Documents responsive to Item 2

From:

Toebe, Wayne E

Sent:

Tuesday, July 05, 2011 1:29 PM

To:

Williams, Joel F Jr

Subject:

FW: 2336W PROCESSING AREA DIFFERENTAL PRESSURE

From: Toebe, Wayne E

Sent: Monday, February 21, 2011 8:55 AM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Bates, John A; Simmons, Fen M; Tuott, Lee C; Jackson, Dale E.

Subject: 2336W PROCESSING AREA DIFFERENTAL PRESSURE

Hello John & John,

This message conveys summary information about the discovery of equipment failure (air compressors) in 2336W at WRAP.

SUMMARY - 2336W PROCESSING AREA

At 0908 on Sunday, 2/20/11, the air compressors for the 2336W Processing Area room at WRAP were found to be inoperative. After initial troubleshooting, the duty station operating engineer was unable to restart the air compressors to provide negative pressure to this room. Although the Processing Area did not have ventilation, the ventilation system for the gloveboxes in the Processing Area continued to function. Also, there were no processing activities occurring in this area over the weekend.

At 1320 on 2/20/11, personnel were able to restart the air compressor manually and the room now has negative pressure. Radiological surveys were performed and no contamination was found. The issue associated with the air compressors has been identified as a faulty circuit board. As a precautionary measure, a portable air compressor was obtained and connected to the WRAP air compressor system to provide back-up and to support future maintenance trouble shooting activities.

Please feel free to call Lee Tuott at 376-1045 or myself at 372-2359 if you have questions or concerns.

Thank you, Wayne

From:

Toebe, Wavne E

Sent:

Tuesday, July 05, 2011 1:29 PM

To:

Williams, Joel F Jr

Subject:

FW: TEMPORARY LOSS OF PROCESS AREA VENTILATION AT WRAP

From: Toebe, Wayne E

Sent: Monday, March 14, 2011 4:40 PM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Jackson, Dale E.; Tuott, Lee C; Mortensen, A S (Stuart); Messinger, David W

Subject: TEMPORARY LOSS OF PROCESS AREA VENTILATION AT WRAP

Hello John & John,

Please see the summary below as a follow-up to my phone message regarding a temporary loss of ventilation at WRAP in the process area.

SUMMARY - TEMPORARY LOSS OF PROCESS AREA VENTILATION AT WRAP

At approximately 10:00AM on 3/12/11, the WRAP facility experienced room exhaust and room supply fan failures due to air compressor failure. The glove box ventilation system remained operational and there were no activities or occupants within the room. The air compressor was restarted at approximately 6:55PM on 3/12/11. The supply and exhaust fans 401, 201, and 202 were also restarted.

If you have questions or concerns, please call me at 521-0333.

Thank you

From:

Toebe, Wayne E

Sent:

Tuesday, July 05, 2011 1:31 PM

To:

Williams, Joel F Jr

Subject:

FW: WRAP 2404WB IDENTIFICATION OF RADIOACTIVE CONTAMINATION

From: Toebe, Wayne E

Sent: Thursday, April 28, 2011 2:24 PM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Bates, John A; Tuott, Lee C; Jackson, Dale E. Subject: WRAP 2404WB IDENTIFICATION OF RADIOACTIVE CONTAMINATION

Hello John & John,

This summary is a follow-up to my phone message regarding the identification of radioactive contamination within the 2404WB building at the WRAP facility.

SUMMARY - IDENTIFICATION OF RADIOACTIVE CONTAMINATION AT 2404WB

On 4/26/11 at approximately 8:40 AM, an estimated 20 ml of liquid was found to have wetted a section of the bottom rolled edge of Drum #0062288, a small portion of the pallet beneath it, and a spot immediately below on the floor in 2404WB. Radiological surveys (direct and smear) of the drum indicated > 1.2 million dpm/100 cm2 for alpha. No beta/gamma contamination was detected. 2404WB is now on restricted access and posted as ARA and HCA.

A recovery plan is being prepared to remove the contamination and overpack the drum. The drum has waste with beryllium contamination and therefore the recovery plan will also address beryllium requirements.

If you have any questions or concerns please contact Lee Tuott at 376-1045 or myself at 521-0333.

Thank you.

From:

Toebe, Wavne E

Sent:

Tuesday, July 05, 2011 1:32 PM

To:

Williams, Joel F Jr

Subject:

FW: WRAP 2404WB IDENTIFICATION OF RADIOACTIVE CONTAMINATION

From: Toebe, Wayne E

Sent: Thursday, May 05, 2011 2:42 PM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Bates, John A; Tuott, Lee C; Jackson, Dale E.

Subject: RE: WRAP 2404WB IDENTIFICATION OF RADIOACTIVE CONTAMINATION

Hello John & John,

Provided below is an updated summary regarding the identification of radioactive contamination at 2404WB and the subsequent recovery activities.

At approximately 0840 hrs, 4/26/2011, while inspecting drums for a waste shipment, a WRAP Nuclear Chemical Operator and Radiological Control Technician identified drum 0062288, located in Row 8 of Building 2404WB, with fluid on the bottom edge of the drum, on the pallet beneath it, and on the floor. The amount of fluid was estimated to be twenty milliliters. Surveys indicated greater than 1,200,000 disintegrations per minute (dpm) per 100 centimeters squared (100 cm²) direct alpha contamination. No beta gamma contamination was identified. At the time of the event, the area was posted as a Radiation Area (RA)/ Radioactive Material Area (RMA). No building ventilation was on at the time. No air sampling within the building was in place at the time of discovery. Drum 0062288 is a 55-gallon drum that contains primarily Transuranic-mixed waste, which is also Beryllium-contaminated, that was generated from the Hanford Site 325 Radiochemistry Building. A recovery plan was developed and implemented to over-pack the drum, clean up the release, and manage the waste generated during conduct of the recovery plan. On 5/01/11, after the first recovery entry, it was confirmed that drum 0062288 has a pin head size hole on the side of the drum approximately two inches up from the bottom edge of the drum. It was estimated that the spill had grown to 200-300 ml. The highest radiological reading of the spilled material was 33,000,000 dpm per 100 cm².

