

Environmental Management Performance Report

July 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.

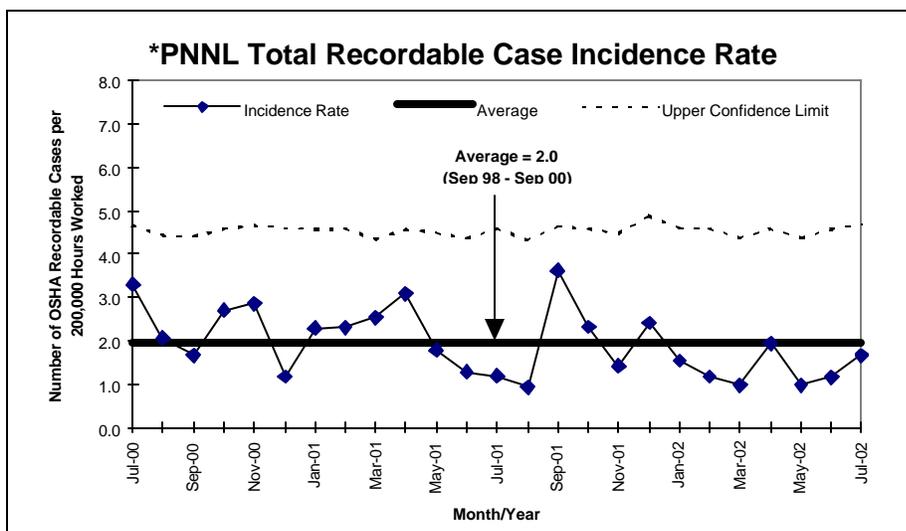
Unless otherwise noted, information in this report is current as of July 28, 2002.

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 = 1.5
 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.

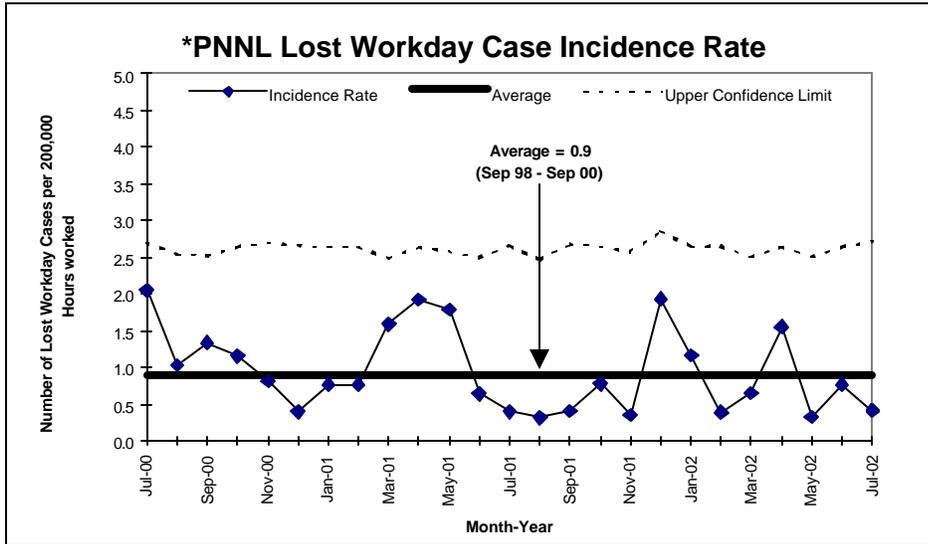
The following rating reflects the overall assessment of recordable case incidence for PNNL. *(Narrative not required when rating is green.)*

	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 = 0.8
 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.)*

*Includes all PNNL Operations.

	GREEN
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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 July 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 controlled areas (CSCAs) and exempt areas were inspected to ensure operations with fissionable material complied with PNNL and DOE-RL requirements. No observations or findings were noted.
- All required radiological air samples were collected and confirmed that all routine effluent discharges from PNNL operations reported to date are below historical release levels and compliant with existing state and federal permits. The Environmental Molecular Sciences Laboratory (EMSL) monthly Discharge Monitoring Report (DMR) for June was submitted directly to the city of Richland on July 5, thereby satisfying the July deliverable with the Pacific Northwest National Laboratory (PNNL) Milestone, RLSS01F201, "Demonstrate Compliance with Industrial Wastewater Permit Limits for EMSL," ten days early. The DMR was submitted in accordance with Part III, Section A of Industrial Wastewater Discharge Permit No. CR-IU005. The June 2002 DMR covered the reporting period June 1 to June 30, 2002. The DMR presented the analytical results for all parameters that required monthly monitoring; all measured parameters were within permit limits.
- During July, 86 NEPA reviews were performed for projects through the Electronic Prep & Risk system. 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. The Packaging and Transportation staff members supported 30 shipments, including seven radioactive shipments offsite, four radioactive shipments onsite, and 19 hazardous material shipments onsite and offsite. The Hazardous Waste Operations Task staff members shipped 74 drums (4,568 kg) and picked up 364 waste items. The monthly review of PNNL's chemical inventory was conducted during July. This review confirmed that PNNL remains below the threshold planning quantity reporting levels for all toxic chemicals.

- Approximately 40 legacy waste projects and tasks are currently scheduled for completion in fiscal year (FY) 2002. Work was performed on 19 projects during the month of July. So far this fiscal year, the legacy work has resulted in over 225 disposal requests. To date, ten projects, including final shipment, have been completed and 15 projects are completed with the exception of the final shipment. During the month of July, the inductively coupled plasma (ICP) unit, the attached glovebox, and all associated equipment were taken out of service and packaged into two waste boxes for final disposal. The project to dispose of two portable lead shielding walls from room 50 in the RPL was completed. The items were packaged for final shipment. The eight curium sources were shipped to Oak Ridge National Laboratory on July 25, which satisfied PNNL Key Milestone RLSS01L202, "Legacy Curium Waste Disposal Complete," five days early. In the 306-W Building, Building, a non-destructive assay (NDA) was performed on the fume hood that had been previously reported to contain enriched uranium. This NDA determined the actual levels of accountable material located within the hood were below those previously noted as book values. Confirmational analysis of the data and the equipment used to gather the data was completed in July, which allows this project to be dropped from the legacy list. Paperwork will be initiated next period and the facility will be downgraded from its current Isolated Nuclear Facility status. PNNL Key Milestone RLSS01L204, "306W Isolated Nuclear Facility Waste Disposition Complete" is considered satisfied.

Performance Data and Analysis

As of July 28th, 2002, the cumulative costs are \$11.1M with a positive cost variance of \$1.1M (9%) and a cumulative schedule variance of negative $-\$0.9M$ (-7%). 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	\$12.2	\$11.1	\$1.1
Schedule Performance (\$M):			
	BCWP	BCWS	Variance
PNNL Waste Management	\$12.2	\$13.1	(\$.9)

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	\$13,115	\$12,218	\$11,125*	\$1,093	9	(\$897)	-7
Total		\$13,115	\$12,218	\$11,125*	\$1,093	9	(\$897)	-7

*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.)*

The cumulative cost variance is within the reporting threshold. The cumulative schedule variance is within the reporting threshold.	GREEN
Green: Satisfactory Yellow: Significant improvement required Red: Unsatisfactory	

PNNL Performance Data and Analysis

