

Environmental Management Performance Report

May 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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Introduction

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.

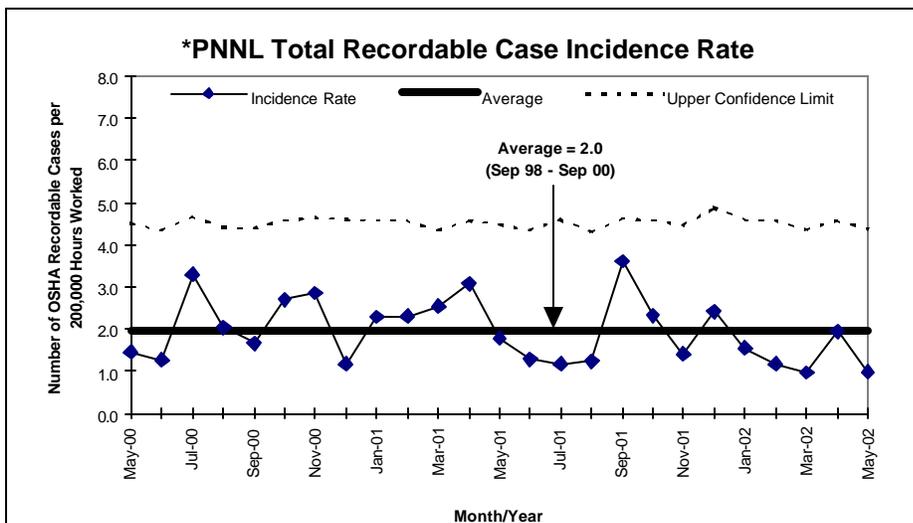
Unless otherwise noted, information in this report is current as of May 26, 2002.

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 \leq 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.

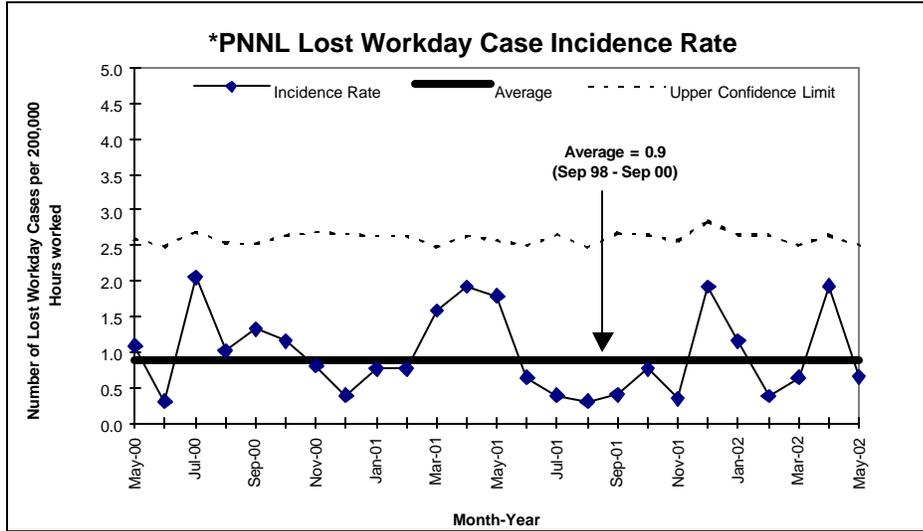
The following rating reflects the overall assessment of recordable case incidence for PNNL. *(Narrative not required when rating is green.)*

| | |
|--|-------|
| | GREEN |
|--|-------|

*Includes all PNNL Operations.

| | | |
|---------------------|--|---------------------|
| Green: Satisfactory | Yellow: Significant improvement required | Red: Unsatisfactory |
|---------------------|--|---------------------|

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 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 |
|--|-------|

| | | |
|---------------------|--|---------------------|
| Green: Satisfactory | Yellow: Significant improvement required | Red: Unsatisfactory |
|---------------------|--|---------------------|

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 May 2002.