Due to the levels of contamination and the constituents in the waste, following the discovery of the release, Building 2404WB was posted as a High Contamination Area (HCA), Airborne Radioactivity Area (ARA), and a Beryllium Contamination Area (BCA). To protect workers, access to 2404-WB is restricted to properly trained workers supporting the recovery work. These workers are required to wear self-contained breathing apparatus (SCBA) and workers with a potential to contact the liquid are required to wear chemical resistant suits until contamination levels are reduced to a point where lower levels of respiratory and PPE protection are acceptable.

At this time, qualified workers are actively working to address this contamination in accordance with a recovery plan; however, it is undetermined as to when unrestricted access to the building will be possible.

It is noted that progress has been made in the implementation of the recovery plan with the successful overpacking of drum 0062288 and the wrapping of the contaminated pallet on the evening of 5/3/11.

As part of the recovery activities, the radiological control technicians (RCTs) collect air grab samples within the building each time access to 2404-WB is performed. In addition the workers have personal air monitors to collect data. In review of the data collected to date, the highest levels of airborne radioactive contamination found are around 12.5 derived air concentrations (DAC) in the grab samples from the immediate spill area and about 12.5 DAC-hr for personnel working in that area. Samples taken from 8-10' back from the spill have found no airborne radioactive contamination. For the

monitors employed outside the 8-10 ft area, 1 DAC-hr is used as the lower detection value so there may be very low levels of airborne radioactivity outside the 8-10 ft area, but they were below the threshold for detection. Air samples are also taken outside the door when access or egress to the building is achieved and those samples have found no airborne radioactive contamination. Surveys are also taken at the 2404-WB doors and vents and no contamination has been found. In summary, low levels of airborne radioactive contamination has been detected in the immediate area of the spill. Upon moving out from the spill, there has been no detectable airborne radioactive contamination identified by the air monitoring and no release of contamination from the building identified by surveys of the doors and vents.

As the recovery activities proceed, a methodical approach to decontaminating the spill area will be implemented that protects workers and avoids the spread of contamination.

If you have any questions or concerns please contact Lee Tuott at 376-1045 or myself at 521-0333.

From: Toebe, Wayne E

Sent: Thursday, April 28, 2011 2:24 PM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Bates, John A; Tuott, Lee C; Jackson, Dale E. **Subject:** WRAP 2404WB IDENTIFICATION OF RADIOACTIVE CONTAMINATION

Hello John & John,

This summary is a follow-up to my phone message regarding the identification of radioactive contamination within the 2404WB building at the WRAP facility.

SUMMARY - IDENTIFICATION OF RADIOACTIVE CONTAMINATION AT 2404WB

On 4/26/11 at approximately 8:40 AM, an estimated 20 ml of liquid was found to have wetted a section of the bottom rolled edge of Drum #0062288, a small portion of the pallet beneath it, and a spot immediately below on the floor in 2404WB. Radiological surveys (direct and smear) of the drum indicated > 1.2 million dpm/100 cm2 for alpha. No beta/gamma contamination was detected. 2404WB is now on restricted access and posted as ARA and HCA.

A recovery plan is being prepared to remove the contamination and overpack the drum. The drum has waste with beryllium contamination and therefore the recovery plan will also address beryllium requirements.

If you have any questions or concerns please contact Lee Tuott at 376-1045 or myself at 521-0333.

Thank you.

From:

Toebe, Wayne E

Sent:

Tuesday, July 05, 2011 1:32 PM

To:

Williams, Joel F Jr

Subject:

FW: PLANNED OUTAGE FOR WRAP 2336-W AND SHUTDOWN OF THE PROCESS AREA

EXHAUST SYSTEM

From: Toebe, Wayne E

Sent: Friday, May 06, 2011 3:38 PM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Bates, John A; Tuott, Lee C; Collins, Michael S; Jackson, Dale E.; Simmons, Fen M;

Rasmussen, James E

Subject: PLANNED OUTAGE FOR WRAP 2336-W AND SHUTDOWN OF THE PROCESS AREA EXHAUST SYSTEM

Hello John & John,

As discussed during the Technical Exchange Meeting on May 20th, WRAP plans to conduct an outage to perform beryllium sampling of the electrical distribution equipment in building 2336-W. Consistent with the discussion on May 20th, the outage will be performed within the agreed controls and monitoring of the ALARACT #28, "Shutdown of Stack System(s) (Maintenance and incidental)." The following is information on the planned outage and the controls that will be implemented:

This outage is currently scheduled to be performed starting at 15:00 on Thursday, May 12. The outage will shut down power to the air distribution system in the process area. As the process area and the associated stack are subject to the Notice of Construction (NOC) #638, Construction and operation of the Waste Receiving and Processing (WRAP) Facility, AIR 08-802, this information on the temporary shutdown of the air distribution system has been developed.

This shutdown will use the controls as identified in ALARCT 28. The shutdown is planned to begin at approximately 15:00 and is scheduled to not exceed 48 hours from the time of the power shutdown of the system to the restart of the system.

