

Meeting Minutes Transmittal

WASTE MANAGEMENT PROJECT/PNNL FACILITIES PROJECT MEETING
Ecology Kennewick Office
Kennewick, Washington

January 16, 2003
3:00 p.m. to 3:30 p.m.

Distribution:

T. L. Aldridge	RL	K8-50
M. Anderson-Moore	Ecology	B5-18
J. V. Stangeland	PNNL	K9-26
E. L. Grohs	PNNL	K3-75
A. K. Ikenberry	PNNL	P7-79
P. J. Crane	PNNL	P7-68
D. K. Lutter	PNNL	P8-08
F. Jamison	Ecology	B5-18
H. T. Tilden	PNNL	K3-75
E. B. Dagan	RL	A5-15
W. J. Bjorklund	PNNL	P7-70
RCRA Files	PHMC	N1-25

ADMINISTRATIVE RECORD (Two Copies for Record):

300 Area Projects, H-0-7
 325 Hazardous Waste Treatment Units, T-3-4
 305-B, S-3-2
 [Care of EDMC, LMSI (H6-08)]

Please send comments/changes on distribution list to:
 DK Lutter, delores.lutter@pnl.gov, (K3-75), (509)376-5631

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Meeting Minutes Transmittal

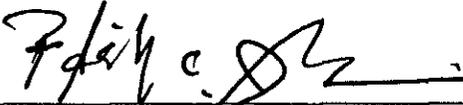
WASTE MANAGEMENT PROJECT/PNNL FACILITIES PROJECT MEETING

Ecology Kennewick Office
Kennewick, Washington

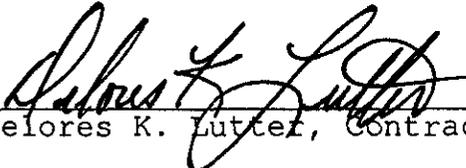
January 16, 2003
3:00 p.m. to 3:30 p.m.

The undersigned indicate by their signatures that these meeting minutes reflect the actual occurrences of the above dated Unit Managers Meeting.


Date: 02/20/03
Theresa L. Aldridge, Project Manager, RL


Date: 02-20-03
Frederick Jamison, 300 Area Project Manager, Washington State
Department of Ecology

Waste Management Project /PNNL Facilities Project Meeting, PNNL
Concurrence


Date: 02/20/03
Delores K. Lutter, Contractor Representative, PNNL

Purpose: Discuss Permitting Process

Meeting Minutes are attached. The minutes are comprised of the following:

- Attachment 1 - Agenda
- Attachment 2 - Summary of Discussion and Commitments/Agreements
- Attachment 3 - Attendance List
- Attachment 4 - Data Gap Plan for RPL
- Attachment 5 - Budget Status

Attachment 1

Waste Management Project/PNNL Facilities Project Meeting
Ecology Kennewick Office
Kennewick, Washington

January 16, 2003
3:00 p.m. to 3:30 p.m.

AGENDA

1. Approval of past minutes. (Ecology/DOE-RL/PNNL)
2. Efficiency Issues (Ecology/DOE-RL)
3. General Discussion (Ecology/DOE-RL/PNNL)
 - 305-B & 325 HWTUs Quarterly Permit Modifications (T. Aldridge/DOE-RL, E. Grohs/PNNL)
 - Waste movement issue within the Shielded Analytical Laboratory (T. Aldridge/DOE-RL, J. Larsen/PNNL)
 - RLWS Status within 325 Building (T. Aldridge/DOE-RL)
 - Legacy Waste Status (T. Aldridge/DOE-RL, W. Bjorklund/PNNL)
 - Status on listed waste ONO (T. Aldridge/DOE-RL, H. Tilden/PNNL)
 - LDR data GAP Plan for 325 Building (T. Aldridge/DOE-RL, H. Tilden/PNNL)
 - Discuss Agenda Items (DOE-RL, Ecology, PNNL)
4. Action Items (Ecology/DOE-RL/PNNL)
 - T. Aldridge (DOE-RL) to telephone Ecology if there are any changes to the RLWS status within 325 building.
OPEN. This action will remain open.
 - DOE-RL/PNNL to provide Ecology with a completed SEPA checklist to support the Class 2 modification request adding room 524 to the HWTUs.
Action: H. Tilden (PNNL)
OPEN
 - T. Aldridge (DOE-RL) to call M. Anderson-Moore (Ecology) and provide a status to the ONO regarding cubicles located in the hood in the 305 lab at RPL.
OPEN
 - T. Aldridge (DOE-RL), Fred Jamison (Ecology) and PNNL to set up a workshop on the current status of the DOE-RL reorganization and its future directions and impacts for the Laboratory and relationship with Ecology.
OPEN
5. Budget Status (J. Stangeland, PNNL)
6. Set Next Project Managers Meeting (Ecology/DOE-RL/PNNL)
 - February 20, 2003
 - Federal Building, Room 248
 - Richland, Washington
 - 3:00 - 3:30 p.m.

