FACT SHEET
APPENDIX 1.0
SUMMARY OF TIER 1 AND TIER 2 DECISIONS

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APPENDIX 1.0
SUMMARY OF TIER 1 AND TIER 2 DECISIONS

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1.0 INTRODUCTION

The following information within Appendix 1.0 provides the Tier 1 and Tier 2 decisions made on the Hanford Site-wide Permit, Revision (Rev.) 9A renewal (reference Section 2.3 in the Hanford Site-wide Permit, Rev. 9A Fact Sheet). The decisions were issues that originated in Major Theme or unit groups workshops but could not be resolved after "two good tries" to get to resolution (see Section 2.3, Tiered Process for Elevation of Issues, of the Hanford Site-wide Permit, Rev. 9A Fact Sheet.). The issue was elevated according to the Working Principles document, which allows for an issue to be resolved in a hierarchy of decision-makers. Appendix 1.0 is meant to provide more information on the additional decisions made to support the Hanford Site-wide Permit, Rev. 9A and serves as a companion document to the technical fact sheet.

2.0 ADDENDUM B WASTE ANALYSIS PLAN TIER 1 AND/OR TIER 2 DECISION

2.1 Waste Analysis Plan: Lab Accreditation (Tier 2 issue for the Waste Analysis Plan Conceptual Agreement Package guidance)

Issue:

Ecology's Position: Ecology needed to know that valid Quality Assurance/Quality Control (QA/QC) is performed in laboratory analysis for permit related analytical work. As a matter of practice, Washington State Department of Ecology (Ecology) requires all samples to be analyzed by a State Accredited laboratory.

United States Department of Energy (USDOE)Position: USDOE disagreed on whether Ecology has the regulatory authority to require laboratory accreditation to demonstrate compliance with Washington Administrative Code (WAC) 173-303-110(1)

Background and Decision: Ecology and the Permittees came to an agreement regarding the accreditation of Washington State laboratories. The agreement is as follows,

> The Permittee must assure that testing laboratories meet the QA/QC requirements of the Waste Analysis Plan (WAP). Use of Washington State Accredited laboratory specific methods provide such assurance. When such methods are not accreditable or not accredited at the selected laboratory, the permittee must specify QA/QC requirements to the laboratory and will confirm the laboratory routinely implements these requirements through contractor or independent audit(s). Documentation of the specification and confirmation/audit process will be available upon request and maintained in the Operating Record. Any sample results received from a non-Washington State Accredited laboratory may be subject to an Ecology assessment and/or inspection.

2.2 Off-Site Waste (Tier 2 issue)

Issue: One of the largest number of public comments that Ecology received on the draft Rev. 9 Permit renewal in 2012 was on the receipt of Off-site waste at Hanford, including comments from the Permittees on the Off-site Waste definition in the Hanford Site-wide Permit, Rev. 9.

Background and Decision: Ecology and the Permittees met multiple times on this topic without getting to resolution. The issue was elevated to Tier 2, and the following was the final decision.

Tier 2 mutually agreed to move forward with a decision on the off-site waste. Ecology and USDOE disagreed on this issue. Ecology agreed to remove the definition of off-site waste from the draft Rev 9 Permit renewal as requested by USDOE. Ecology will proceed with including unit specific conditions for Central Waste Complex (CWC), 325 HWTU, T-Plant, Integrated Disposal Facility (IDF) or Low-Level Burial Grounds (LLBG) in the draft Rev. 9A Permit revised renewal.

These draft unit-specific permit conditions address the agreement between USDOE and Ecology on the importation of off-site waste and is consistent with the Record of Decision that USDOE issued on December 13, 2013. The following template permit condition language is proposed in the current draft Rev. 9A Permit:

