

# Environmental Management Performance Report

April 2002



**Pacific Northwest  
National Laboratory**

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



**Department of Energy**  
Richland Operations Office

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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-7911-122a, PNNL's Quarterly Project Status Report, for the second 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.

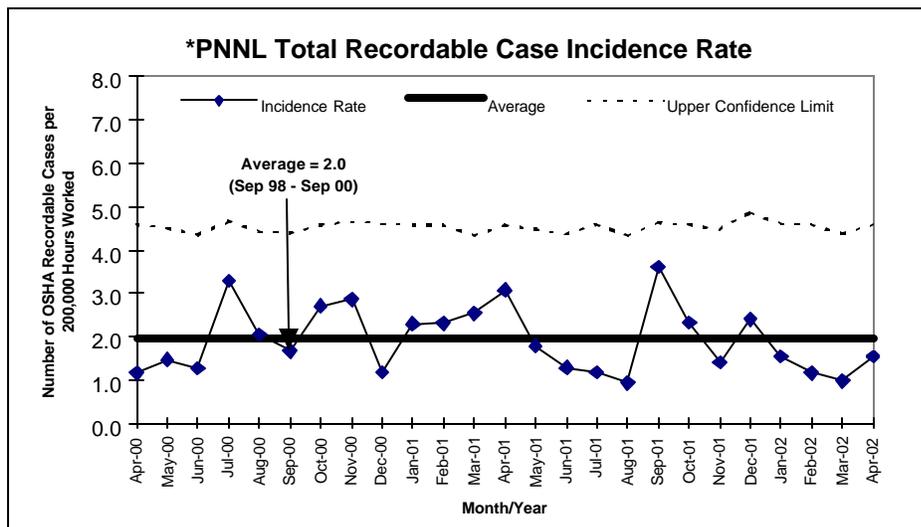
Unless otherwise noted, information in this report is current as of April 28, 2002.

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



**FY 2002 Rate Overview:**  
 Cumulative To Date = 1.6  
 Lab Specified Level ≤ 2.2

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

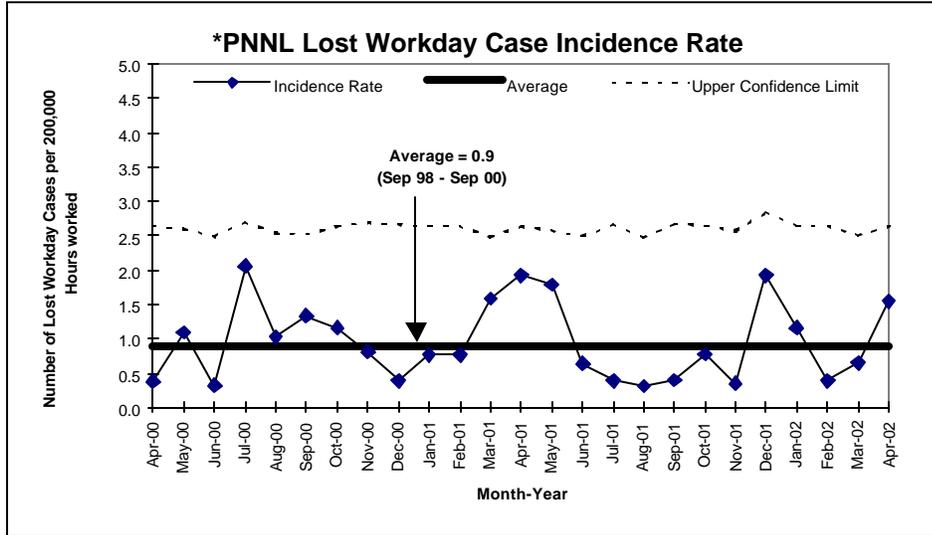
The following rating reflects the overall assessment of recordable case incidence for PNNL. *(Narrative not required when rating is green.)*

	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 = 0.9  
 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.)*

\*Includes all PNNL Operations.

	GREEN
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Green: Satisfactory	Yellow: Significant improvement required	Red: Unsatisfactory
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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 April 2002.

