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Meeting Minutes Transmittal

**325/3100 HAZARDOUS WASTE TREATMENT UNIT
Unit Managers Meeting
337 Building, Mt. Shuksan
Richland, Washington**

**September 20, 1994
10:00 a.m. to 11:00 a.m.**

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

Not Present _____ Date: _____
Clifford E. Clark, Unit Manager, RL

Not Present _____ Date: _____
Daniel L. Duncan, RCRA Program Manager, EPA Region 10

Jeanne J. Wallace Date: 10/18/94
Jeanne J. Wallace, Unit Manager, Washington State Department of Ecology

325/3100 Hazardous Waste Treatment Unit, PNL Concurrence

Kathleen A. Poston Date: 10/18/94
Kathleen A. Poston, Contractor Representative, PNL

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 - Action Items
- Attachment 5 - Draft Procedural Closure Package for the Thermal, Physical/Chemical and Biological Treatment Test Facilities



Attachment 1

**325/3100 HAZARDOUS WASTE TREATMENT UNIT
Unit Managers Meeting
337 Building, Mt. Shuksan
Richland, Washington**

**September 20, 1994
10:00 a.m. to 11:00 a.m.**

Agenda

1. Approval of Past Unit Managers Meeting Minutes (Ecology/RL/PNL)
- 2.. 325 HWTU Start-up Schedule (RL/PNL)
3. Status of TPA Change Request for TPA Procedural Closure (RL/PNL)
4. Status of Combined 325 HWTUs Part A (Form 3) (RL/PNL)
5. Status of Combined 325 HWTUs NOI for Tank Storage (RL/PNL)
6. Status of Combined 325 HWTUs Part B Permit Application (RL/PNL)
7. Status of 300 Area RLWS Compliance Evaluation (RL/PNL)
8. Status of Response to 325 SAL Compliance Letter (RL/PNL)
9. General Discussion (Ecology/RL/PNL)
10. Status Action Items (Ecology/RL/PNL)
 - Past Action Items
6-7-94:1
RL and PNL will provide Ecology (Ms. Wallace) a procedural closure information package by August 15, 1994.
 - New Action Items
11. Next Unit Managers Meeting (Ecology/RL/PNL)
 - Proposed dates during week of October 17
 - Proposed topics

Attachment 2

**325/3100 HAZARDOUS WASTE TREATMENT UNIT
Unit Managers Meeting
337 Building, Mt. Shuksan
Richland, Washington**

**September 20, 1994
10:00 a.m. to 11:00 a.m.**

Summary of Discussion and Commitments/Agreements**1. Approval of Past Unit Managers Meeting Minutes**

The July 14, 1994 Unit Manager Meeting minutes were approved and signed.

2. 325 HWTU Start-up Schedule

Ms. K. Poston (PNL) reported that approval of the 325 HWTU procedures was being finalized. Once finalized PNL will be able to complete the ORR. RL will then decide what level of review they will do prior to startup. Ms. J. Wallace (Ecology) commented that it sure seemed like the whole process it was taking a long time to be completed. Ms. Poston stated that the radiological procedures had been incorporated and the only major issue remaining was training.

3. Status of TPA Change Package Request for TPA Procedural Closure

Mr. B. Day (PNL) stated that the finalization of the TPA change package had been held up. Ms. Wallace inquired as to when the change package would be submitted to Ecology. Mr. Day stated that it could take up to 3 weeks because the package would have to go through the PNL and RL concurrence processes.

4. Status of Combined 325 HWTUs Part A

Ms. Poston stated that the Part A was in the process to be certified by PNL director, Bill Madia. After the certification it would take about a week to obtain the right internal PNL signatures for the transmittal package. Mr. Day stated that the F039 waste code had been added and WHC was currently revising their Part A's to add the same code. The F039 waste code had recently been assigned to the wastes at the tanks farms and therefore the all associated Hanford TSD units were adding them to their Part As.

5. Status of Combined 325 HWTUs NOI for Tank Storage (RL/PNL)

Ms. Poston stated that the development of the NOI had been put on hold pending the regulatory outcome of the slab tanks in the High Level Radiochemistry Facility. Apparently there was a chance that the Slab tanks might have to be permitted. Ms. Poston then gave a brief description of the slab tanks, including their location, to Ms. Wallace.