> The [Unit Group Name] [Unit Group Type] Unit Group is located in the [Hanford Site Location] of the Hanford Site. The [Unit Group Name] Unit Group provides treatment, storage, or disposal of dangerous waste and/or mixed waste (MW) generated on the Hanford Facility [or other Unit Group description of waste treatment, storage or disposal activities] and [specify any off-site waste streams applicable] generated off the Hanford Facility and within the limitations and exemptions specified in USDOE's December 13, 2013 Record of Decision for the Final Tank Closure and Waste Management Environmental Impact Statement for the Hanford Site, Richland, Washington]. Permittees may manage the following wastes as described in the Waste Analysis Plan which are approved for [treatment, storage or disposal] at the [Unit Group Name] Unit Group: dangerous and/or mixed waste that is generated from processes at the Hanford Facility and [specify any off-site waste streams applicable] generated off the Hanford Facility and within the limitations and exemptions specified in USDOE's December 13, 2013 Record of Decision for the Final Tank Closure and Waste Management Environmental Impact Statement for the Hanford Site, Richland, Washington]. Changes to the wastes authorized for management at [Unit Group Name] Unit Group may be authorized via a permit modification decision pursuant to Permit Condition I.C.1. Requests for permit modifications must be accompanied by an analysis adequate for Ecology to comply with SEPA.

USDOE reserved their right to submit public comments on the draft permit conditions and appeal any final permit conditions.

2.3 Resolution for Permit Inclusion of Slurry Line Operation Information (Tier 2 Decision)

Issue: The Permittees and Ecology disagreed on addressing line plugging issues identified in the 242-A Data Quality Objectives (DQO), Rev. 8 (2022) within the text of the 242-A Evaporator Addendum B, “Waste Analysis Plan.” (WAP) There was also a disagreement on whether criteria for preventing plugging of the Slurry Line should be included in Addendum B.

Background and Decision: The Double-Shell Tank (DST) DQO addresses line plugging, reference it in the 242-A Evaporator WAP for resolution.

- This appears to address the concern for redundancy.
- Line plugging concerns are addressed via the DST DQO.
- See RPP-8532, *Double-Shell Tank Chemistry Control Data Quality Objectives* (from DST WAP DQO).

Along with references to the 242-A Evaporator DQO, the 242-A Evaporator WAP will also include a reference to the DST DQO. Tier 1 agreed that the following statement will be included in the WAP: "Line plugging concerns for the 242-A Evaporator are addressed in the DQO for the DST System."

It is noted that during Tier 1 discussions Ecology and the Permittees did not have the same issue statement. Tier 1 members addressed both issue statements in the final decision.

3.0 ADDENDUM C PROCESS INFORMATION TIER 1 AND/OR 2 DECISIONS

3.1 Process Information: Container Storage and Specifying the Number of Overpack Containers (Tier 1 issue)

Issue: Ecology and the Permittees disagreed about a Major Theme regarding the requirement for the Permittees to provide the number of empty containers and overpack drums kept at each unit group. Ecology and USDOE attempted to address a Major Theme question in the Process Conceptual Agreement Package Major Theme workshops. The stalled progress toward an agreement resulted in elevating the issue to Tier 1 to resolve the matter or to further elevate the issue to Tier 2.

Background and Decision: In the Tier 1 decision, Ecology and the Permittees agreed on the following Major Theme Agreement to meet WAC 173-303-320(1) and -320(3),

> Please specify the number of empty containers and overpack drums kept at the unit group to respond to inadequate or compromised containers; or provide a description of other provisions to address substandard containers. The time to respond must ensure protection to human health and the environment and consistent with the time allowed for responding to a leaking container.

3.2 Process Information: Tank Container Firewater Capacity (Tier 2 issue)

Issue: The Permittee and Ecology disagreed on whether or not 20 minutes of firewater capacity must be calculated as part of the hazardous waste secondary containment for those secondary containments that use sprinklers for fire suppression.

Background and Decision: Tier 1 representatives elevated this issue to Tier 2 for resolution to encourage completion of Major Theme discussions. Ecology and USDOE Tier 2 representatives agreed on the following regarding firewater capacity as it is calculated as part of the hazardous waste secondary containment for those secondary containments that use sprinklers for fire suppression:

For the tank system secondary containment design requirements, please include material specifications, design drawings, and calculations, as appropriate, documenting that all areas with automatic sprinkler systems have additional capacity to contain 20 minutes of fire water, consistent with the International Fire Code. For 325 Building, work groups will describe other methods to prevent releases of firewater as allowed by the International Fire Code.

3.3 Provision of Design Drawings for Container Storage Secondary Containment (Tier 2 issue)

Issue: The Permittee and Ecology disagreed on whether or not drawings are required to be submitted for container storage and load/unload areas to demonstrate compliance with the requirements of WAC 173-303-806(4)(b).

