

Environmental Management Performance Report

August 2002



**Pacific Northwest
National Laboratory**

Operated by Battelle for the
U.S. Department of Energy



Department of Energy
Richland Operations Office

PREPARED FOR THE U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE
OFFICE OF ENVIRONMENTAL MANAGEMENT

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This document provides the Department of Energy Richland Operations Office (DOE-RL) with a report of the Pacific Northwest National Laboratory (PNNL) performance by Battelle Memorial Institute and its subcontractors.

In Section A, the Executive Summary, text and graphics report the safety metrics status for all PNNL activities. Senior management's overall performance assessment of all Environmental Management activities conducted at PNNL is presented in a stoplight chart.

Section B, Project Performance Summary, provides a brief summary of the month's performance for the PNNL lead activity, PNNL Waste Management (PBS RL-SS01), and is presented in the narrative and Cost / Schedule Performance Stoplight. More detailed information can be found within PNNL-7911-124a, PNNL's Quarterly Project Status Report, for the fourth quarter of Fiscal Year (FY) 2002. Summary analyses pertaining to PNNL's support to other Project Baseline Summaries (PBSs) are addressed in the contractor's report having lead responsibility for that scope.

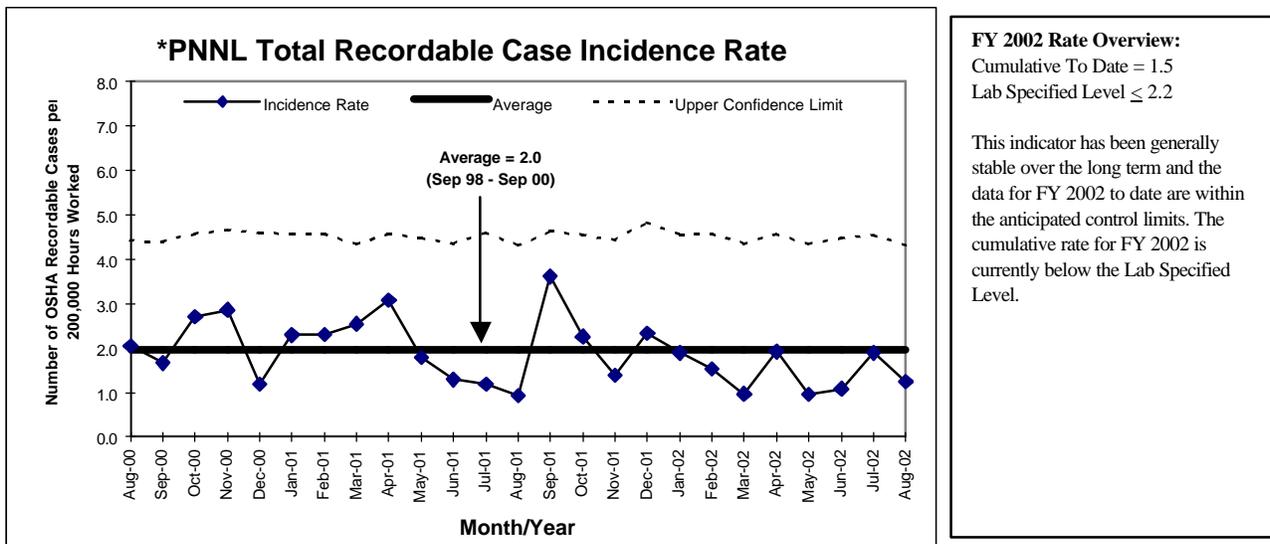
Unless otherwise noted, information in this report is current as of August 25, 2002.

This section provides an executive-level summary of performance information and is intended to bring to management’s attention that information considered to be most noteworthy. This section includes an overview of safety performance and assessment stoplight charts.

Safety Overview

The focus of this section is on documenting trends in lab wide work-related injury and illness rates. These are the same performance indicators as appear in the FY 2002 Battelle Performance Evaluation and Fee Agreement, which is part of the PNNL Operations Contract. The monthly rates for Recordable and Lost Workday cases are presented graphically in this section and are monitored for statistically significant changes. Current efforts to improve performance are being made through the implementation of the Integrated Safety Management System (ISMS) and Voluntary Protection Program (VPP).

