

Environmental Management Performance Report

January 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-7911-121a, PNNL's Quarterly Project Status Report, for the first 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.

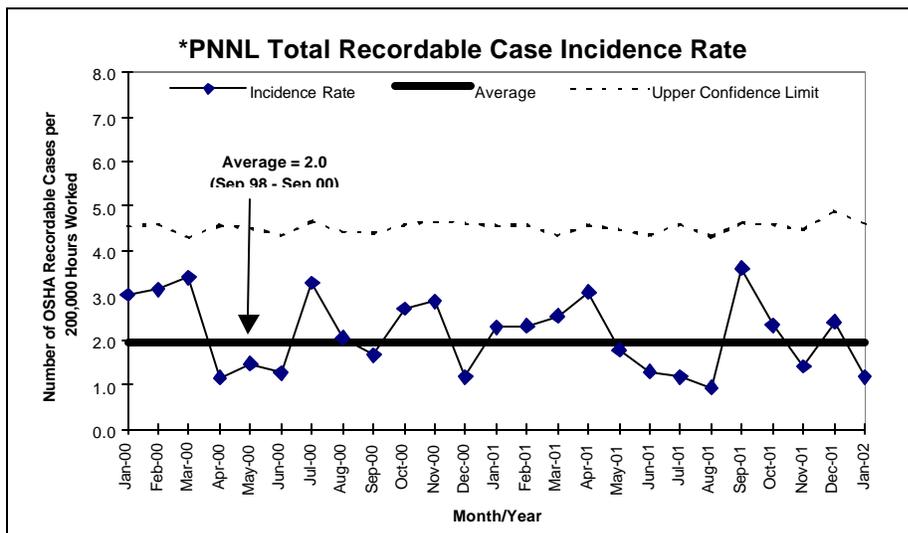
Unless otherwise noted, information in this report is current as of January 27, 2002.

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 = 1.8
 Lab Specified Level ≤ 2.2

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

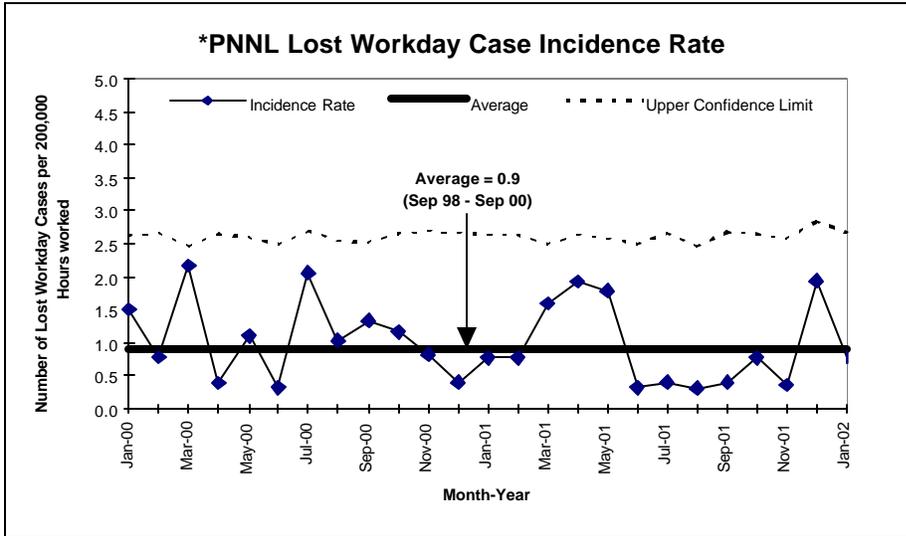
The following rating reflects the overall assessment of recordable case incidence for PNNL. *(Narrative not required when rating is green.)*

Green

*Includes all Pacific Northwest National Laboratory 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 ≤ 1.1

This indicator has been generally stable over the long term. The data points for the first four months of FY 2002 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 last workday case incidence for PNNL. *(Narrative not required when rating is green.)*

Green

*Includes all Pacific Northwest National Laboratory Operations.

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 January 2002.