The following radiological controls will be implemented through written work instruction:

- 1. If the power to the WRAP air distribution systems will be shutdown for more than 48 hours, Washington Department of Health (WDOH) will be contacted and the continued monitoring and airborne controls will be discussed.
- 2. RCTs will perform radiological swipe surveys daily (during normal work days when this activity is being performed) on a representative few normally accessible outer facility doors. If an increase in removable (smearable) contamination is detected in any of the sampled locations during the period of shutdown, WDOH will be notified and informed of the containment measures to be taken.
- 3. Waste processing activities will not be performed during the outage. In addition, operational activities will be placed in a safe configuration prior to the outage.
- 4. RCTs will monitor during the outage to ensure that the activities are being performed in a manner that controls potential radiological emissions.

If due to unforeseen circumstances this outage is rescheduled, WDOH will be notified.

If you have any questions or need additional information, please contact me at 521-0333 or Lee Tuott at 376-1045.

From:

Toebe, Wayne E

Sent:

Tuesday, July 05, 2011 1:32 PM

To:

Williams, Joel F Jr

Subject:

FW: TEMPORARY LOSS OF VENTILATION AT VARIOUS LOCATIONS

From: Toebe, Wayne E

Sent: Monday, May 16, 2011 5:04 PM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Bates, John A; Rasmussen, James E; Tuott, Lee C; Jackson, Dale E.; Collins, Michael S;

Simmons, Fen M; Cawrse, Allan E

Subject: TEMPORARY LOSS OF VENTILATION AT VARIOUS LOCATIONS

Hello John & John,

This message is a follow-up to my phone call regarding temporary loss of ventilation (and a sample pump) at various facilities during the weekend's storm.

SUMMARY - TEMPORARY LOSS OF VENTILATION AT VARIOUS HANFORD FACILITIES

Exhaust Fans 291U-EF-2 (U-Plant) and 291-S-EF-1 (REDOX) experienced loss of ventilation on 5/14/11, at approximately 12:52 AM due to adverse weather. The outages were discovered by the Stationary Equipment Operator and have been restored to service.

Exhaust Fan EF-V11-1 (PUREX) is operational, but EF-V11-3 is currently inoperable due to bus outage caused by adverse weather (system is currently undergoing restoration). Additionally, the PUREX stack sample pump P-V19-1 shut down due to pump failure. The outage was discovered by the Stationary Equipment Operator and P-V19-3 has been started (P-V19-1 and P-V19-2 are out of service).

The WRAP facility experienced a loss of process area ventilation on 5/14/11, at approximately 1:41 AM due to adverse weather. The system was restarted on 5/14/11, at approximately 6:10 AM.

If you have any questions, please call me at 521-0333.

Thank you.

From:

Toebe, Wavne E

Sent:

Tuesday, July 05, 2011 1:32 PM

To:

Williams, Joel F Jr

Subject:

FW: WRAP 2404WB IDENTIFICATION OF RADIOACTIVE CONTAMINATION

From: Toebe, Wayne E

Sent: Friday, June 03, 2011 2:23 PM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Bates, John A; Tuott, Lee C; Jackson, Dale E.; Flyckt, Don L

Subject: RE: WRAP 2404WB IDENTIFICATION OF RADIOACTIVE CONTAMINATION

Hello John & John,

Provided below is an updated summary regarding the status of the radioactive contamination recently found to have leaked from a container at 2404WB, and the subsequent recovery activities. Related messages (4/28/11 and 5/5/11) are provided below for your reference.

WRAP personnel have been implementing a recovery plan that methodically addresses the leak associated with the waste drum that was stored in 2404-WB. After initial discovery of the contaminated liquid, the 2404WB building was secured and a re-entry recovery plan was prepared to assess and mitigate the situation. Upon re-entry under the recovery plan, it was discovered that the source of the contaminated liquid was a leaking drum. The total amount of leaked material to our containment pad within 2404WB is now estimated to be 2000 ml covering an area of approximately 10.8 ft². The leakage has since stopped.

WRAP personnel have implemented a recovery plan and the leaking drum is now overpacked, the contaminated pallets are wrapped, and the areas of high surface contamination due to the leak have been covered with baking soda, soil cement, and a filtered tarp. Following these airborne control measures to address the surface contamination, an air sampler was placed in the immediate proximity to the leak and to date there has been no airborne contamination detected. Tarps have also been placed on the floor extending beyond the spill area. The tarps beyond the spill area will be methodically removed and the floor confirmed free of contamination. The tarp covering the leaked waste will remain until a radiological containment tent (approximately 12'x12') and support rooms to be ventilated with a PTRAEU (AIR 06-1025) are constructed and operated in compliance with the existing PTRAEU categorical license. At this time, a portable exhauster that has been used in the WRAP 2336W process area is being evaluated for use. The portable exhauster is a NFSRPS Model SP 700 that provides flow rates ranging from 580 CFM to 735 CFM. The construction of the containment tent is planned to be initiated by mid-June.

As part of the operational activities at WRAP, the two existing 2404-WB exhaust fans (each individually rated at 16,700 cfm) are planned to be turned on when the weather conditions warm. This is currently scheduled for June 6. Based on (1) the control measures that have been provided, such as the covering of the spill, (2) the air monitoring activities in the proximity of the spill (which will be continued), and (3) the indication of no detected airborne contamination, we believe that it is acceptable to turn the 2404-WB exhaust fans on at this time. The information submitted to you on 5/5/2011 by email will continue to be followed.

If you have any questions or concerns please contact Lee Tuott at 376-1045 or myself at 521-0333.

Thank you.

From: Toebe, Wayne E

Sent: Thursday, May 05, 2011 2:42 PM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Bates, John A; Tuott, Lee C; Jackson, Dale E.