6. Status of Combined 325 HWTUs Part B Permit Application (RL/PNL)

Mr. J. Donaghue (PNL) stated that PNL was having trouble with the contractor hired to write the Part B Application and Notice of Intent (NOI). And in fact he was considering issuing a stop work order to the contractor. They were about half done with the easy chapters but much of the work was garbage. Ms. Wallace inquired as to the identity of the contractor. Mr. Donaghue replied that the contractor was AT Kearney. Ms. Wallace then asked about the quality of the NOI that AT Kearney was also developing. Mr. Donaghue replied the quality was also not good and that he was going to talk to Liz Bowers of LMD on the issue.

Ms. Poston asked Jeanne if she would like to see the Part B application in sections or chapters as it is developed instead of waiting for the submittal of the entire application. Ms. Wallace said yes and in fact that type of process had worked well on B-Pond for which she was the Ecology unit manager.

7. Status of 300 Area RLWS Compliance Evaluation (RL/PNL)

Ms. Poston stated that the RLWS compliance issue and its associated RCRA permitting did have an impact on the 325 HWTUS because of two reasons. The 325 Shielded Analytical Laboratory which is being combined with the 325 HWTUS will have a new tank that discharges dangerous waste into the RLWS. In addition the HWTU has a discharge point to the RLWS that is routinely used.

Mr. Day state that a RL/PNL/WHC presentation to Ecology on the issue is scheduled for Friday, September 23. One of the major issues is where the RLWS associated with the 340 building ends and what portions would have to be permitted. Mr. Day indicated that Steve Moore (Ecology) had given preliminary informal guidance that the boundary for the RLWS could be at a valve or diverter box before or after it enter a building. Ms. Poston stated that RL was supposed to provide a formal proposal in the meeting.

Ms. Wallace requested copies of the RLWS drawings for the 324 and 325 buildings. Mr. Day stated he could probably get her copies because the drawing were developed and updated for the Friday meeting and were supposed to be given to Ecology in that meeting.

8. Status of Response to 325 SAL Compliance Letter (RL/PNL)

Ms. Poston stated that information for non-compliance item number 2 in the letter had been informally transmitted to Ecology in August to document completion of the item. Item number 2 had to do with training of SAL staff. Ms. Poston also stated that item number 4 that had to do with including water added to the 325 SAL tank as dangerous waste in calculating volumes and weight for the 325 records, would not be completed by the October due date. The work to add a flow meter to the tank has been delayed due to the shut down of 325. Mr. Day stated that a response letter will be sent to Ecology that closed out all items except item number 4.

Ms. Wallace asked how the Hanford Annual Dangerous Waste report was put together and how the data was correlated. Mr. Day stated that his understanding that the data was gathered and put together on a TSD unit by unit basis.

9. General Discussion

Ms. Wallace wanted to know if anybody knew anything about a item in the Bechtel Hanford Incorporated (BHI) budget. She had attended a presentation on the Environmental Restoration budget and there was a funding item for the 325 building in the BHI budget but it didn't have any money allocated to it. No one in the meeting had any knowledge on the budget item.

10. Status Action Items (Ecology/RL/PNL)

Mr. Day provided Ms. Wallace with a draft of a procedural closure request package for the Thermal, Physical/Chemical and Biological Treatment Test Facilities. This action closed out action item 6-7-94:1.

There was one new action item to provide Ms. Wallace with RLWS drawings for the 324 and 325 building.

11. Next Unit Managers Meeting

- **Proposed dates during week of October 17**

The next Unit Managers Meeting was scheduled for October 18.

- **Proposed Topics**

Proposed topics for the next Unit Managers Meeting include: discussion regarding the TPA change package; the procedural closure request for the Thermal, Physical/Chemical and Biological Treatment Test Facilities; the 325 HWTU start-up schedule; and a status on the consolidated Form 3, NOI and Part B permit application.

Attachment 4

325/3100 HAZARDOUS WASTE TREATMENT UNIT
Unit Managers Meeting
337 Building, Mt. Shuksan
Richland, Washington

September 20, 1994
10:00 a.m. to 11:00 a.m.

Action Items

Action Item #

Description

6-7-94:1

PNL will provide Ecology (Ms. Wallace) a full justification regarding the TPA change request package by August 15, 1994.

Closed

9-20-94:1

PNL will provide Ecology (Ms Wallace) with RLWS drawings for the 324 and 325 buildings.