- Scheduled Radiochemical Processing Laboratory (RPL) radiological surveys and nuclear control inspections were performed. Activities pertaining to the surveillance and maintenance of all shutdown facilities are on track. Criticality safety inspections and nuclear material holdings in all Material Balance Areas (MBA) were reviewed with MBA Custodians. Approximately 20 percent of the nuclear material labels were verified, and the total MBA inventory was compared to criticality safety inventories on the Continuous Fissionable Material Inventory (CFMI) logs. All criticality safety controlled areas (CSCAs) and exempt areas (EA) were inspected to ensure operations with fissionable material complied with PNNL and RPL requirements. Utility isolation continues on 331-B in preparation for demolition of the building later this year. The isolation is approximately 95 percent complete.
- During the month of April, all required radiological air samples were collected with results confirming that all historical emission levels were within allowed limits.. The Environmental Molecular Science Laboratory (EMSL) monthly Discharge Monitoring Report (DMR) for March was submitted directly to the city of Richland on April 12, 2002, thereby satisfying the April deliverable within PNNL Milestone RLSS01F201, "Demonstrate Compliance with Industrial Wastewater Permit Limits for EMSL." The DMR was submitted in accordance with Part III, Section A of Industrial Wastewater Discharge Permit No. CR-IU005. This report covered the period March 1 to March 28, 2002 as well as reporting required for the first quarter of fiscal year (FY) 2002. All measured parameters for wastewater discharged to the Richland publicly owned treatment works were within permit limits.

- During the month of April, 135 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-reporting levels for all toxic chemicals. The Hazardous Waste Operations Task staff members shipped 72 drums (2,997 kg). Packaging and Transportation staff supported twenty-eight shipments including thirteen radioactive shipments offsite, five radioactive shipments onsite, and ten hazardous material shipments onsite and offsite. In addition, thirty-one drums of Low Level and Radioactive Mixed Wastes were shipped in April.
- Over thirty legacy waste projects/tasks are scheduled for completion in FY 2002. Staff members are currently working on 25 legacy tasks that have resulted in over 186 disposal requests to date. Work continued in the legacy waste management of over 550 items located in RPL Rooms 517. Three hundred forty-six items were disposed. Five drums of legacy waste were shipped to the Central Waste Complex (CWC) on April 30. Legacy material located at the Process Development Laboratory East (PDLE) and Research Technology Laboratory (RTL) facilities were sorted for recycling, and the hazardous material was disposed.

## Performance Data and Analysis

As of April 28th, 2002, the cumulative costs are \$7.4M with a positive cost variance of \$.9M (11%) and a cumulative schedule variance of negative \$.6M (-7%). The cumulative cost variance is largely due to project efficiencies. The WMOC Program Office is currently evaluating unfunded priority items and will redirect available funds through the change control process. The projects expect to complete within the approved budget. The cumulative schedule variance is within the reporting threshold. It is anticipated that the scope will be completed as scheduled.

<b>Cost Performance (\$M):</b>			
	<b>BCWP</b>	<b>ACWP</b>	<b>Variance</b>
<b>PNNL Waste Management</b>	\$8.3	\$7.4	\$.9
<b>Schedule Performance (\$M):</b>			
	<b>BCWP</b>	<b>BCWS</b>	<b>Variance</b>
<b>PNNL Waste Management</b>	\$8.3	\$8.9	(\$.6)

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

<b>WBS</b>	<b>PBS</b>	<b>BCWS</b>	<b>BCWP</b>	<b>ACWP</b>	<b>CV</b>	<b>%</b>	<b>SV</b>	<b>%</b>
3.4.1.7	RL-SS01	<u>\$8,896</u>	<u>\$8,284</u>	<u>\$7,356*</u>	<u>\$928</u>	<u>11</u>	<u>(\$612)</u>	<u>-7</u>
<b>Total</b>		<u>\$8,896</u>	<u>\$8,284</u>	<u>\$7,356*</u>	<u>\$928</u>	<u>11</u>	<u>(\$612)</u>	<u>-7</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 \$13,599M.

### 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 largely due to issues within the RPL and Legacy Waste Projects. Programmatic efficiencies and delayed billings attribute to the majority of the variance.</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