Total Recordable Case Incidence Rate



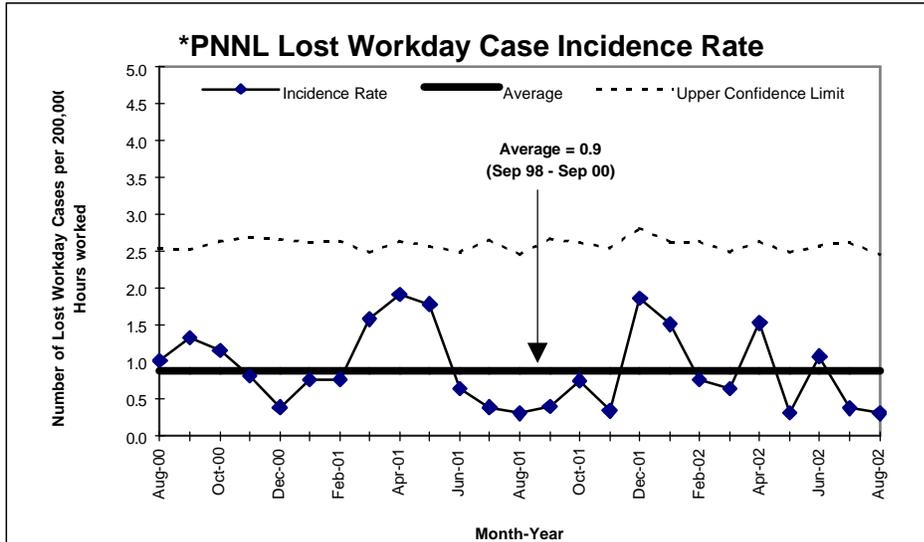
The following rating reflects the overall assessment of recordable case incidence for PNNL.
 (Narrative not required when rating is green.)

	GREEN
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*Includes all PNNL Operations.

Green: Satisfactory	Yellow: Significant improvement required	Red: Unsatisfactory
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Lost Workday Case Incidence Rate



FY 2002 Rate Overview:
 Cumulative To Date = 0.8
 Lab Specified Level \leq 1.1

This indicator has been generally stable over the long term. The data points for FY 2002 to date are within the anticipated control limits. The cumulative rate for FY 2002 is currently below the Lab Specified Level.

The following rating reflects the overall lost workday case incidence for PNNL. *(Narrative not required when rating is green.)*

	GREEN
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*Includes all PNNL Operations.

Green: Satisfactory	Yellow: Significant improvement required	Red: Unsatisfactory
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ISO 14001 Registration

PNNL undertook the effort to gain ISO 14001 registration this year in order to complete the “Triple Crown” of environmental safety and health standards. ISO 14001 standards are used worldwide and are agreements containing technical specifications to consistently be used as rules or guidelines to ensure that products, processes and services are fit for their purpose. The “Triple Crown” consists of three elements – Integrated Safety Management (ISM), the Voluntary Protection Program (VPP) and ISO 14001. The laboratory has already earned ISO validation and VPP Gold Star Status and plans to have ISO 14001 certification by the end of 2002.

This section provides cost and schedule performance, any significant issues, and baseline change request information for the period covered. In FY 2002, Battelle Memorial Institute has lead responsibility over PBS RL-SS01, PNNL Waste Management WBS 3.4.1.7.

Mission

WBS 3.4.1.7 provides PNNL with waste management services and compliant operations in support of science and technology development for the multiprogramming needs of the U.S. Department of Energy (DOE) Complex. These services include:

- Essential surveillance and maintenance of DOE laboratory facilities assigned to PNNL for safe containment of radioactive and hazardous materials.
- Infrastructure required to manage wastes and effluents currently generated at the PNNL.
- Operational compliance services to meet regulatory requirements and operating permits including environment, safety, and health regulations.
- Management of legacy wastes and contamination remaining from past PNNL research operations.

Activity Summary

The following summarizes the activities associated with PNNL Waste Management services and operations conducted during August 2002.

- August – All radiological surveys were completed as scheduled. Activities pertaining to the surveillance and maintenance of all shutdown facilities are on track. The demolition of the 331-B Dog Run and Kennel Facility was initiated. Recyclable materials have been removed, the asbestos remediation is complete, hazardous materials such as lead, PCB's and mercury switches, etc. have been removed. The physical demolition of more than 50% of the above grade structure has been completed. See photos below.