Proposed topics may be submitted to D. K. Lutter, e-mail delores.lutter@pnl.gov,
(Work) 376-5631, (Fax) 376-2329

Attachment 2

Waste Management Project/PNNL Facilities Project Meeting
Ecology Kennewick Office
Kennewick, Washington

January 16, 2003
3:00 p.m. to 3:30 p.m.

1. Approval of Past Minutes

The November 21, 2002 Project Manager Meeting (PMM) minutes were approved. The December 2002 PMM was canceled, thus this meeting is the December-January PMM.

2. Efficiency Issues

There were no new efficiency issues to address.

3. General Discussion

- 305-B & 325 HWTUs Quarterly Permit Modifications

G. Grohs (PNNL) reported that the next quarterly modification Ecology will receive will contain the Building Emergency Procedure for 325 and possibly 305-B's. The 305-B Building Emergency Procedure isn't due until June but we may complete it early to send it along with that of the 325 Building. Also there will be a few minor text changes to 305-B's and 325's Waste Analysis Plan (WAP).

H. Tilden (PNNL) stated that the Class 1 packet, which contained the 325 streamlined version, was delivered to Ecology January 9, 2003. M. Anderson-Moore (Ecology) indicated she had not received a copy of the packet, and requested a rough draft. G. Grohs (PNNL) responded that he would provide a redline strikeout version, following approval from RL.

- Waste movement issue within the Shielded Analytical Laboratory

J. Larsen (PNNL) reported on the waste movement in the Shielded Analytical Laboratory, which is the hot cell facility of the treatment, storage, disposal (TSD) in the 325 Building. Waste in the hot cells is in one quart cans, which are loaded out into shielded 55-gallon drums. In the September 2002 time frame, 12 cans were loaded outside the hot cell into two shielded 55-gallon drums. Six of the cans had already been accepted and logged into the TSD, and six were newly generated waste. However, all 12 of the cans were mistaken for newly generated waste, and the drums were moved to a 90-day storage area, managed per the requirements of the 90-day area, and then accepted back into the TSD before the 90-day clock was up and managed as TSD waste.

To correct the issue, the facility reviewed the procedure for managing TSD inventory, particularly focusing on the labels attached to cans within the TSD. It was discovered that the hazardous waste labels are the same for waste in a satellite accumulation area as for waste already in the TSD. As a result,

all of the TSD waste has been relabeled with a new TSD label , clearly identifying it as belonging to the TSD in an effort to eliminate the confusion of being newly generated waste.

J. Larsen (PNNL) added that the issue was identified through an inventory reconciliation effort, and that an entry has been made into the facility log book describing this activity.

H. Tilden (PNNL) noted that the annual permit noncompliance report will reflect this waste movement issue.

- RLWS Status within 325 Building

T. Aldridge (DOE-RL) stated that the RLWS status within the 325 Building has not been provided to DOE from the laboratory. M. Anderson-Moore (Ecology) requested a final status as soon as possible to aid in updating the ten-year site-wide permit. T. Aldridge (DOE-RL) took an action to provide Ecology with what DOE's decision is by February 1, 2003.

- Legacy Waste Status

T. Aldridge (DOE-RL) stated that there were no changes to the status of legacy waste.

- Status on listed waste ONO

H. Tilden (PNNL) reported that PNNL is still evaluating the data quality package on the laboratory results. There were a couple of hits above detection levels on analytes of concern, and PNNL is in the process of ensuring the data package accurately reflects that information.

- LDR data GAP Plan for 325 Building

H. Tilden (PNNL) explained that facilities housing treatment, storage, and/or disposal (TSD) activities, and/or potential mixed waste as defined in the Ecology final determination, are subject to assessments under the Land Disposal Restrictions (LDR) Program. RL and Ecology have agreed that when an LDR assessment is completed on a facility, RL will share the assessment with Ecology, and that a data gap plan will be prepared within one year following completion of the assessment and also shared with Ecology. The 325 Building LDR assessment was begun at the end of 2001, and concluded in May 2002. There were no data deficiencies noted in the assessment report. PNNL prepared a data GAP plan in December 2002, which indicates PNNL is not planning to do sampling and analysis or any other kind of characterization activity associated with the potential mixed waste at the 325 facility.

A copy of the LDR report and the data gap plan was provided to Ecology (Attachment #4) during the PMM. H. Tilden (PNNL) noted that the assessment did not identify any new potential mixed waste. Potential mixed waste is a group of items which DOE has not yet determined to be discarded, and the material generally falls into two subclasses: material that has no future use or material that is stored for reuse. This description of potential

mixed waste was added to the annual LDR report two years ago and provides a way to alert Ecology that there are materials on site that could eventually be managed as mixed waste.

- Discuss agenda items

T. Aldridge (DOE-RL) reported that she met with F. Jamison (Ecology) and H. Tilden (PNNL) to discuss the future agenda topics for the PMM. F. Jamison (Ecology) provided a list of Ecology's roles for determining the impacts of Office of Science transition on PMM interaction. Following T. Aldridge's (DOE-RL) and H. Tilden's (PNNL) development of responses for the areas on the list, the responses were routed through DOE for comment. T. Aldridge (DOE-RL) took an action to e-mail the matrix to Ecology within two weeks. F. Jamison (Ecology) will review the matrix, and T. Aldridge (DOE-RL) will also discuss the matrix with PNNL.