Background and Decision: Tier 2 representatives from the Permittees and Ecology agreed on the following;

The Permittees agree to provide information (sketches, drawings, or data) as allowed by WAC 173-303-806(4)(b), as necessary to demonstrate compliance with the container management and load/unload area standards. When available, the Permittee will provide Engineering Design drawings to address the information requirements for WAC 173-303-806(4)(b). When such drawings are not available, reasons for their unavailability will be initially documented. Ecology will consider placement of sketches or other information in the permit for the purpose of addressing WAC 173-303-806(4)(b) performance criteria for container storage areas on a unit-by-unit basis.

3.4 Double-Shell Tank AZ-301 Condensate Collection Tank (Tier 2 issue)

Issue: USDOE disagreed with Ecology that DST AZ-301 Condensate Collection Tank (AZ-301) should be included in the DST portion of the Rev 9A Permit.

Background and Decision: Referencing USDOE Letter 16-ECD-0045 and Ecology Letter 17-NWP-066, there has been a series of letters between USDOE and Ecology related to AZ-301 and Management of Condensate. In addition, this write-up does not cover the physical management of the AZ-301 condensate, which was agreed early on to routinely send it to Liquid Effluent Retention Facility (LERF)/200 Area Effluent Treatment Facility (ETF) and not back into the DSTs. If LERF/ETF is unavailable or if condensate loadout is not possible, condensate may be sent back to DSTs for safe management provided that corrosion of the DST by the condensate is prevented. This write up only describes how AZ-301 will be identified in the DST application material.

Decision:

AZ-301 will be incorporated into the DST portion of the Rev. 9A Permit as follows:

- Part A: AZ-301 will be listed in the Part A.
- WAP: Included as appropriate.

- Process Description Addendum: The DST application will be updated to describe the tank ventilation system and specifically state that the AZ-301 Tank collects condensate as a result of equipment that is in place to protect the High Efficiency Particulate Air filters. The ventilation systems are not used as treatment of the mixed waste that is in the tanks as defined by WAC 173-303. The process description will describe the AZ-301 system and what parts meet WAC requirements for things like secondary containment, and what parts of the system do not. The process description will also state that USDOE and Ecology have agreed that stating what meets the WAC requirements and what does not, will not require any upgrades to the DSTs to make them compliant with the regulations. (Basis is the Silver List Working Group.)
- Closure: Included as appropriate.
- Inspection Addendum: The DST application will be updated to identify those parts of the condensate line that can be visually inspected and those areas, which cannot be. For those areas which cannot be visually inspected it will be stated that USDOE and Ecology have agreed that modifications will not be required to meet the visual inspection requirements and will describe the alternative method of detecting potential leaks.
- Security, Preparedness and Prevention, Training, And Contingency Addenda: No information specific to AZ-301 is required.

4.0 ADDENDUM D GROUNDWATER MONITORING PLAN TIER 1 AND/OR TIER 2 DECISION

4.1 Groundwater Monitoring Plans and Compliant/Noncompliant Wells (Tier 1 issue)

Issue: Ecology and USDOE elevated an issue to ensure all groundwater wells for groundwater monitoring for Resource Conservation and Recovery Act (RCRA) unit groups in the draft Rev. 9A Permit will meet all construction standards in Chapter WAC 173-160 by the time the permit is issued.

Background and Decision: Ecology and USDOE agreed on the following,

> It is the intent that all groundwater wells used in groundwater monitoring for Resource Conservation and Recovery Act (RCRA) unit groups in the Hanford Facility Dangerous Waste Permit, Revision 9 will meet all construction standards in Chapter Washington Administrative Code (WAC) 173-160 by the time the Revision 9 Permit is issued. If it is necessary to include WAC 173-160 non-compliant wells in groundwater monitoring in the Rev. 9A Permit, USDOE and Ecology will meet to discuss inclusion of additional inspection and other requirements.

Attachment 8, *Inspection and Training Plan for Groundwater Monitoring Wells*, in the Hanford Site-wide Permit, Rev. 8C is incorporated in the Rev. 9A Permit. In addition, an inspection schedule will be added to conduct down well camera inspections at least once every ten years for carbon steel wells (non-compliant wells) at RCRA unit groups. Also included in this decision is for Attachment 8 to reference Attachment 7, *Policy on Remediation of Existing Wells and*

Acceptance Criteria for RCRA and CERCLA, June 1990 and an inspection schedule to conduct down well camera inspections at least once every ten years for carbon steel wells (non-compliant wells) at RCRA unit groups. Since this decision, Ecology determined that Attachment 7 should be removed, and it is marked reserved.