Subject: RE: WRAP 2404WB IDENTIFICATION OF RADIOACTIVE CONTAMINATION

Hello John & John,

Provided below is an updated summary regarding the identification of radioactive contamination at 2404WB and the subsequent recovery activities.

At approximately 0840 hrs, 4/26/2011, while inspecting drums for a waste shipment, a WRAP Nuclear Chemical Operator and Radiological Control Technician identified drum 0062288, located in Row 8 of Building 2404WB, with fluid on the bottom edge of the drum, on the pallet beneath it, and on the floor. The amount of fluid was estimated to be twenty milliliters. Surveys indicated greater than 1,200,000 disintegrations per minute (dpm) per 100 centimeters squared (100 cm²) direct alpha contamination. No beta gamma contamination was identified. At the time of the event, the area was posted as a Radiation Area (RA)/ Radioactive Material Area (RMA). No building ventilation was on at the time. No air sampling within the building was in place at the time of discovery. Drum 0062288 is a 55-gallon drum that contains primarily Transuranic-mixed waste, which is also Beryllium-contaminated, that was generated from the Hanford Site 325 Radiochemistry Building. A recovery plan was developed and implemented to over-pack the drum, clean up the release, and manage the waste generated during conduct of the recovery plan. On 5/01/11, after the first recovery entry, it was confirmed that drum 0062288 has a pin head size hole on the side of the drum approximately two inches up from the bottom edge of the drum. It was estimated that the spill had grown to 200-300 ml. The highest radiological reading of the spilled material was 33,000,000 dpm per 100 cm².

Due to the levels of contamination and the constituents in the waste, following the discovery of the release, Building 2404WB was posted as a High Contamination Area (HCA), Airborne Radioactivity Area (ARA), and a Beryllium Contamination Area (BCA). To protect workers, access to 2404-WB is restricted to properly trained workers supporting the recovery work. These workers are required to wear self-contained breathing apparatus (SCBA) and workers with a potential to contact the liquid are required to wear chemical resistant suits until contamination levels are reduced to a point where lower levels of respiratory and PPE protection are acceptable.

At this time, qualified workers are actively working to address this contamination in accordance with a recovery plan; however, it is undetermined as to when unrestricted access to the building will be possible.

It is noted that progress has been made in the implementation of the recovery plan with the successful overpacking of drum 0062288 and the wrapping of the contaminated pallet on the evening of 5/3/11.

As part of the recovery activities, the radiological control technicians (RCTs) collect air grab samples within the building each time access to 2404-WB is performed. In addition the workers have personal air monitors to collect data. In review of the data collected to date, the highest levels of airborne radioactive contamination found are around 12.5 derived air concentrations (DAC) in the grab samples from the immediate spill area and about 12.5 DAC-hr for personnel working in that area. Samples taken from 8-10' back from the spill have found no airborne radioactive contamination. For the monitors employed outside the 8-10 ft area, 1 DAC-hr is used as the lower detection value so there may be very low levels of airborne radioactivity outside the 8-10 ft area, but they were below the threshold for detection. Air samples are also taken outside the door when access or egress to the building is achieved and those samples have found no airborne radioactive contamination. Surveys are also taken at the 2404-WB doors and vents and no contamination has been found. In summary, low levels of airborne radioactive contamination has been detected in the immediate area of the spill. Upon moving out from the spill, there has been no detectable airborne radioactive contamination identified by the air monitoring and no release of contamination from the building identified by surveys of the doors and vents.

As the recovery activities proceed, a methodical approach to decontaminating the spill area will be implemented that protects workers and avoids the spread of contamination.

If you have any questions or concerns please contact Lee Tuott at 376-1045 or myself at 521-0333.

From: Toebe, Wayne E

Sent: Thursday, April 28, 2011 2:24 PM

To: 'Martell, P John (DOH)'; 'Schmidt, John W (DOH)'

Cc: 'Berven, Shawna D (DOH)'; Bates, John A; Tuott, Lee C; Jackson, Dale E. Subject: WRAP 2404WB IDENTIFICATION OF RADIOACTIVE CONTAMINATION

Hello John & John,

This summary is a follow-up to my phone message regarding the identification of radioactive contamination within the 2404WB building at the WRAP facility.

SUMMARY - IDENTIFICATION OF RADIOACTIVE CONTAMINATION AT 2404WB

On 4/26/11 at approximately 8:40 AM, an estimated 20 ml of liquid was found to have wetted a section of the bottom rolled edge of Drum #0062288, a small portion of the pallet beneath it, and a spot immediately below on the floor in 2404WB. Radiological surveys (direct and smear) of the drum indicated > 1.2 million dpm/100 cm2 for alpha. No beta/gamma contamination was detected. 2404WB is now on restricted access and posted as ARA and HCA.

A recovery plan is being prepared to remove the contamination and overpack the drum. The drum has waste with beryllium contamination and therefore the recovery plan will also address beryllium requirements.

If you have any questions or concerns please contact Lee Tuott at 376-1045 or myself at 521-0333.

Thank you.