4. Action Items

T. Aldridge (DOE-RL) to telephone Ecology if there are any changes to the RLWS status within 325 building. A deadline has been set for February 1, 2003. This action will remain open.
OPEN

DOE-RL/PNNL to provide Ecology with a completed SEPA checklist to support the Class 2 modification request adding room 524 to the HWTUs. M. Anderson-Moore confirmed that Ecology received the SEPA checklist. This action item was closed.
CLOSED

T. Aldridge (DOE-RL), Fred Jamison (Ecology) and PNNL to set up a workshop on the current status of the DOE-RL reorganization and its future directions and impacts for the Laboratory and relationship with Ecology. This was closed and the next action item replaces it.
CLOSED

T. Aldridge (DOE-RL) will e-mail F. Jamison (Ecology) the agenda items matrix, with any pertinent discussions, by January 24, 2003.
OPEN

5. Budget Status

J. Stangeland (PNNL) distributed the FY 2003 cost and schedule performance summary for the first quarter (Attachment #5). This represents the first quarter of the restructured program, and legacy waste is the only activity related to this PMM. The budget is in continuing resolution. Legacy waste has received 1.1 million dollars out of a requested 4.4 million dollars. The cost variance reflects some efficiencies and work that was carried over from FY 2002.

The large schedule variance is due to the continuing resolution. A baseline change request to add the carryover scope to this fiscal year's baseline is pending. Once the allocations are

finalized, PNNL can follow through with the change request and align the baseline, which will resolve the schedule variance.

6. Set Next Meeting Date

The next PMM was scheduled for February 20, 2003, at 3:00 p.m. at the Federal Building, room 248, in Richland, Washington.

Proposed topics may be submitted to D.K. Lutter, e-mail delores.lutter@pnl.gov, 376-5631, 376-2329 (fax).

Attachment 4

**Waste Management Project/PNNL Facilities Project Managers Meeting
Ecology Kennewick Office
Kennewick, Washington**

**January 16, 2003
3:00 p.m. to 3:30 p.m.**

Pacific Northwest National Laboratory

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

December 18, 2002

Mr. Roger F. Christensen, Director
Laboratory Operations Division
U.S. Department of Energy
Richland Operations Office
P.O. Box 550, MSIN K8-50
Richland, Washington 99352-0550

Dear Mr. Christensen:

DATA GAP PLAN FOR RADIOCHEMICAL PROCESSING LABORATORY

Current Tri-Party Agreement requirements for the Land Disposal Restrictions (LDR) report include the submittal of a data gap plan within one year of the scheduled performance of an assessment at each facility scheduled to be assessed. The Radiochemical Processing Laboratory (RPL), also known as the 325 Building, was scheduled to receive an assessment in the fourth quarter of calendar year 2001. As a result, the data gap plan is due to Ecology by the end of December 2002.

The RPL assessment was performed by the U.S. Department of Energy, Richland Operations Office (RL) and was transmitted to the Laboratory on May 31, 2002. The report did not note any data gaps. Also, the inspectors did not discover any new potential mixed waste as defined by LDR report requirements.

Through our review of the existing potential mixed waste inventory and the RPL assessment report, Pacific Northwest National Laboratory has determined that there are no data gaps evident at this time pertaining to mixed waste and potential mixed waste at RPL. Hence this letter is intended to serve as the "data gap plan" required by the LDR reporting process. No actions are necessary at this time.

Key documents containing existing data on potential mixed waste in RPL, along with individual project record materials, include "300 Area Dangerous Waste Tank Management System: Compliance Plan Approach" (Ebasco and Hart Crowser, 1990) and "Integrity Assessment Plan for PNL 300 Area Radioactive Hazardous Waste Tank System" (SAIC, 1993).

902 Battelle Boulevard • P.O. Box 999 • Richland, WA 99352

Mr. Roger F. Christensen

December 18, 2002

Page 2

This information will be shared with the State of Washington Department of Ecology in our regularly scheduled Project Managers Meeting on December 19, 2002. If you have any questions or need further information concerning this data gap plan, please contact Mr. Harold Tilden of Environmental Management Services at 375-2966.

Sincerely,



Roby D. Enge, Director
Environment, Safety, Health and Quality

RDE:HTT:mew

cc: TL Aldridge, RL
TL Davis, RL
GL Sinton, RL



Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

02-A&E-0066

MAY 31 2002

Dr. L. J. Powell, Director
Pacific Northwest National Laboratory
Richland, Washington 99352

Dear Dr. Powell:

CONTRACT NO. DE-AC06-76RL01830 - RESOURCE CONSERVATION AND RECOVERY
ACT (RCRA) ASSESSMENT – A&E-DWR-02-004

RL's Analysis and Evaluation Division conducted an assessment of the Radio Chemical
Processing Laboratory during the months of December 2001 through March 2002.