5.0 ADDENDUM E SECURITY TIER 1 AND/OR TIER 2 DECISION

5.1 Security: Underground Pipelines are Considered Active Portions (Tier 1 issue)

Issue: USDOE and Ecology discussed whether underground transfer lines were considered active portions and whether security signs were required.

Background and Decision: Ecology and the Permittees came to a Tier 1 agreement as follows,

> Underground transfer lines, such as the PC-5000, the Hanford Site cross-site transfer line, and similar underground pipelines and ancillary equipment, may be considered active portions. The underground lines are accessible through few access points, which are secured. Buried pipelines are protected from unknowing and unauthorized access by means of a soil cover. The soil cover serves as a natural barrier pursuant to WAC 173-303-310(2)(c). Buried pipelines lack gates or doors; manholes and valve pits provide points of access via concrete or metal covers. Overhead cranes and lifting equipment are required to remove the covers, which renders access to the active portion unapproachable and does not require a security sign.

5.2 Security: Required Details of Security Signs (Tier 1 issue)

Issue: USDOE and Ecology disagreed on posting signs in sufficient numbers to be seen from any approach to the active portions of the Hanford facility.

WAC 173-303-310(2) requires signs to be posted "at each entrance to the active portion[s], and at other locations, in sufficient numbers to be seen from any approach to the active portion[s]. Signs must bear the legend, 'Danger-unauthorized personnel keep out,' or an equivalent legend, written in English, and must be legible from a distance of twenty-five feet or more."

Background and Decision: Ecology and the Permittees came to a Tier 1 agreement on the following:

- Security signs must state, "Danger – unauthorized personnel keep out," or an equivalent legend that is approved by Ecology. (Other similar warning signs, i.e., radiological, asbestos, beryllium, etc. warning signs, are not equivalent to this legend.)
- Security signs must be legible from a distance of twenty-five feet.
- WAC 173-303-310(2)(a) requires that signs may be placed in sufficient numbers to be seen from any approach to the active portion. The Tier 1 decision clarifies that when one sign is no longer viewable, the next sign should be viewable. Signs may be placed at a distance of no more than 250 ft apart.

- Signs must be posted at each entrance to the active portion. When the active portion is a building, posting signs only at entrances is acceptable. When there are no doors on the back side of a building, there is no approach to the active portion, and a warning sign on the back of the building is not needed.
- Fences which are at least 6 feet (nominal) in height and are located at least 25 feet from a Dangerous Waste Management Unit (DWMU) and fences which are at least 6 feet (nominal) in height and are lined with barbed wire or similar deterrent on top satisfy access control requirements. Security signs are required along fence lines regardless of height and with or without barbed wire per WAC 173-303-310(2)(a).
    - Security signs are not required on an interior shared fence line between the active portions of two tank farms, because there is no approach to the active portion.
    - Where there is a steep hill/cliff bordering a fence line along the active portion, the active portion could be unapproachable and may not require a security sign.
    - Access control to temporary entrances used for work of a short duration can be monitored by posting a person at the location to guard against unauthorized intrusion, and security signs may not be necessary. Entrances (such as doors or gates), which are normally locked and not routinely used for access and are protected from incidental access through posting a person at the entrance or protected by some other means when open, may not require additional signage. A description of the procedure for establishing and using temporary entrances and non-routine entrances to active portions will be included in the affected unit group security addenda.

5.3 Security: 242-A Evaporator Security (Tier 1 Issue)

Issue: Ecology and USDOE disagreed on specific permit language in the Security Addendum regarding securing doors and gates.

Background and Decision: The following language is agreed upon by Tier 1 representatives for use in the 242-A Evaporator Security Addendum, “During periods when the facility is unoccupied, the 242-A Evaporator doors and gates are closed and locked with electronic and keyed locks. When the 242-A Evaporator is occupied during standard work hours, the main entrance to the 242-A Evaporator (east door) remains unlocked; all other times this entrance is locked.”