Department of Energy

Richland Operations Office P.O. Box 550 Richland, Washington 99352

11-EMD-0055

MAY 1 3 2011

Mr. E. R. Skinnarland Nuclear Waste Program State of Washington Department of Ecology 3100 Port of Benton Boulevard Richland, Washington 99354

Dear Mr. Skinnarland:

NOTIFICATION OF INABILITY TO PERFORM RESOURCE CONSERVATION AND RECOVERY ACT INSPECTIONS OF CONTAINER STORED IN THE 2404-WB BUILDING AT THE WASTE RECEIVING AND PROCESSING (WRAP) FACILITY

With this letter the U. S. Department of Energy Richland Operations Office (RL) is notifying Ecology that due to circumstances beyond its control, required weekly inspections of containers stored in the 2404-WB building at the WRAP facility have been temporarily stopped. The information below provides an explanation of the situation causing the inspections to be stopped. Radiological safety requirements under the Atomic Energy Act mandate that access to the building be restricted until the situation causing the potential exposure problem has been corrected. Inspections of the containers stored in 2404-WB will resume as soon as possible.

At approximately 8:40 a.m. on April 26, 2011, while inspecting drums for a waste shipment, a WRAP Nuclear Chemical Operator and Radiological Control Technician identified drum 0062288, located in Row 8 of Building 2404-WB, with fluid on the bottom edge of the drum, on the pallet beneath it, and on the floor. The amount of fluid was estimated to be twenty milliliters (ml). Surveys indicated greater than 1,200,000 disintegrations per minute (dpm) per 100 centimeters squared (100 cm2) direct alpha contamination. No beta gamma contamination was identified. At the time of the event, the area was posted as a Radiation Area/Radioactive Material Area. No building ventilation was on at the time. No air sampling was in place at the time of discovery. Drum 0062288 is a 55-gallon drum that contains beryllium-contaminated, transuranic-mixed waste that was generated from the Hanford Site 300 Area. A recovery plan was developed and implemented to over-pack the drum, clean up the release, and manage the waste generated during conduct of the recovery plan. On May 1, 2011, after the first recovery entry, it was confirmed that drum 0062288 has a pin head size hole on the side of the drum approximately two inches up from the bottom edge of the drum. It was estimated that the spill had grown to 200-300 ml. The highest radiological reading of the spilled material was 33,000,000 dpm per 100 cm2 direct alpha.

Due to the levels of contamination and the constituents in the waste, Building 2404-WB was immediately posted as a High Contamination Area, Airborne Radioactivity Area, and a Beryllium Contamination Area at the time of discovery. To protect workers, access to 2404-WB

Mr. E. R. Skinnarland 11-EMD-0055

-2-

is restricted to properly trained workers supporting the recovery work. These workers are required to wear self-contained breathing apparatus and chemical resistant suits until contamination levels are reduced requiring lower levels of respiratory and personal protective equipment.

As this release was discovered on April 26, 2011, the weekly dangerous waste inspection for 2404-WB could not be performed. In addition, it is not expected that the weekly inspection personnel will be able to access the building until the contamination is cleaned up. At this time, qualified workers are actively working to address this contamination in accordance with a recovery plan; however, it is undetermined as to when access to the building to perform weekly inspections will be possible. It is noted that progress has been made in the implementation of the recovery plan with the overpacking of drum 0062288 and the wrapping of the contaminated pallet on the evening of May 3, 2011.

If you have any questions, please contact me, or your staff may contact Larry D. Romine, on (509) 376-4747.

Sincerely,

Stephen R. Weil, Director

Environmental Management Division

EMD:CEC



Department of Energy

Richland Operations Office P.O. Box 550 Richland, Washington 99352

11-EMD-0064

JUN 0 8 2017

Mr. E. R. Skinnarland Nuclear Waste Program State of Washington Department of Ecology 3100 Port of Benton Boulevard Richland, Washington 99354

Dear Mr. Skinnarland:

NOTIFICATION THAT THE RESOURCE CONSERVATION AND RECOVERY ACT INSPECTIONS OF CONTAINER STORED IN THE 2404-WB BUILDING AT THE WASTE RECEIVING AND PROCESSING (WRAP) FACILITY HAVE RESUMED

With this letter the U. S. Department of Energy Richland Operations Office (RL) is notifying the State of Washington Department of Ecology that required weekly inspections of containers stored in the 2404-WB Building at the WRAP facility have resumed. The radiological safety requirements under the Atomic Energy Act that mandated the access to the building be restricted have been corrected. Inspections of the containers stored in 2404-WB resumed on May 24, 2011. The four missed weekly inspections were recorded in the facility inspection log.

A recovery plan for the 2404-WB Building was developed and implemented. Drum 0062288 was decontaminated, patched, plastic wrapped, and placed into a reinforced 10 ml plastic liner with three "Bat Mats" under the drum. The bagged drum was over-packed into an 85 gallon drum with 10 pounds of sodium bicarbonate poured into the annular space. The drum was then placed on a secondary containment pallet within 2404-WB. The 2404-WB Building floor and surrounding drum pallets have been decontaminated and the building has been placed back in operation.

Drum 0062288 was one of fifteen drums from the 325 Building placed in the 218-W-4C trench 4 in 1979. The original Hanford Engineering Development Laboratory (HEDL)-63 drum was repacked into two "daughter" drums, one of which was drum 0062288. The other daughter drum, 0061308, has also been set on a containment pallet. The remaining 325 Building HEDL waste stream drums have been located and placed on secondary containment pallets. Until further characterization can be completed all the drums have been labeled as "corrosive," have the waste code D002 applied in the Solid Waste Information and Tracking System database, the pH identifier as pH less than two, the storage category updated to "A" for Acids, and the physical type changed to L/S (liquid/solid).

If you have any questions, please contact me, or your staff may contact Larry D. Romine, on (509) 376-4747.