Action: Brian Day

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Attachment 5

**325/3100 HAZARDOUS WASTE TREATMENT UNIT
Unit Managers Meeting
337 Building, Mt. Shuksan
Richland, Washington**

**September 20, 1994
10:00 a.m. to 11:00 a.m.**

**Draft Procedural Closure Package for the
Thermal, Physical/Chemical and Biological
Treatment Test Facilities**

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Thermal Treatment Test Facilities
Procedural Closure
Technical Data Synopsis

1.0 INTRODUCTION

1.1 Purpose

The purpose of this synopsis is to support the request for procedural closure, by the Department of Energy-Richland Operations Office (DOE-RL) and Pacific Northwest Laboratory (PNL), of the Washington State Hazardous Waste Management Act (Chapter 70.105 RCW) Permitted Thermal Treatment Test Facilities. The request is being made in accordance with section 6.3.3 of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Action Plan. Information discussed below will demonstrate that Thermal Treatment Test Facilities has never treated, stored, or disposed of dangerous waste, including mixed waste, except as provided by WAC 173-303-200 or 173-303-802. There are no plans to manage dangerous or mixed waste at the facilities except as provided by WAC 173-303-200 or 173-303-802. The procedural closure of the facilities will modify the Hanford Facility Permit Application by eliminating the Thermal Treatment Test Facilities Form 3 from that document.

1.2 Previous Application Submittal

The initial Part A permit application (Form 3) for the unit was submitted to the Washington State Department of Ecology by DOE-RL on May 19, 1988. This Part A permit application (Form 3) was submitted based on the assumption that groups of similar technologies could be permitted together, regardless of the physical location of the technologies, and the types of wastes to be treated. As a result of a RD&D Permitting Strategy Study conducted by DOE-RL, PNL and Westinghouse Hanford Company (WHC), no thermal treatment technologies or activities were identified that need RCRA permitting at this time, and no future need to obtain a "generic" permit for demonstrating these thermal treatment technologies was identified.

2.0 FACILITY DESCRIPTION

Thermal treatment test activities were projected to occur at the 324 Building Engineering Development Laboratory (EDL), the EDL high bay, and the hot cell complex of the 324 Building, as well as at the 600 Area ISV test site and the 116-B-6-1 crib.

3.0 PROCESS INFORMATION

3.1 Operations History

Waste management activities in the facilities have consisted solely of accumulation of hazardous waste in accordance with the generator requirements of WAC 173-303-200. Thermal treatment test activities that have been performed were accomplished with simulated wastestreams, on treatability study samples and samples for characterization. The simulated wastestreams are not regulated by WAC 173-303, while the samples for characterization and

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treatability study samples are excluded from most of the dangerous waste regulations, including permitting, under WAC 173-303-071(3)(1) and (s) respectively. Residues from thermal treatment activities on simulated wastes were managed in accordance with WAC 173-303 requirements and PNL waste management practices.

3.2 Waste Designation

Waste residues from activities covered under the sample exclusion were returned to the generator and treatability test study exclusion residues were sent back to the generator or managed in accordance with WAC 173-303 generator requirements and PNL waste management practices. No treatment activities involving wastes above the treatability studies sample exclusion quantity limits have been conducted.

In an April 30, 1990 Ecology letter from Timothy Nord to Ronald Gerten of DOE-RL, Ecology made a determination that the material used in a pilot-scale in-situ vitrification of a tank containing simulated mixed waste sludge was subject to the Washington State Dangerous Waste Regulations (WAC 173-303). As a result that test fell within the criteria of the Interim Status Part A Permit for PNL's Thermal Treatment Test Facilities. Ecology based their determination on the following two criteria:

- The materials (simulated waste) used in the test are solid waste pursuant to WAC 173-303-016(4)(e) which states "materials are solid waste if they are abandoned by being accumulated, stored or treated (but not recycled) before or in lieu of being abandoned by being disposed of, burned or incinerated."
- The materials' composition meet the criteria for dangerous waste under WAC 173-303-084, dangerous waste mixtures.

DOE-RL and PNL disagree with this interpretation based on the fact that the treated material did not meet the first criterion listed above. The material was not being treated prior to disposal. It was treated to demonstrate the viability of in-situ vitrification as a treatment technology for mixed waste in underground storage tanks. In fact, the resulting vitrified mass had a use as analysis material to demonstrate the effectiveness of the technology. Only after the material had no further use did the material become subject to RCRA regulation and become a solid waste. At this point the vitrified mass met the conditions of WAC 173-303-016(4)(e) due to the fact that it was an abandoned material, because it was being stored before being disposed of.

At this point the subsequent analytical information from the study indicated that the concentration of materials in the resulting glass matrix and surrounding soil were well below established regulatory thresholds (e.g. EP Toxicity). Attached is the PNL report titled, "Underground Tank Vitrification: A Pilot-Scale In Situ Vitrification Test of a Tank Containing a Simulated Mixed Waste Sludge" (PNL-8846) that documents information on the in-situ test and resulting vitrified mass in question. Since the glass block did not meet the criteria of a dangerous waste, it was properly disposed of in a solid waste landfill.