Demolition of the 331-B Dog Run & Kennel Facility – BEFORE



Demolition of the 331-B Dog Run & Kennel Facility – AFTER



- All required radiological air samples were completed as scheduled. Nuclear material holdings in all Material Balance Areas (MBA) were reviewed with MBA Custodians. Approximately 20% of the Nuclear Material labels were verified. The total MBA inventory was compared to criticality safety inventories on the Continuous Fissionable Material Inventory (CFMI) logs. Only three minor observations were noted and all were corrected before the end of the month. The City of Richland conducted an industrial wastewater inspection of the Environmental Molecular Sciences Laboratory (EMSL). The annual inspection is conducted to assess compliance with the facility's Industrial Wastewater Permit No. CR-IU005 and to review operational changes at the facility since the city's last inspection on May 8, 2001. The inspection resulted in no items of concern or corrective actions. On August 14, the July 2002 Discharge Monitoring Report (DMR) for EMSL was submitted to the City of Richland in accordance with part III, Section A of Industrial Wastewater Discharge Permit No. CR-IU005. The August 2002 DMR covered the reporting period from July 1 to July 31, 2002. All measured parameters were within permitted levels. This report submittal satisfied the August deliverable for PNNL Key Milestone RLSS01F201, "Demonstrate Compliance with Industrial Wastewater Permit Limits for EMSL," on schedule. The Radiochemical Processing Laboratory (RPL) stack sample line videoscope inspection was completed on August 17. The sample line was very clean and radioactive materials were not found in the sample line during the inspection. The results have been shared with other Hanford Site contractors and the results will be shared with the Washington State Department of Health (WDOH) in September. Completion of this activity supports the implementation of the new American National Standards Institute (ANSI) N13.1 (1999) standard for sampling and monitoring of airborne radioactive materials.

- During August, 113 NEPA reviews were performed. The monthly review of PNNL’s Chemical Inventory was conducted and the review confirmed PNNL remains below the Threshold Planning Quantity (TPQ) reporting levels for all toxic chemicals. The Hazardous and Miscellaneous Waste Operations Staff picked up 504 items and processed 820 items during the month of August. This was the largest volume of waste items processed in a month since December 2000. The Packaging and Transportation staff members supported 46 shipments, including 9 radioactive shipments offsite, 15 radioactive shipments onsite, and 22 hazardous material shipments onsite and offsite.
- Approximately 40 legacy waste projects and tasks are currently scheduled for completion in FY 2002. Work was performed on 11 projects during the month. The legacy work thus far in FY 2002 has resulted in over 273 disposal requests. To date, 12 projects have been completed, including final shipment, and 15 projects are completed with the exception of the final shipment. Work began to dismantle the ion exchange columns within the glove box located in room 604 at the RPL. This is an acceleration of work due to efficiencies realized during FY 2002. Work continued at the 200 Area Tower Site. Cables and fence posts that were strewn over several acres were collected and segregated for recycling of as much metal as possible.

Performance Data and Analysis

As of August 25th, 2002, the cumulative costs are \$12.4M with a positive cost variance of \$1.2M (9%) and a cumulative schedule variance of negative -\$0.9M (-6%). The cumulative cost variance is largely due to labor costs, specifically, unfilled vacancies and programmatic efficiencies. This variance is anticipated to extend through fiscal year end and is expected to complete under budget. The WMOC Program Office is currently evaluating unfunded priority items to redistribute available funds via change control and weighing that against anticipated FY03 funding shortfalls. The cumulative schedule variance is due to delays with the 331-B Building demolition, updating the Facility Effluent Monitoring Plan (FEMP) documents and self-assessments, and delays in conducting stack studies under the Radiological Air Emissions Task. It is anticipated the scope will be completed as scheduled.

Cost Performance (\$M):			
	BCWP	ACWP	Variance
PNNL Waste Management	\$13.6	\$12.4	\$1.2
Schedule Performance (\$M):			
	BCWP	BCWS	Variance
PNNL Waste Management	\$13.6	\$14.4	(\$0.9)

FY 2002 Cost/Schedule Performance - All Fund Types **Cumulative to Date Status - (\$000)**

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Section B - Project Performance Summary

WBS	PBS	BCWS	BCWP	ACWP	CV	%	SV	%
3.4.1.7	RL-SS01	<u>\$14,417</u>	<u>\$13,564</u>	<u>\$12,391*</u>	<u>\$1,173</u>	<u>9</u>	<u>(\$853)</u>	<u>-6</u>
Total		<u>\$14,417</u>	<u>\$13,564</u>	<u>\$12,391*</u>	<u>\$1,173</u>	<u>9</u>	<u>(\$853)</u>	<u>-6</u>

*PNNL has \$1.194M carryover, is expecting \$15.044M new B/A in FY 2002, for a total of \$16.238M. Current new B/A obligated is \$15.044M.

Cost/Schedule Performance Stoplight

The following rating reflects overall cost and schedule performance for PNNL Waste Management activities. *(Narrative not required when rating is green.)*

<p>The cumulative cost variance is within the reporting threshold.</p> <p>The cumulative schedule variance is within the reporting threshold.</p>	GREEN
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Green: Satisfactory	Yellow: Significant improvement required	Red: Unsatisfactory
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PNNL Performance Data and Analysis