Sincerely,

Stephen R. Weil, Director

Environmental Management Division

Atole Pleat

EMD:ACM

cc: J. Biebesheimer, Ecology

K. Conaway, Ecology

D. G. Singleton, Ecology

Ecology NWP Library

Environmental Portal, LMSI, A3-95

Administrative Record, TSD: TS-2-4 (WRAP)

HF Operating Record (S. Thompson, MSA, H7-28)

Documents responsive to Item 7

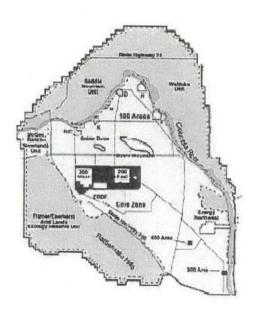
Revision Number: 8C



Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion

Revision 8C

For the Treatment, Storage, and Disposal of Dangerous Waste



Washington State Department of Ecology Nuclear Waste Program

September 2010

Revision Number: 8C

Class 1 Modification September 30, 2010

For additional copies of this permit contact:

Washington State Department of Ecology 3100 Port of Benton Boulevard Richland, Washington 99354-1670 509-372-7950

The Department of Ecology is an equal-opportunity agency and does not discriminate on the basis of race, creed, color disability, age, religion, national origin, sex, marital status, disabled-veteran status, Vietnam-era veteran status or sexual orientation.

For more information or if you have special accommodation needs, please contact the Nuclear Waste Program at (509) 372-7950.

Department of Ecology Headquarters telecommunications device for the deaf (TDD) number is: $(360)\ 407-6006$

Expiration Date: September 27, 2004 Revision Number: 8C Page 1 of 42

DANGEROUS WASTE PORTION OF THE 1 2 RESOURCE CONSERVATION AND RECOVERY ACT PERMIT 3 FOR THE TREATMENT, STORAGE, AND DISPOSAL OF DANGEROUS WASTE

- 4 Washington State Department of Ecology
- Nuclear Waste Program 5
- 6 3100 Port of Benton Boulevard
- 7 Richland, Washington 99354
- 8 Telephone: 509-372-7950
- 9 Issued in accordance with the applicable provisions of the Hazardous Waste Management Act,
- Chapter 70.105 Revised Code of Washington (RCW), and the regulations promulgated there under in 10
- Chapter 173-303 Washington Administrative Code (WAC). 11

ISSUED TO: 12

United States Department of Energy

Richland Operations Office

(Owner/Operator)

P.O. Box 550, MSIN A7-50

Richland, Washington 99352

Telephone: (509) 376-7395

Mission Support Alliance

2490 Garlick, MSIN H1-30

Richland, Washington 99354

Telephone: (509) 376-1310

Washington Closure Hanford, LLC

(Co-operator)

2620 Fermi Avenue, MSIN H4-24

Richland, Washington 99354

Telephone: (509) 372-9951

Pacific Northwest National Laboratory

(Co-operator)

P.O. Box 999, MSIN K1-46

Richland, Washington 99352

Telephone: (509) 375-5911

United States Department of Energy

Office of River Protection

(Owner/Operator)

P.O. Box 450, MSIN H6-60

Richland, Washington 99352

Telephone: (509) 372-3062

Bechtel National, Inc.

(Co-Operator)

2435 Stevens Center Place MSIN H4-02

Richland, Washington 99354

Telephone: (509) 371-2335

Washington River Protection Solutions, LLC

(Co-operator)

P.O. Box 1500, MSIN H6-63

Richland, Washington 99352

Telephone: (509) 372-9138

CH2MHILL Plateau Remediation Company

(Co-operator)

P.O. Box 1600, MSIN H7-30

Richland, Washington 99352

Telephone: (509) 376-0556

- 13 This Permit as modified on October 22, 2007, will remain in effect until reissuance of the
- September 27, 2004 Permit, unless revoked and reissued under WAC 173-303-830(3), terminated under 14
- WAC 173-303-830(5), or continued in accordance with WAC 173-303-806(7). 15
- 16 ISSUED BY:

18

WASHINGTON STATE DEPARTMENT OF ECOLOGY 17

Jane A. Hedges, Program Manager 19

Nuclear Waste Program, Department of Ecology 20

Permit Number: WA7 89000 8967 Expiration Date: September 27, 2004
Revision Number: 8C Page 2 of 42

1

TABLE OF CONTENTS

2	LIST OF ATTACHMENTS4			
3	INTRODUCTION			
4	UNIT STATUS TABLE			
5	DEFINITIONS			
6	ACRONYMS			
7	PART I	STANDARD CONDITIONS	15	
8	I.A	EFFECT OF PERMIT	15	
9	I.B	PERSONAL AND PROPERTY RIGHTS	16	
10	I.C	PERMIT ACTIONS	-	
11	I.D	SEVERABILITY		
12	I.E	DUTIES AND REQUIREMENTS		
13	I.F	SIGNATORY REQUIREMENT		
14	I.G	CONFIDENTIAL INFORMATION		
15	I.H	DOCUMENTS TO BE MAINTAINED AT FACILITY SITE	22	
16	PART II	GENERAL FACILITY CONDITIONS		
17	II.A	FACILITY CONTINGENCY PLAN		
18	II.B	PREPAREDNESS AND PREVENTION		
19	II.C	PERSONNEL TRAINING		
20	II.D	WASTE ANALYSIS		
21	II.E	QUALITY ASSURANCE/QUALITY CONTROL		
22	II.F	GROUND WATER AND VADOSE ZONE MONITORING		
23	II.G	SITING CRITERIA		
24	II.H	RECORDKEEPING AND REPORTING		
25	II.I	FACILITY OPERATING RECORD		
26	II.J	FACILITY CLOSURE		
27	II.K	SOIL/GROUND WATER CLOSURE PERFORMANCE STANDARDS		
28	II.L	DESIGN AND OPERATION OF THE FACILITY		
29	II.M	SECURITY	31	
30	II.N	RECEIPT OF DANGEROUS WASTES GENERATED OFF-SITE		
31	II.O	GENERAL INSPECTION REQUIREMENTS		
32	II.P	MANIFEST SYSTEM		
33	II.Q	ON-SITE TRANSPORTATION		
34	II.R	EQUIVALENT MATERIALS		
35	II.S	LAND DISPOSAL RESTRICTIONS (LDR)		
36	II.T	ACCESS AND INFORMATION		
37	II.U	MAPPING OF UNDERGROUND PIPING		
38	II.V	MARKING OF UNDERGROUND PIPING		
39	II.W	OTHER PERMITS AND/OR APPROVALS		
40	II.X	SCHEDULE EXTENSIONS		
41	II.Y	CORRECTIVE ACTION		
42	II.Z	WASTE MINIMIZATION	40	
43	II.AA	AIR EMISSION STANDARDS FOR PROCESS VENTS		
44	II.BB	AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS	40	
45 46	II.CC	AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS	40	
47	PART III	UNIT-SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS	41	