4.0 SUMMARY

Thermal treatment test activities that have been conducted at the Hanford Site, and which were subject to the Washington State Dangerous Waste Regulations, were conducted with simulants or with waste quantities falling within the treatability study sample exclusion. No activities have been conducted within the scope of the Thermal Treatment Test Facilities Part A Permit Application which require the preparation and submission of a Part B Permit Application, nor are any planned. The DOE-RL and PNL request that procedural closure in accordance with section 6.3.3 of the FFACO be implemented.

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5.0 CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Owner/Operator

John D. Wagoner, Manager
U.S. Department of Energy
Richland Operations Office

Date

Co-operator

William J. Madia, Director
Pacific Northwest Laboratory

Date

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Physical/Chemical Treatment Test Facilities
Procedural Closure
Technical Data Synopsis

1.0 INTRODUCTION

1.1 Purpose

The purpose of this synopsis is to support the request for procedural closure, by the Department of Energy-Richland Operations Office (DOE-RL) and Pacific Northwest Laboratory (PNL), of the Washington State Hazardous Waste Management Act (Chapter 70.105 RCW) Permitted Physical/Chemical Treatment Test Facilities. The request is being made in accordance with section 6.3.3 of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Action Plan. Information discussed below will demonstrate that Physical/Chemical Treatment Test Facilities have never treated, stored, or disposed of dangerous waste, including mixed waste, except as provided by WAC 173-303-200 or 173-303-802. There are no plans to manage dangerous or mixed waste at the facilities except as provided by WAC 173-303-200 or 173-303-802. The procedural closure of the facilities will modify the Hanford Facility Permit Application by eliminating the Thermal Treatment Test Facilities Form 3 from that document.

1.2 Previous Application Submittal

The initial Part A permit application (Form 3) was submitted to the Washington State Department of Ecology by DOE-RL on May 19, 1988, and Revision 1 was submitted on June 14, 1991 to cover the activities of the 325 Shielded Analytical Laboratory. The original Part A permit application (Form 3) was submitted based on the assumption that groups of similar technologies could be permitted together, regardless of the physical location of the technologies, and the types of wastes to be treated. The Shielded Analytical Laboratory (included with the Physical/Chemical Treatment Test Facilities Part A Application, Rev. 1) activities and operations are best included with the 325 Hazardous Waste Treatment Units. As a result of a RD&D Permitting Strategy Study conducted by DOE-RL, PNL and Westinghouse Hanford Company (WHC), no physical/chemical treatment technologies or activities were identified that need RCRA permitting at this time, and no future need to obtain a "generic" permit for demonstrating these physical/chemical treatment technologies was identified.

2.0 FACILITY DESCRIPTION

Physical and chemical treatment test activities were projected to occur at three major locations: the 325 Building Shielded Analytical Laboratory, the hot cell complex of the 324 Building, and the 324 Building Biological Treatment Test Facilities.

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3.0 PROCESS INFORMATION

3.1 Operations History

Waste management activities in the facilities have consisted solely of accumulation of hazardous waste in accordance with the generator requirements of WAC 173-303-200. Any physical/chemical treatment test activities that have been performed were accomplished primarily with simulated wastestreams, on treatability study samples and samples for characterization. The simulated wastestreams are not regulated by WAC 173-303, while the samples for characterization and treatability study samples are excluded from most of the dangerous waste regulations, including permitting, under WAC 173-303-071(3)(1) and (s) respectively. Residues from physical and chemical treatment activities on simulated wastes were managed in accordance with WAC 173-303 requirements and PNL waste management practices.

The 325 Shielded Analytical Laboratory conducted treatment operations on small quantities of wastes produced during analytical chemistry operations. The 325 SAL has now been included within the 325 Building Hazardous Waste Treatment Units Part A Application.

3.2 Waste Designation

Waste residues from activities covered under the sample exclusion were returned to the generator and treatability test study exclusion residues sent back to the generator or managed in accordance with WAC 173-303 generator requirements and PNL waste management practices. No treatment activities involving wastes above the treatability studies sample exclusion quantity limits have been conducted.

4.0 SUMMARY

Physical and chemical treatment test activities that have been conducted at the Hanford Site, and which were subject to the Washington State Dangerous Waste Regulations, were conducted with simulants or with waste quantities falling within the treatability study sample exclusion. No activities have been conducted within the scope of the Physical/Chemical Treatment Test Facilities Part A Permit Application which require the preparation and submission of a Part B Permit Application, nor are any planned.