- Emission data for the Radiochemical Processing Laboratory (RPL) showed approximately 11 curies (Ci) of tritium released between December 1 and December 27, 2001. The cumulative tritium release for RPL in calendar year 2001 was approximately 339 Ci; the annual permitted release is 1,800 Ci. Under existing permits, emissions are measured and reported to the Environmental Protection Agency (EPA) and the Washington State Department of Health (WDOH) on a calendar-year basis. Tracking and trending of emissions against the 1,800-Ci limit will be reset to zero and will begin again with the first set of samples collected in January 2002. The FY 2002 first quarter Radioactive Inventory Verification in RPL Compliance assessment was completed and documented. There were no significant findings. Support was provided to the Ecology and Environmental Protection Agency (EPA) related to inspection of the 320, 329, 3720, and 305-B Buildings. Receipt of the Ecology report dated January 25, 2002, indicated no findings or observations were noted during the inspection.
- Radiological air samples required during the month of January were collected and confirmed that all results received to date were within historical emission levels. The Environmental Molecular Science Laboratory (EMSL) monthly Discharge Monitoring Report (DMR) for December was submitted directly to the city of Richland on January 11, thereby satisfying the January deliverable within PNNL Milestone RLSS01F201. The DMR was submitted in accordance with Part III, Section A of Industrial Wastewater Discharge Permit No. CR-IU005. This report covered the period December 1 to December 31, 2001. All measured parameters were within permit limits. As required by Part

II, Section A(2) of the Industrial Wastewater Discharge Permit No. CR-IU005, the Quarterly Discharge Log was also included as part of the DMR submittal. Certification was provided of PNNL's input to the *Hanford Site Air Operating Permit (AOP) Semi-Annual Report for the Period July 2, 2001 through December 31, 2001* (DOE/RL-2002-04). This certification fulfilled the required actions for completion of Key Milestone RLSS01F203, "Prepare Air Operating Permit First Semi-Annual Compliance Report." Packaging and Transportation staff members supported twenty-nine shipments including six radioactive shipments offsite, five radioactive shipments onsite, and eighteen hazardous material shipments onsite and offsite. The Hazardous Waste Treatment Units treated 230 kg of mixed waste.

- Ninety-Five National Environmental Policy Act (NEPA) reviews were conducted and the Threshold Planning Quantity (TPQ) monthly review of the PNNL's chemical inventory was conducted. Some of these projects are proposed for funding. Others have been ongoing for some time, but scope, location, or probable environmental impacts were changed. The change requires another review for environmental compliance purposes.
- Staff continue to monitor the sale of 15.7 metric tons of graphite generated during the 318 Building Legacy Waste Project cleanout. Work has begun to dispose of two legacy waste items located in the 331 Building. When these items have been disposed, all legacy waste items will have been removed from the 331 Building. Legacy staff members are teaming with Fluor Hanford staff members at the 324 Building to discuss options for the disposal of the three bowling ball casks at PNNL and one at the 324 Building. It is expected that teaming with Fluor Hanford to deal with these legacy waste items will be more efficient and may expedite disposition.

Performance Data and Analysis

As of January 27th, 2002, the cumulative costs are \$3.6M with a positive cost variance of \$.8M and a cumulative schedule variance of negative \$2.0M. The cumulative cost variance is 19% and the cumulative schedule variance is a negative 31%. These variances are largely due to fiscal year startup issues, delayed billings and working under DOE continuing resolution.

Cost Performance (\$M):			
	BCWP	ACWP	Variance
PNNL Waste Management	\$4.4	\$3.6	\$.8
Schedule Performance (\$M):			
	BCWP	BCWS	Variance
PNNL Waste Management	\$4.4	\$6.4	(\$2.0)

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

WBS	PBS	BCWS	BCWP	ACWP	CV	%	SV	%
3.4.1.7	RL-SS01	<u>\$6,376</u>	<u>\$4,423</u>	<u>\$3,596*</u>	<u>\$828</u>	<u>19</u>	<u>(\$1,952)</u>	<u>-31</u>
Total		<u>\$6,376</u>	<u>\$4,423</u>	<u>\$3,596*</u>	<u>\$828</u>	<u>19</u>	<u>(\$1,952)</u>	<u>-31</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 \$9.283M.

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. The projects expect to complete within the approved budget.</p> <p>The cumulative schedule variance is largely due to fiscal year startup issues. Projects have been directed to work to FY01 allocations that were approximately 25% below planned project levels. A baseline change request has been submitted to adjust the scope and schedule to reflect the FY02 authorized budget</p>	YELLOW
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Green: Satisfactory	Yellow: Significant improvement required	Red: Unsatisfactory
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PNNL Performance Data and Analysis