- Radiological surveys and air samples were completed as scheduled and confirmed all results received to date are within historical emission levels. Activities pertaining to the surveillance and maintenance of all shutdown facilities are on track. Nuclear material holdings in all Material Balance Areas (MBA) were reviewed with MBA Custodians. Approximately 10% 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. Also completed were inspections of all Criticality Safety Controlled Areas (CSCAs) and exempt areas (EA) to ensure operations with fissionable material complied with PNNL and Radiochemical Processing Laboratory (RPL) requirements. No observations or findings were noted for activities conducted during May. Utility isolation was completed on the 331 to 331-B Building interface in preparation for demolition later this year.
- All required radiological air samples were collected during the month of May with results confirming that all historical emission levels were within allowed limits. On May 10, 2002, the April 2002 Discharge Monitoring Report (DMR) for the Environmental Molecular Sciences Laboratory (EMSL) was submitted to the City of Richland in accordance with Part III, Section A of Industrial Wastewater Discharge Permit No. CR-IU005. The April 2002 DMR covered the period April 1 to April 30, 2002. All measured parameters for wastewater discharged to the Richland publicly owned treatment works were within permit limits. The Washington State Department of Health (WDOH) conducted a Title V Level II unannounced stack inspection of the 325 (RPL) stack (EP-325-01-S)

on May 23, 2002. To date, no issues have been identified by WDOH. The inspection close-out letter from WDOH is expected in June.

- During the month of May, 117 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. A new interactive procedure, FSR-24, was completed in order to help field staff identify secondary waste that may contain listed hazardous waste. The completion of FSR-24 is one of several actions required to implement a new "contained in" policy pertaining to "F listed" Resource Conservation and Recovery Act (RCRA) wastes. Also in May, the Hazardous Waste Operations Task staff members packaged 81 drums for shipment and picked up 476 items. Radioactive Waste Operations staff packaged 101 items. Packaging and Transportation staff supported 46 shipments including 25 radioactive shipments offsite, 10 radioactive shipments onsite, and 11 hazardous material shipments onsite and offsite. In addition, 8 drums of Low Level and Radioactive Mixed Wastes were shipped. Twenty items were accepted into the Hazardous Waste Treatment Unit and a total of 389.4 kilograms of waste was treated during the month.
- The massive cleanout of legacy tank-waste samples in RPL Room 517 is complete. Three hundred forty-six items were disposed. All preparations for the removal of the ICP glove box and associated equipment, as well as two large contaminated lead shields, are completed and preparatory work for the actual removal of the items is ongoing. The Battelle Request (BR) letter was received from DOE with the approval to ship eight legacy curium sources to Oak Ridge National Laboratory. Shipping details are being worked out with Oak Ridge staff and the shipment is expected to take place next month. Staff members continue to work to dispose of two legacy waste items located in the 331 Building. When these items have been disposed, all legacy waste activities will be complete for that building. Staff members are tracking all completed legacy waste packages that were transferred to the Radiological Waste Operations group. One hundred-eleven disposal requests related to thirty legacy waste line items are awaiting shipment to the CWC or the low-level waste burial grounds at this time.

Performance Data and Analysis

As of May 26h, 2002, the cumulative costs are \$8.5M with a positive cost variance of \$1.1M (12%) and a cumulative schedule variance of negative \$.6M (-6%). 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.

| Cost Performance (\$M): | | | |
|------------------------------------|-------------|-------------|-----------------|
| | BCWP | ACWP | Variance |
| PNNL Waste Management | \$9.6 | \$8.5 | \$1.1 |
| Schedule Performance (\$M): | | | |
| | BCWP | BCWS | Variance |
| PNNL Waste Management | \$9.6 | \$10.2 | (\$.6) |

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>\$10,230</u> | <u>\$9,616</u> | <u>\$8,501*</u> | <u>\$1,115</u> | <u>12</u> | <u>(\$614)</u> | <u>-6</u> |
| Total | | <u>\$10,230</u> | <u>\$9,616</u> | <u>\$8,501*</u> | <u>\$1,115</u> | <u>12</u> | <u>(\$614)</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 \$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 |
|---|-------|

| | | |
|---------------------|--|---------------------|
| Green: Satisfactory | Yellow: Significant improvement required | Red: Unsatisfactory |
|---------------------|--|---------------------|

PNNL Performance Data and Analysis