	Revision Number: 8C	Expiration Date:	September 27, 2004 Page 3 of 42
	PART IV UNIT SPECIFIC CONDITIONS FOR CORRECTIVE	E ACTION	41
2	PART V UNIT-SPECIFIC CONDITIONS FOR UNITS UNDE	ERGOING CLOSUF	RE41
3	PART VI UNIT-SPECIFIC CONDITIONS FOR UNITS IN PO	ST-CLOSURE	41
ļ	UNITS RETIRED FROM THE PERMIT		41

5

Revision Number: 8C Page 4 of 42

List of Attachments

1

23

2 The following listed documents are attached in their entirety. However, only those portions of the

- 3 attachments specified in Parts I through VI are enforceable conditions of this Permit and subject to the
- 4 permit modification requirements of Permit Condition I.C.3. Changes to portions of the attachments,
- which are not subject to the permit modification process, will be addressed in accordance with Permit
- 6 Conditions I.E.8, I.E.11, I.E.13, I.E.15, through I.E.20, and I.E.22. Ecology has, as deemed necessary,
- 7 modified specific language in these attachments. These modifications are described in the conditions
- 8 (Parts I through VI), and thereby supersede the language of the attachment.

9 10	Attachment 1	Hanford Federal Facility Agreement and Consent Order, (as amended) http://www.hanford.gov/tpa/coverpg.htm
11 12	Attachment 2	Hanford Facility Legal Description, from Class ¹ 1 modification, dated January 7, 1999
13	Attachment 3	Security, dated September 30, 2010
14 15	Attachment 4	Hanford Emergency Management Plan, DOE/RL-94-02 Revision 2, as amended and approved modifications
16	Attachment 5	Hanford Facility Personnel Training Program, dated September 30, 2010
17	Attachment 6	Reports and Records, dated September 30, 2010
18 19	Attachment 7	Policy on Remediation of Existing Wells and Acceptance Criteria for RCRA and CERCLA, June 1990
20	Attachment 8	Hanford Well Maintenance and Inspection Plan, BHI-01265, Revision 0, May 1999
21	Attachment 9	Permit Applicability Matrix, dated September 30, 2010
22	Attachment 10	Purgewater Management Plan, July 1990

Revision Number: 8C Page 5 of 42

Introduction

1

- 2 Where information regarding treatment, management, and disposal of the radioactive source, byproduct
- 3 material, special nuclear material (as defined by the Atomic Energy Act of 1954, as amended) and/or the
- 4 radionuclide component of mixed waste has been incorporated into this permit, it is not incorporated for
- 5 the purpose of regulating the radiation hazards of such components under the authority of this permit or
- 6 Chapter 70.105 RCW.
- 7 Pursuant to Chapter 70.105 RCW, the Hazardous Waste Management Act (HWMA) of 1976, as
- 8 amended, Chapter 70.105D RCW, the Model Toxics Control Act (MTCA), and regulations promulgated
- 9 there under by the Washington State Department of Ecology (hereafter called Ecology), codified in
- 10 Chapter 173-303 Washington Administrative Code (WAC), Dangerous Waste Regulations, a Dangerous
- Waste Permit is issued to the United States Department of Energy (USDOE) Richland Operations Office
- 12 (RL) and Office of River Protection (ORP) [owner/operator], and its contractors [co-operators], Bechtel
- National, Incorporated (BNI), CH2MHILL Plateau Remediation Company (CHPRC), Mission Support
- 14 Alliance, LLC (MSA)], Pacific Northwest National Laboratory (PNNL), Washington Closure
- 15 Hanford, LLC (WCH), and Washington River Protection Solutions, LLC (WRPS) and hereafter called the
- Permittees, for the treatment, storage, and disposal of dangerous waste at the Hanford Facility.
- 17 This Dangerous Waste Permit, issued in conjunction with the United States Environmental Protection
- 18 Agency's (hereafter called EPA) Hazardous and Solid Waste Amendments Portion of the Resource
- Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal (TSD) of
- Hazardous Waste (HSWA Permit), constitutes the RCRA Permit for the Hanford Facility. Use of the
- 21 term "Permit" within the Dangerous Waste Permit will refer to the Dangerous Waste Permit, while use of
- 22 the term "Permit" within the HSWA Permit, will refer to the HSWA Permit. Use of the same term in both
- 23 the Dangerous Waste Permit and the HSWA Permit, will have the standard meaning associated with the
- 24 activities addressed by the permit in which the term is used. Such meanings will prevail, except where
- 25 specifically stated otherwise.
- 26 The Permittees will comply with all terms and conditions set forth in this Permit and those portions of the
- 27 Attachments that have been specifically incorporated into this Permit. When the Permit and the
- Attachments (except Permit Attachment 1) conflict, the wording of the Permit will prevail. The Permit is
- 29 intended to be consistent with the terms and conditions of the Hanford Federal Facility Agreement and
- 30 Consent Order (HFFACO, Permit Attachment 1). The Permittees will also comply with all applicable
- 31 state regulations, including Chapter 173-303 WAC.
- 32 Applicable state regulations are those which are in effect on the date of issuance, or as specified in
- 33 subsequent modifications of this Permit. In addition, applicable state regulations include any self-
- 34 implementing statutory provisions and related regulations which, according to the requirements of the
- 35 HWMA, as amended, or other law(s), are automatically applicable to the Permittees' dangerous waste
- management activities, notwithstanding the conditions of this Permit.
- 37 This Permit is based upon the Administrative Record, as required by WAC 173-303-840. The Permittees'
- failure in the application, or during the Permit issuance process, to fully disclose all relevant facts, or the
- 39 Permittees' misrepresentation of any relevant facts at any time, will be grounds for the termination or
- 40 modification of this Permit and/or initiation of an enforcement action, including criminal proceedings.
- 41 The Permittees will inform Ecology of any deviation from the Permit conditions, or changes in the
- 42 information on which the application is based, which would affect either the Permittees' ability to
- comply, or actual compliance with the applicable regulations or the Permit conditions, or which alters any
- 44 condition of this Permit in any way.