Pacific Northwest National Laboratory's compliance with the RCRA Permit requirements was
considered Satisfactory. There were no Findings and one Observation. No response is required.
The assessment is rated as "green" - meets requirements.

If, in my capacity as a Contracting Officer Representative (COR) I provide any direction which
your company believes exceeds my COR authority, you are to immediately notify the contracting
officer and request clarification prior to complying with the direction.

If you have any questions concerning this matter, you may contact me, or your staff may
contact Terri Aldridge, Laboratory Operations Division, on (509) 372-4508.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul W. Kruger", with a long horizontal line extending to the right.

Paul W. Kruger, Associate Manager
for Science and Technology

A&E:DWR

Enclosure

cc w/encl:
E. L. Grohs, PNNL
A. K. Ikenberry, PNNL
J. D. Jacobsen, PNNL
L. J. Voigt, ATLLI

Assessment Report
A&E-DWR-02-004

Pacific Northwest National Laboratory, Building 325 Facility

Environmental Compliance Assessment
Analysis and Evaluation Division

April, 2002



United States
Department of Energy
Richland Operations Office

SIGNATURE PAGE

Prepared by:  6/4/02
Date
Dave Roha
Analysis and Evaluation Division, Lead Assessor

 6/22/02
Date
Steve Chalk
Analysis and Evaluation Division, Assessor

EXECUTIVE SUMMARY

The U.S. Department of Energy (DOE), Richland Operations Office (RL), Analysis and Evaluation Division (A&E) performed an environmental regulations compliance assessment at the Radiochemical Processing Laboratory (RPL) (Building 325) during the period of December 20, 2001, through March 11, 2002. The scope of the assessment was: 1) to validate the contractor's compliance with the Hanford Site Resource Conservation and Recovery Act (RCRA) Permit Number WA7890008967 requirements covering the treatment and storage and disposal of mixed waste; and 2) to validate status of Potential Mixed Waste (PMW) in the Facility.

An entrance meeting was conducted on December 20, 2001, at the Pacific Northwest National Laboratory (PNNL) conference room at the RPL in the 300 Area. The A&E Assessment Team, the PNNL points of contact, and subject matter experts attended the meeting. The assessment schedule and the areas to be assessed were discussed. An exit meeting was held on March 7, 2002, at the RPL.

The assessment concluded in one Observation. The Observation relates to three previously used tanks that have been stored for over 10 years with no planned future use. The tanks were flushed and drained. Since these tanks did not contain listed wastes, they are considered to be Low Level Waste (LLW) and not PMW.

This assessment is rated as "green" - generally meets requirements. The Facility is considered adequate for continued safe waste storage. The Facility's management and conduct of operations demonstrate a commitment to working safely and meeting DOE expectations of providing quality service to the Hanford Site.

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1.0 INTRODUCTION AND SCOPE

1.1. BACKGROUND

PNNL operates the RPL (Building 325), which houses laboratories and specialized facilities. The RPL activities range from work with non-radioactive materials to work with microgram to kilogram quantities of fissionable materials and mega curie activities of other radionuclides. Included in the facility are general-purpose chemical laboratories, a high-level radiochemistry facility, a shielded analytical laboratory, fissionable material storage areas and Hazardous Waste Treatment Units (HWTU), and the Shielded Analytical Laboratories (SAL) in rooms 32, 200-203, 520, and 528. The general-purpose laboratories characterize fuel, single and double-shell tank waste, environmental samples, tritium, and provide for storage of dangerous, mixed, and radioactive waste. The facility consists of two areas (HWTU and SAL) that are permitted as "Final Status" Treatment, Storage and Disposal (TSD) units in the current RCRA permit.

The RPL has a continuing mission for the foreseeable future. These future activities include evaluating, developing, integrating and implementing technologies that provide innovative solutions for complex environmental and industrial problems. The characterization of radiochemical and spent-nuclear fuel samples uses analytical and metallurgical equipment capable of determining fluid and thermal behavior that governs the successful development of waste processes and engineered systems.

The facility footprint consists of the RPL main building, which contains a basement level, 3 floors, approximately 200 rooms, labs, and storage areas, numerous gloveboxes, numerous storage tanks with associated piping systems, a permitted High-Efficiency Particulate Air (HEPA) ventilation system, and an adjacent fenced storage yard. Currently, the facility's Radioactive Liquid Waste System (RLWS) piping is capped and sealed at the facility boundary. Consequently, no discharges are made through this system to other facilities. The scope of the assessment included inspection of all accessible facility spaces for identification of mixed waste or potential mixed waste. "Calendar Year 2001 Hanford Site Mixed Waste Land Disposal Restrictions Report Volumes 1 and 2," DOE/RL-2002-21, Revision 0, Appendix C "Potential Mixed Waste" Table identifies the following potential mixed waste at the RPL:

- Column D; Solid waste, with potential for mixed waste:
 - Tank system formerly used for product materials subsequently used as feedstock for research projects. Tanks have been drained and flushed, but remain in place.
- Column E; Materials with potential to become solid waste and subsequently mixed waste (in standby, possible use):
 - Hot cells, hoods, and gloveboxes used for radioactive materials and waste analysis and research (reused as needed for new or expanded research activities).

