-5101

OR

- Visit the Hanford Homepage at:
<http://www.hanford.gov>



Washington Sen. Slade Gorton (second from right) and staff members toured the K West Basin and were briefed on the Spent Nuclear Fuel Project during an August visit. Gorton also spoke with employees at the Fast Flux Test Facility.