With the exception of operations in the Shielded Analytical Laboratory (which now operates under the 325 Building Hazardous Waste Treatment Units Part A Application, Form 3), physical and chemical treatment test activities that have been conducted at the Hanford Site, and which were subject to the Washington State Dangerous Waste Regulations, were conducted with simulants or with waste quantities falling within the treatability study sample exclusion. No activities have been conducted within the scope of the Physical and Chemical Treatment Test Facilities Part A Application which require the preparation and submission of a Part B Application, nor are any planned. The DOE-RL and PNL request that procedural closure in accordance with section 6.3.3 of the FFACO be implemented.

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5.0 CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Owner/Operator

John D. Wagoner, Manager
U.S. Department of Energy
Richland Operations Office

Date

Co-operator

William J. Madia, Director
Pacific Northwest Laboratory

Date

Biological Treatment Test Facilities
Procedural Closure
Technical Data Synopsis

DRAFT

1.0 INTRODUCTION

1.1 Purpose

The purpose of this synopsis is to support the request for procedural closure, by the Department of Energy-Richland Operations Office (DOE-RL) and Pacific Northwest Laboratory (PNL), of the Washington State Hazardous Waste Management Act (Chapter 70.105 RCW) Permitted Biological Treatment Test Facilities. The request is being made in accordance with section 6.3.3 of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Action Plan. Information discussed below will demonstrate that the Biological Treatment Test Facilities have never treated, stored, or disposed of dangerous waste, including mixed waste, except as provided by WAC 173-303-200 or 173-303-802. Currently there are no plans to manage dangerous or mixed waste at the facilities except as provided by WAC 173-303-200 or 173-303-802. The procedural closure of the facilities will modify the Hanford Facility Permit Application by eliminating the Biological Treatment Test Facilities Form 3 from that document.

1.2 Previous Application Submittal

The initial Part A permit application (Form 3) for the unit was submitted to the Washington State Department of Ecology by DOE-RL on May 19, 1988. This Part A permit application (Form 3) was submitted based on the assumption that groups of similar technologies could be permitted together, regardless of the physical location of the technologies, and the types of wastes to be treated. As a result of a RD&D Permitting Strategy Study conducted by DOE-RL, PNL and Westinghouse Hanford Company (WHC), no biological treatment technologies or activities were identified that need RCRA permitting at this time, and no future need to obtain a "generic" permit for demonstrating these thermal treatment technologies was identified.

2.0 FACILITY DESCRIPTION

Biological treatment test activities were projected to occur in selected laboratories in the 324, 325, and 331 Buildings in the 300 Area, and potentially at other facilities or at remedial action locations.

3.0 PROCESS INFORMATION

3.1 Operations History

Waste management activities in the facilities have consisted solely of accumulation of hazardous waste in accordance with the generator requirements of WAC 173-303-200. Biological treatment test activities that have been performed were accomplished primarily with simulated wastestreams, on treatability study samples and samples for characterization. The simulated wastestreams are not regulated by WAC 173-303, while the samples for

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characterization and treatability study samples are excluded from most of the dangerous waste regulations, including permitting, under WAC 173-303-071(3)(1) and (s) respectively. Residues from biological treatment activities on simulated wastes were managed in accordance with WAC 173-303 requirements and PNL waste management practices.

3.2 Waste Designation

Waste residues from activities covered under the sample exclusion were returned to the generator and treatability test study exclusion residues were sent back to the generator or managed in accordance with WAC 173-303 requirements and PNL waste management practices. No treatment activities involving wastes above the treatability studies sample exclusion quantity limits have been conducted.

4.0 SUMMARY

Biological treatment test activities that have been conducted at the Hanford Site, and which were subject to the Washington State Dangerous Waste Regulations, were conducted with simulants or with waste quantities falling within the treatability study sample exclusion. No activities have been conducted within the scope of the Biological Treatment Test Facilities Part A Permit Application which require the preparation and submission of a Part B Permit Application, nor are any planned. The DOE-RL and PNL request that procedural closure in accordance with section 6.3.3 of the FFACO be implemented.

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5.0 CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Owner/Operator
John D. Wagoner, Manager
U.S. Department of Energy
Richland Operations Office

Date

Co-operator
William J. Madia, Director
Pacific Northwest Laboratory

Date

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ADMINISTRATIVE RECORD: 325/3100 Hazardous Waste Treatment Unit, T-3-4
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