1.2. ASSESSMENT

This assessment covers the permittee's program for compliance with the RCRA permit requirements pertaining to the receipt, handling, storage, and treatment of mixed waste at the facility. The purpose of this assessment was to:

- Evaluate the facility for compliance with the Hanford Facility RCRA Permit Number WA7890008967.
- Meet a commitment of the Department of Ecology "Final Determination Pursuant to the Hanford Federal Facility Agreement and Consent Order (HFFACO) regarding the U. S. Department of Energy's (DOE) compliance with the Land Disposal Restriction (LDR) Requirements of Washington State's Hazardous Waste Management Act (HWMA)."
- Identify areas where mixed waste or PMW exist.
- Provide information for DOE's Annual LDR Report (HFFACO Milestone M-26-01).

Third party assessments are conducted by DOE to evaluate the total picture of how well the Hanford contractors (in this case, PNNL) management system complies with the applicable regulatory requirements and standards. This assessment was applied using a graded approach, tailored to the specific activities being performed at the RPL.

2.0 METHODS

An assessment entry meeting was held at the RPL 325 in the 300 Area on December 20, 2001. The assessment team members were identified. The purpose of the assessment was declared and the scope of the assessment was described. The conduct of the assessment was reviewed along with the assessment schedule. The assessment was conducted using the process of A&E Procedure A&E-01, "Evaluation of Contractor Performance in Meeting Waste Management Storage Requirements."

The method used for this assessment was a combination of document review and interviews. The inside and outside of the facility was inspected and regulatory documents were reviewed to develop the areas of primary focus for the assessment. The documents used to develop the checklist for the assessment included the Hanford Facility RCRA Permit Number WA7890008967, DOE/RL-90-24, Revision 7, "Hanford Facility Dangerous Waste Permit Application," as applicable to the RPL, WAC 173-303, 40 CFR, RL Facility Representative (FR) surveillances, contractor self-assessments, and independent assessments. This assessment focused on the following specific areas:

- Facility records;
- procedures;
- facility contingency plan;
- facility security;
- self-(management and independent) assessments; and
- identification of mixed waste or potential mixed waste.

The RL Contractor Oversight and Evaluation Planning process provides the mechanism whereby RL personnel (mission element, mission support, and support service) evaluate contractor performance to ensure work is performed in accordance with the applicable requirements. This process also provides the mechanism to evaluate the adequacy of the contractors' management and independent assessment program and fulfills an important part of the feedback and improvement function of the RL Integrated Management System (RIMS). This process supports implementation of DOE M 411.1A, "Safety Functions, Responsibilities and Authorities Manual," DOE P 450.5, "Line Environment, Safety, and Health Oversight," and DOE O 224.1, "Contractor Performance Based Business Management Process."

2.1 ASSESSMENT TEAM MEMBERS

Dave Roha of the RL A&E Division led the assessment and Steve Chalk was a team member.

3.0 RESULTS

3.1 GENERAL

The facility reviews its waste management status during a monthly Project Managers meeting with the Washington State Department of Ecology (Ecology). The assessment team reviewed the meeting minutes for several recent meeting. Issues discussed included management of waste drums in the HWTU, status of the new RLWS waste collection tank in the basement and, Legacy Waste Program status. Appropriate contractor and DOE staff were present at the meetings. The Project Managers meeting appears to be an effective approach to managing issues with Ecology.

The RPL Building contains numerous storage tanks. Currently none of the tanks can be discharged outside of the facility because the RLWS piping used for these discharges has been cut, capped and sealed.

3.1.1 Current storage tank status:

Tank	Location	Active	Status (i.e. empty/flushed, etc.)
TK-1	Basement 325, Rm. 32	Yes	In use collecting liquid from various lab drains
TK-43	Basement 325, Rm. 45	No	Awaiting final determination for use
PT-1	Basement Vault B	No	Empty except for heel/secondary containment
PT-2	Basement Vault B	No	Empty except for heel/secondary containment
PT-3	Basement Vault C	No	Empty except for heel/secondary containment
PT-4	Basement Vault C	No	Empty except for heel/secondary containment
PT-5	Basement Vault C	No	Empty except for heel/secondary containment
WT-1	Basement Vault A	No	Empty except for heel/secondary containment
TK-W4	Basement Vault A	Yes	Empty except for heel/secondary containment
W-4	Basement Vault A	No	Empty except for heel/secondary containment
W-5	Basement 325, Rm. 40 A	No	Empty except for heel/secondary containment
W-1	Basement 325, Rm. 40 A	Yes	Empty except for heel/secondary containment
W-2	Basement 325, Rm. 40 A	Yes	Empty except for heel/secondary containment

W-3	Basement 325, Rm. 40 A	Yes	Empty except for heel/secondary containment
-----	------------------------	-----	---

The tanks located in Basement Vaults A, B, and C are scheduled to be decommissioned with the building upon final closure.