6.0 ADDENDUM G PERSONNEL TRAINING TIER 1 AND/OR TIER 2 DECISION

6.1 Training: Template Language for Training Plans (Tier 2 Decision)

Issue: USDOE and Ecology disagreed on the inclusion of waste moving equipment training in dangerous waste training plans and Permit Addendum G, “Personnel Training.”

Background and Decision: Ecology and USDOE disagreed on the Tier 1 issue to require training for the operation of specific waste equipment covered by the Occupational Safety and Health Administration. Under the Working Principles agreement, if an issue is elevated and the Permittees and Ecology do not agree, then the issue is documented as a disagreement and Ecology will write the permit to be reflective of Ecology’s position. In the Tier 2 decision, it was

documented that, “Ecology will require, enforceable through a permit condition, to satisfy RCRA training requirements for waste moving equipment, the DOE to provide training for the operation of specific waste moving equipment covered by the Occupational Safety and Health Administration. Ecology’s suggested permit condition, ‘Permittee staff that handle dangerous waste with mechanical handling equipment will be trained in accordance with 29 Code of Federal Regulations 1910, Subpart N – Material Handling and Storage.’”

USDOE did not concur with Ecology’s position that training specifically required under the authorities, absent instruction specific to dangerous waste, is within enforceable provisions of RCRA. USDOE may consider such a condition as basis for appealing the final permit. While Ecology did not include this permit condition in the Parts I and II Permit Conditions or the unit-specific permit conditions, the basis of the decision was used in discussions in which Ecology brought in additional regulations that Ecology felt were appropriate to fulfill dangerous waste requirements.

7.0 ADDENDUM I INSPECTION PLAN TIER 1 AND/OR TIER 2 DECISION

7.1 Inspection: Areas Subject to Spills (Tier 1 issue)

Issue: Ecology and USDOE disagreed that daily inspections of areas subject to spills includes container storage areas, and that when in use means whenever dangerous waste (all types) is present.

Background and Decision: According to WAC 173-303-320(2)(c), “The schedule must indicate the frequency of inspection for specific items. The frequency should be based on the rate of possible deterioration of equipment, and the probability of an environmental or human health incident. Areas subject to spills must be inspected daily when in use. At a minimum the inspection schedule must also include the applicable items and frequencies required for the specific waste management methods described in 40 C.F.R. Part 265 Subparts F through R, 265.1033, 265.1052, 265.1053, 265.1058 and 265.1084 through 265.1090, for interim status facilities and in WAC 173303-630 through 173-303-680, and 40 C.F.R. 264.1033, 264.1052, 264.1053, 264.1058 and 264.1083 through 264.1089 for final status facilities; and (*sic*)”

USDOE provided Ecology with demonstrations by contractor for all DWMUs at the Hanford site, where containers of dangerous or mixed waste are stored. The purpose of the demonstration was to show that areas used for passive storage do not pose increased probability of environmental and/or human health incidents if inspected less frequently than daily. USDOE has defined “passive storage” to mean containers in storage areas where no waste packaging, transfer, shipping, or movement activities are being performed. Ecology agrees that container storage areas which are passively storing dangerous waste or mixed waste containers do not necessarily require daily inspections.

The frequency at which inspections of container storage areas are performed should be discussed at Unit Group Workshops on Inspections. Ecology will allow USDOE to propose a schedule frequency for inspection of container storage areas, which will be based on the rate of possible deterioration of equipment, and the probability of an environmental or human health

incident. Ecology will review the frequency and justification and determine if the schedule for individual units requires more frequent inspections based on the information provided.

7.2 Inspection: At Least Weekly Inspections (Tier 1 issue)

Issue: Ecology and the USDOE disagreed where WAC 173-303 requires that inspections must be performed "at least weekly."

Background and Decision: Ecology's position is that the inspection must be performed every seven days, with no more than six days between inspections. USDOE's position is that the inspection must be performed at least once per calendar week.

Where WAC 173-303 requires that inspections must be performed "at least yearly" or "at least annually." Ecology's position is that the inspection must be performed every 365 days, with no more than 364 days between inspections. USDOE's position is that the inspection must be performed every 12 month period +/- 30 days.

WAC 173-303-630(6) *Inspections.* At least weekly, the owner or operator must inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion, deterioration, or other factors. The owner or operator must keep an inspection log including at least the date and time of the inspection, the printed name and the handwritten signature of the inspector, a notation of the observations made and the date and nature of any repairs or remedial actions taken. The log must be kept at the facility for at least five years from the date of inspection.