Facility Spaces Inspected:

3.1.2 Basement Floor:

<u>Room</u>	<u>Results</u>
90	Counting Lab- housekeeping good, no identified mixed waste or PMW in the area.
93	Lab- housekeeping good, no identified mixed waste or PMW in the area.
91	Unused room, misc. debris, no identified mixed waste or PMW in the area.
45	Open area that comprises the large open area of the basement floor. Contains facility operating systems such as, HEPA filter ventilation system, compressor, and support piping, Instrument and Control (I&C) systems, active and inactive portions of the 300 Area RLWS piping, and storage space for new materials/equipment. A new collection tank, Number 43, has not been put in service and is waiting for a final use determination. The waste discharge piping collected wastewater from numerous waste streams. This piping was part of the 300 Area RLWS. The RLWS is a system of double walled pipes, tanks, and drains that collected various radioactive liquid wastes from Buildings 324, 325, 326, 327, and 329 in the 300 Area. Prior to being disconnected and capped, wastewater collected in the RLWS was transferred to the 340 Building where it was consolidated into tanks prior to being transferred for treatment. If the pH of the discharged waste was outside the acceptable range (5-8) the transfer was followed by a line flush. This information is discussed in further detail in the following reports: <ul style="list-style-type: none"> • "300 Area Dangerous Waste Tank Management System: Compliance Plan Approach," February 16, 1990; and • "Integrity Assessment Plan for PNL 300 Area Radioactive Hazardous Waste Tank System," July 30, 1993.
94	Lab- housekeeping good, no identified mixed waste or PMW in the area.
95	Unused lab- housekeeping good, no identified mixed waste or PMW in the area.
52	Empty room- housekeeping good, no identified mixed waste or PMW in the area.
54	Empty lab- housekeeping good, no identified mixed waste or PMW in the area.
48	Storeroom- housekeeping good, no identified mixed waste or PMW in the area.
57E	Room contains a Co-60 source irradiator- the equipment has a planned future use.
58	Manipulator repair shop- no identified mixed waste or PMW in the area.
57W	Storeroom- housekeeping good, no identified mixed waste or PMW in the area.

55B	Lab for helium processing- housekeeping good, no identified mixed waste or PMW in the area.
32	Tank 1 located inside- housekeeping good, no identified mixed waste or PMW in the area.
34	Storage room- housekeeping good, no identified mixed waste or PMW in the area.
33	Lab- housekeeping good, no identified mixed waste or PMW in the area.
31	Empty room- housekeeping good, no identified mixed waste or PMW in the area.
22A	Storage room for NDA lab- housekeeping good, no identified mixed waste or PMW in the area.
23	Unused glovebox- housekeeping good, no identified mixed waste or PMW in the area.
30A	Storage room- housekeeping good, no identified mixed waste or PMW in the area.
40A	Slab Tanks (W-1, W-2, W-3, W-5) for drain collection from the room 600 cells- this area is inaccessible for direct visual inspection. Remote visual inspection was performed. Housekeeping good, no identified mixed waste or PMW in the area.
40	This area was inaccessible for inspection due to high radiation levels and high contamination levels. This area was contained by a contamination control tent enclosure.
40C	This area was inaccessible for inspection due to high radiation levels and high contamination levels. This area was contained by a contamination control tent enclosure.
43	Waste compaction room- housekeeping good, no identified mixed waste or PMW was identified in the area.

3.1.3 First Floor:

<u>Room</u>	<u>Results</u>
100	The 100 series rooms are offices and general storage areas - housekeeping good, no identified mixed waste or PMW in the area.
300	Office space- housekeeping good, no identified mixed waste or PMW in the area.
301	Office space- housekeeping good, no identified mixed waste or PMW in the area.
600	Office space- housekeeping good, no identified mixed waste or PMW in the area.
200	Backside of hot cells- area not inspected due to high radiation levels (Part of SAL unit).
201	Front side of hot cells- housekeeping good, no identified mixed waste or PMW in the area (Part of SAL unit).
202	Area not inspected due to high radiation levels (Part of SAL unit).
203	Area not inspected due to high radiation levels (Part of SAL unit).
204	Office- housekeeping good, no identified mixed waste or PMW in the area.
205	Instrument shop- housekeeping good, no identified mixed waste or PMW in the area.

206	Machine shop- housekeeping good, no identified mixed waste or PMW in the area.
209	Storage area- housekeeping good, no identified mixed waste or PMW in the area.
302	Standards Lab- housekeeping good, no identified mixed waste or PMW in the area.
303	Unused Lab- housekeeping good, no identified mixed waste or PMW in the area.
305	Gloveboxes in use- housekeeping good, no identified mixed waste or PMW in the area.
306	Lab- housekeeping good, no identified mixed waste or PMW in the area.
308	Lab- housekeeping good, no identified mixed waste or PMW in the area.
310	Lab- housekeeping good, no identified mixed waste or PMW in the area.
309	Lab- housekeeping good, no identified mixed waste or PMW in the area.
313	Lab- in refurbishment phase, housekeeping good, no identified mixed waste or PMW in the area.
312	Lab- housekeeping good, no identified mixed waste or PMW in the area.
317	Lab- housekeeping good, no identified mixed waste or PMW in the area.
316	Lab- housekeeping good, no identified mixed waste or PMW in the area.
702	Lab- housekeeping good, no identified mixed waste or PMW in the area.
701	Lab- housekeeping good, no identified mixed waste or PMW in the area.
700	Lab- housekeeping good, no identified mixed waste or PMW in the area.
320	Lab- housekeeping good, no identified mixed waste or PMW in the area.
325	Unused Lab- housekeeping good, no identified mixed waste or PMW in the area.
326	Lab- housekeeping good, no identified mixed waste or PMW in the area.
327/327A	Lab- housekeeping good, no identified mixed waste or PMW in the area.
330	Lab- housekeeping good, no identified mixed waste or PMW in the area.
705	Office- housekeeping good, no identified mixed waste or PMW in the area.
421	Lab- housekeeping good, no identified mixed waste or PMW in the area.
425	Lab- housekeeping good, no identified mixed waste or PMW in the area.
427	Lab- housekeeping good, no identified mixed waste or PMW in the area.
426	Storeroom/receiving room- housekeeping good, no identified mixed waste or PMW in the area.
430	Rear entrance anteroom- housekeeping good, no identified mixed waste or PMW in the area.
420	Sampling receiving and prep area- housekeeping good, no identified mixed waste or PMW in the area.
416	Lab- housekeeping good, no identified mixed waste or PMW in the area.
419	Lab- housekeeping good, no identified mixed waste or PMW in the area.
415	Lab- housekeeping good, no identified mixed waste or PMW in the area.
414	Lab- housekeeping good, no identified mixed waste or PMW in the area.
410	Lab- Satellite Accumulation Area (SAA) log sheet inspected and found satisfactory; housekeeping good, no identified mixed waste or PMW in the area.
409	Lab- housekeeping good, no identified mixed waste or PMW in the area.
406	Lab with gloveboxes in use- housekeeping good, no identified mixed waste or PMW in the area.

405	Lab- housekeeping good, no identified mixed waste or PMW in the area.
404	Storeroom- housekeeping good, no identified mixed waste or PMW in the area.
403	Empty room- housekeeping good, no identified mixed waste or PMW was identified in the area.
400	Lab- SAA log sheet inspected and found satisfactory; housekeeping good, no identified mixed waste or PMW in the area.
525	Lab- housekeeping good, no identified mixed waste or PMW in the area.
528	HWTU package preparation glove boxes- housekeeping good, no identified mixed waste or PMW in the area.
527	Office shipping records- housekeeping good, no identified mixed waste or PMW in the area.
524	LLW storage- housekeeping good, no identified mixed waste or PMW in the area.
520	HWTU treatment lab- housekeeping good, no identified mixed waste or PMW in the area.
517	Lab- housekeeping good, no identified mixed waste or PMW in the area.
516	Lab- housekeeping good, no identified mixed waste or PMW in the area.
514	Laundry storage room- housekeeping good, no identified mixed waste or PMW in the area.
515	Glovebox not in use- housekeeping good, no identified mixed waste or PMW in the area.
510	Lab- housekeeping good, no identified mixed waste or PMW in the area.
511	Lab- housekeeping good, no identified mixed waste or PMW in the area.
506	Lab- with glovebox in use; housekeeping good, no identified mixed waste or PMW in the area. This lab has been the site of recent radioactive contamination incidents.
507	Lab- housekeeping good, no identified mixed waste or PMW in the area.
505	Empty lab- housekeeping good, no identified mixed waste or PMW in the area.
504	Gloveboxes in use- housekeeping good, no identified mixed waste or PMW in the area.
501	Lab- housekeeping good, no identified mixed waste or PMW in the area.
500	Lab- housekeeping good, no identified mixed waste or PMW in the area.

3.1.4 600 Annex:

<u>Room</u>	<u>Results</u>
601	A, B, & C Hot cells, housekeeping good, no identified mixed waste or PMW in the area.
604	Two gloveboxes in process of cleanout of legacy waste, housekeeping good, no identified mixed waste or PMW in the area.
603	Hot cell manipulator repair shop- containing two open-faced hoods (housekeeping issue), a bowling ball cask, diversion box, heating system for vault tank system as (not used for many years), and a cleaned glovebox awaiting future use. The contaminated hoods appeared be a collection point for various chemicals and other debris collected from recent load-out operations. PNNL staff told the team

that future cleanout of the hoods is planned. In addition, the team was told that chemicals stored in the hoods are being managed by the facility chemical management system. However, the general clutter in and around the hoods indicates housekeeping practices need improvement in this area.