USDOE and its contractors will conduct no less than 52 inspections of dangerous waste containers and dangerous waste container storage areas each calendar year. These inspections will be performed weekly, looking for leaks and deterioration caused by corrosion or other factors. Weekly inspections are defined in WAC 173-303-040 as at least once during the period from Sunday to Saturday.

7.3 242-A Evaporator Inspections (Tier 1 Issues)

Ecology and the Permittees agreed to include the following inspection in the 242-A Evaporator (OUG-4) Inspection Plan (Addendum I).

Inspection of Protective Coatings for Secondary Containment Systems by a Qualified Person:

Issue: Ecology and USDOE disagreed on the inspection of Protective Coatings for Secondary Containment Systems by a qualified person.

Background and Decision: Tier 1 participants agreed to language for inspections of Protective Coatings for Secondary Containment Systems by a qualified person. The decision provides information to Ecology and the Permittees on what type of inspection will be necessary to address this issue and the inspection language is revised as follows:

- Inspection: Protective Coating Inspection by a Qualified Person.
- Frequency: 2½ years/5 years for floor surfaces normally not visible.
- Problem: Waste materials have the potential to degrade the concrete matrix and structural supports for process equipment. Protective coatings help prevent damage to

the surfaces to which they are applied should a leak occur. Defects in the coatings may be overlooked in routine inspections, or may not be visible due to protective matting, portable equipment, waste containers, or removable shielding.

- Inspection: Inspect protective coatings for defects and abnormalities which may result in the coating not being protective. Inspection of protective coatings shall be performed by an American Society for Nondestructive Testing-certified Non-Destructive Test Level 2 or equivalent inspector.
- Applies to the evaporator room, pump room, condenser room, and loadout and hot equipment storage room.

242-A Evaporator Reboiler Leak Assessment Inspection:

Issue: Ecology and USDOE disagreed on including the inspection of the Reboiler Leak Assessment every ten years in the Inspection Plan.

Background and Decision: Tier 1 representatives felt that instead of requiring this information in the Inspection Plan Addendum, that this could be provided in the Process Information Addendum.

Tier 1 members agreed to the following,

> Permit conditions and Process Information addendum will likely address scope of the integrity assessment requirements as well as the schedule. There were indications from the Ecology team that it may be possible to resolve this issue based on sufficiently addressing the IQRPE integrity assessment requirements in the Process Addendum discussion. Adequacy of integrity assessment information needs to be discussed in Process Addendum Workshops. Completion of the Process Addendum discussion on IQRPE integrity assessment requirements could result in revisitation of this issue at Tier 1.

242-A Inspection of the Caisson on the PC-5000 Line:

Issue: The Permittees and Ecology disagreed on including an inspection of Caisson MH-WTP-01 for evidence of leaks or intrusion.

Background and Decision: Tier 1 looked at the Class 2 Permit Modification 8C.2022.2F (July 14, 2022) to add leak detection mentioned in the Permittees issue paper. Based on a cursory review of the permit modification, leak detection (via sensors) in the PC-5000 transfer line will be more frequent than every ten years. The proposed permit modification includes indication of the frequency of the Independent Qualified Registered Professional Engineer (IQRPE) evaluation on a frequency of “every 10 years.” Alarm logic is included in the leak detection (addresses functionality) which allows testing from control station or control room. Information from a presentation for the permit modification indicates that detection capability at the Caisson is included in the sensors. The Conceptual Agreement Package Matrix requires the schedule for conducting tank integrity assessments. The frequency of Integrity assessments needs to be discussed in Process Addendum Workshops. Completion of the Process Addendum discussion on IQRPE assessment could result in revisitation of this issue at Tier 1.

242-A Inspection of Safety Showers and Eyewash Stations

Issue: Ecology and USDOE disagreed on evaluation criteria for Safety Showers and Eyewash Station in the 242-A Evaporator inspection schedule in the Rev 9A Permit.

Background and Decision: Tier 1 agreed that alarm check for safety showers will be conducted along with the monthly check of adequate pressure and no obstructions. The monthly inspection shall include verifying that dust caps are in place for eyewash stations.

242-A Inspection of P-B Operating Parameters:

Issue: Ecology and USDOE disagreed on whether to include inspection of P-B-1 (recirculation pump) and P-B-2 (slurry pump) operating characteristics in the Addendum I, "Inspection Plan" inspection schedule for the 242-A Evaporator.

Background and Decision: Tier 1 representatives agreed to add the inspections of P-B-1 and P-B-2, and the specifics of the inspection requirements are included in the 242-A Evaporator Addendum I. The inspections included monitoring P-B-1 Recirculation Pump Operating Characteristics and P-B-2 Slurry Pump Operating Characteristics.

242-A Inspection of Pump Room Sump Integrity:

Issue: USDOE and Ecology disagreed on including Pump Room Sump Integrity inspection, that USDOE identifies as an integrity assessment inspection, in the 242-A Evaporator Addendum I, "Inspection Plan" inspection schedule.

Background and Decision: By way of the tank system requirements in WAC-173-303-640, additional emphasis on agreement to address IIQRPE integrity assessment requirements for the pump room sump should be discussed in Process information Conceptual Agreement Package Workshops rather than addressing the integrity of the pump room sump in the Inspection Addendum. In the event such a proposal is not fully agreed to between the parties in the unit group workshops, a draft or drafts would be brought to Tier 1.

7.4 242-A Evaporator Inspections (Tier 2 Issues)

242-A Inspection of Exit Signs and Emergency Lighting

Issue: USDOE and Ecology disagreed on Inspection of Exit Signs and Emergency Lighting at 242-A; and USDOE and Ecology disagree on Inspection of Emergency Lighting Annual Battery Drawdown as Functional Test at 242-A.

Background and Decision: Tier 1 did not reach resolution on these two issue topics. The issue was elevated to Tier 2 representatives. The following provides the background and decision on this issue.

- USDOE proposed resolution including inspections as they are currently included in the WTP, Inspection Plan.
- Item: Emergency and exit lighting.
- Inspection: Test Operability.
- Frequency: Monthly.
- Method: Functional.

Primary points of disagreement include:

- Incorporated into this issue is USDOE's concern over what they consider "duplicate/overlapping regulations." This could preclude resolution on a number of inspection related issues making their way through the system.
- Ecology believes USDOE's compliance with other regulations does not preclude Ecology's requirement for the Permittees to follow similar regulations through the WAC.
- Ecology believes the inspection requirements are consistent with state regulations.
- USDOE is concerned that Ecology does not apply inspection requirements for exit signs and emergency lighting and drawdown testing similarly in other dangerous waste permits in the state of Washington.
- Parties have agreed to include monthly functional testing of emergency lighting (this was not in disagreement).

Both of these issues were elevated to Tier 2 for consideration and resolution. Tier 2 did not come to resolution on these two topics and requested that Tier 1 review and revise the decision document accordingly prior to Tier 2 signatures being applied.

The agreement to disagree assumes that Ecology will proceed with permitting based on its interpretation of the applicable requirements and incorporation of the indicated inspections in the permit, and it acknowledges USDOE's ability to comment and/or to appeal decisions based on the regulatory process outlined in the WAC.

Ecology will include the following (or similar) in the Inspection Plan of 242-A Evaporator:

Annually**:** Test emergency lights for a minimum of 1 ½ hours.

Monthly**:** Inspect exit signs are continually illuminated while the building is occupied.

Inspect exit signs are present at each point of egress and are clearly visible.

242-A Inspection of Radiation monitoring for Leak Detection

Issue: The Permittees and Ecology disagreed on including inspection of the R-C-1 Steam Condensate Radiation Monitoring System in the 242-A Evaporator Addendum I, "Inspection Plan" inspection schedule.

Background and Decision: Ecology communicated in Tier 1 that the radiation monitoring component of this inspection is only as a surrogate for the chemical component of the waste stream in the event it is released to the 200 Area Treated Effluent Disposal Facility (TEDF) (Listed waste).

Tier 2 representatives agreed on the following, "Annually the Permittee will conduct an annual (or before the start of each 242-A Evaporator campaign) functional test of the RC-1 Steam Condensate Radiation Monitoring System for the purpose of verifying response to radiation detected in the steam condensate effluent to TEDF. If the evaporator is not functioning, the annual functional test may be delayed until before the start of the next campaign. The R-C-1 Steam Condensate Radiation Monitoring System will be used as a leak detection system for dangerous waste only. Inspection requirements associated with the R-C-1 condensate

monitoring system are solely for the purpose of leak detection and are not for the purpose of regulating the radioactive component of mixed waste."