- 607 Office space- housekeeping good, no identified mixed waste or PMW in the area.
 608 Office space- housekeeping good, no identified mixed waste or PMW in the area.
 609 Office space- housekeeping good, no identified mixed waste or PMW in the area.
 610 Storage area LLW- housekeeping good, no identified mixed waste or PMW in the area.
 611B Lab area- located in the room were three unused tanks and a large rectangular structure. Facility staff identified the tanks and the large rectangular structure as components used for the chemical addition (nitric acid) system for the "A" and "C" cells. This system has not been used since the 1970's and was in a standby during the 1980's. The system, with its associated piping and components, was disassembled in the early 1990's, leaving only the three estimated 300-gallon capacity tanks and the rectangular structure, which provided radiation shielding for the chemical makeup system. The tanks were flushed and drained. Since these tanks did not contain listed wastes, they are not considered PMW. The facility has kept the tanks for an undefined potential future project. The shield cover has remained to provide shielding for the adjacent lab work areas.
 611A Electron microscope located in room- housekeeping good, no identified mixed waste or PMW in the area.

3.1.5 Second Floor:

<u>Room</u>	<u>Results</u>
Mechanical	Misc. plant equipment- housekeeping good, no identified mixed waste or PMW in the area.
902	Housekeeping good, no identified mixed waste or PMW in the area.
904	Housekeeping good, no identified mixed waste or PMW in the area.
905	Housekeeping good, no identified mixed waste or PMW in the area.
910-930	Housekeeping good, no identified mixed waste or PMW in the area.
932-950	Housekeeping good, no identified mixed waste or PMW in the area.
954-958	Housekeeping good, no identified mixed waste or PMW in the area.
960	Housekeeping good, no identified mixed waste or PMW in the area.
961	Housekeeping good, no identified mixed waste or PMW in the area.
964-968	Housekeeping good, no identified mixed waste or PMW in the area.

3.2 SPECIFIC

1) Facility Records (as required by WAC-173-303-380): The facility records of the data related to the inspections were reviewed at the facility. Other documents reviewed:

- "300 Area Dangerous Waste Tank Management System: Compliance Plan Approach," February 16, 1990;
- "Integrity Assessment Plan for PNL 300 Area Radioactive Hazardous Waste Tank System," July 30, 1993; and
- "Waste Management Project/PNNL Facilities Project Meeting minutes of January 24, 2001, and February 14, 2002.

No issues were found.

2) Facility Contingency Plan (as required by WAC 173-303-340 & 350): The facility's emergency preparedness plan was established. Document reviewed:

- "Building Emergency Procedure, Radiochemical Processing Laboratory (RPL) Building"

No issues were found.

3) Facility Security (as required by WAC-173-303-310): Facility surveillance sheets were reviewed. The correct warning signs were posted on the outside of the facilities and at all entry points.

No issues were found.

4) Self-(management and independent) Assessments (as required by DOE P 450.5): The assessment team identified that there were two contractor (management) Self-Assessments and one contractor Independent Oversight assessment performed during the previous 12 months. The contractor deficiency evaluation group assessed the results from the assessments, determined the root causes and specified corrective actions following organizational procedures.

No issues were found.

4.0 FINDINGS AND OBSERVATIONS

4.1 NO FINDINGS WERE IDENTIFIED

4.2 OBSERVATION A&E-DWR-02-004-O-001- PREVIOUSLY USED TANKS STORED WITH NO POTENTIAL FUTURE USE

Room 603 contains three previously used tanks. Facility staff identified the tanks as being used for the chemical addition (nitric acid) system for the "A" and "C" cells. This system has not been used since the 1970's and was in standby during the 1980's. The system, with its associated piping and components, was disassembled in the early 1990's, leaving the three estimated 300-gallon capacity tanks. The tanks were flushed and drained. Since these tanks did not contain listed wastes, they are considered to be LLW and not PMW. The facility has kept the tanks for an undefined potential future project. An observation is defined as a deficient condition observed, which, though it does not violate any specific requirement, could harm the product or process. The team considers that facility should evaluate the need to store these LLW tanks since they do not have a defined future use.

5.0 PERSONNEL CONTACTED

T. F. Gilmore, PNNL
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Attachment 5

**Waste Management Project/PNNL Facilities Project Managers Meeting
Ecology Kennewick Office
Kennewick, Washington**

**January 16, 2003
3:00 p.m. – 3:30 p.m.**

**PNNL LRO Program
 FY 2003 Cost and Schedule Performance Summary
 First Quarter**

1/15/2003

Subactivity	Type	SubAcct	Expected Authorized Funds	Total Authorized Funds	BAC	BCWS Oct-Dec	BCWP Oct-Dec	ACWP Oct-Dec	CV Oct-Dec	CV %	SV Oct-Dec	SV %
RL-RS01-2 Legacy Waste	OP	28029	4,467,845	1,128,774	4,467,845	796,369	273,300	225,006	48,294	18	-523,069	-66

CPI (p) = 0.85 how much one planned dollar actually costs
 CPI (e) = 1.17 > 1 = under costs; < 1 = over costs
 SPI (e) = 0.56 > 1 = ahead of schedule; < 1 = behind schedule
 Program Completed % = 11.45%