7.5 222-S Laboratory Complex Inspections (Tier 2 Issue)

222-S Complex Inspection of 219-S Functional Testing

Issue: Ecology and USDOE discussed the issue of including the 219-S Functional testing inspection in the Inspection Plan.

Background and Decision: Tier 2 reached a mutually agreed to resolution for 219-S Functional Testing that includes the inspections at issue in the inspection addenda. Ecology and USDOE are interested in moving permitting forward at the 222-S Laboratory Complex. Ecology believes their position is reflective of the requirements in the regulations and that the same basis will be used for other units if the same issue arises. USDOE believes that this testing is not necessarily a requirement under inspections (rather can be considered maintenance) and is concerned with application at other facilities but is willing to include the testing in the inspection addenda due to minimal impacts.

The following functional test for the 219-S tank system will be included in the Inspection Addenda for the 222-S Laboratory:

- Leak Detection and Level Alarms:
  - 11A Hot Cell Drains (electronically activate the test circuits, and check alarm and light functionality).
  - 222-S Drains (electronically activate the test circuits and check alarm and light functionality).
  - 219-S Sumps (electronically activate the test circuits, and check alarm and light functionality).
- Sump Pumps:
  - P7 (activate the pump and observe).
  - P9 (activate the pump and observe).

8.0 ADDENDUM J CONTINGENCY PLAN TIER 1 AND/OR TIER 2 DECISION

Building Emergency Plans (BEPs)/Facility Response Plans (FRPs) Modifications for portions of the Contingency Plan that are not subject to modification. (Tier 1 issue that affects all Unit Groups)

Issue: The Permittees and Ecology discussed the issue of managing language in Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02) that deals with non-dangerous or non-hazardous waste information and requirements.

Background and Decision: Tier 1 members agreed that changes to non-dangerous waste portions of Attachment 4 and BEPs do not require a permit modification, per WAC 173-303-350(2), and also agreed that all changes to these documents will be submitted to Ecology to maintain permit configuration control.

A standard permit condition was added to the permit that specifies the agreed-to approach for incorporation of self-implemented changes made by USDOE to DOE/RL-94-02 and BEP sections which include “non-dangerous waste (non-Hazardous Waste Management Act or non-dangerous waste regulation) provisions.” The permit condition established that non-enforceable portions of Attachment 4 or BEPs will not require a permit modification, as provided in WAC 173-303-350(2).

When USDOE makes changes to the non-dangerous waste provisions of DOE/RL-94-02, they will submit the updated document to the Ecology Project Manager through a distribution list. Ecology will incorporate the changes to DOE/RL-94-02 with the next quarter’s permit modifications. USDOE will also submit a file of the new document revision to Ecology.

Ecology will perform a document comparison of the new document file and the prior revision of the document.

9.0 ADDENDUM K POST-CLOSURE PLAN TIER 1 DECISION

Issue: Ecology and the Permittees discussed the inclusion of Coordinated Closure unit groups in the Rev. 9A Permit.

Background and Decision: Ecology and the Permittees agreed in a Tier 1 decision that Coordinated Closure Plans in Addendum H will be adequately addressed in the Post-Closure Plan (Addendum K). See Section 3.3.8.1 in the Hanford Site-wide Permit, Rev. 9A Fact Sheet for the list of unit groups that will have Coordinated Closure Plans.

Post-Closure Plan (Addendum K) content will be addressed through specific components of the Coordinated Closure Plans (Addendum H).

10.0 RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) V. DANGEROUS WASTE REFERENCES (TIER 1 DECISION)

Issue: Ecology and the USDOE discussed whether to use the term “Dangerous Waste” in place of “RCRA” in documents prepared and being prepared for the Rev. 9A Permit.

Background and Decision: For documents and addenda prepared in support of the Rev. 9A Permit, Ecology has requested that USDOE and the Hanford Contractors use the term “Dangerous Waste” rather than “RCRA.” RCRA references that are in Addenda that have already been locked down may be changed to “dangerous waste” by Ecology during preparation of the permit.

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