Revision Number: 8C Page 6 of 42

1 Ecology will enforce all conditions of this Permit for which the State of Washington is authorized, or

- which are "state-only" provisions (i.e., conditions broader in scope or more stringent than the federal
- 3 RCRA program). Any challenges of any Permit condition may be appealed in accordance with
- 4 WAC 173-303-845. In the event that any Permit condition is challenged by any Permittee under
- 5 WAC 173-303-845, Ecology may stay any such Permit condition as it pertains to all Permittees, in
- 6 accordance with the same terms of any stay it grants to the challenging Permittee. If such a stay is
- 7 granted, it will constitute a "stay by the issuing agency" within the meaning of RCW 43.21B.320(1).
- 8 This Permit has been developed to allow a step-wise permitting process of the Hanford Facility to ensure
- 9 the proper implementation of the <u>HFFACO</u>. In order to accomplish this, this Permit consists of six (6)
- 10 parts.
- Part I, Standard Conditions, contains conditions which are similar to those appearing in all dangerous
- waste permits.
- 13 Part II, General Facility Conditions, combines typical dangerous waste permit conditions with those
- 14 conditions intended to address issues specific to the Hanford Facility. Where appropriate, the general
- facility conditions apply to all final status dangerous waste management activities at the Facility. Where
- appropriate, the general facility conditions also address dangerous waste management activities which
- may not be directly associated with distinct TSD units, or which may be associated with many TSD units
- 18 (i.e., spill reporting, training, contingency planning, etc.). Part II also includes conditions that address
- 19 corrective action at solid waste management units and areas of concern.
- 20 Part III, Unit-Specific Conditions for Operating Units, contains those Permit requirements that apply
- 21 to each individual TSD unit operating under final status. Conditions for each TSD unit are found in a
- 22 chapter dedicated to that TSD unit. These unit-specific chapters contain references to Standard
- 23 Conditions (Part I) and General Conditions (Part II), as well as additional requirements which are
- intended to ensure that each TSD unit is operated in an efficient and environmentally protective manner.
- Additional requirements may also be added when an operating unit ceases operations and undergoes
- 26 closure.
- 27 Part IV, Unit-Specific Conditions for Corrective Action, contains those permit requirements which
- 28 apply to specific RPP units that are undergoing corrective action under the HFFACO. RPP units may
- 29 include solid waste management units and other areas of concern (i.e., releases that are not at solid waste
- 30 management units and do not constitute a solid waste management unit) that are undergoing corrective
- 31 action. For The Comprehensive Environmental Response, Conservation, and Liability Act (CERCLA)
- and RCRA past practice (RPP) units identified in the HFFACO, the corrective action conditions are
- 33 structured around continued coordination with, and reliance on, the investigation and cleanup
- requirements established under the HFFACO. For TSD units identified in the HFFACO, the corrective
- 35 action conditions contemplate use of closure and post-closure processes to satisfy corrective action.
- 36 Part V, Unit-Specific Conditions for Units Undergoing Closure, contains those requirements which
- apply to those specific TSD units, included in this part, that are undergoing closure. In accordance with
- 38 Section 5.3 of the Action Plan of the HFFACO, all TSD units that undergo closure, irrespective of permit
- 39 status, will be closed pursuant to the authorized State Dangerous Waste Program in accordance with
- 40 WAC 173-303-610. Requirements for each TSD unit undergoing closure are found in a chapter dedicated
- 41 to that TSD unit. These unit-specific chapters contain references to Standard Conditions (Part I) and
- 42 General Conditions (Part II), as well as additional requirements which are intended to ensure that each
- TSD unit is closed in an efficient and environmentally protective manner.

Revision Number: 8C Page 7 of 42

1 Part VI, Unit-Specific Conditions for Units in Post-Closure, contains those requirements which apply to those specific units in this part that have completed modified or landfill closure requirements, and now 2

only need to meet Post-Closure Standards. As set forth in Section 5.3 of the Action Plan of the HFFACO,

4 certain TSD units will be permitted for post-closure care pursuant to the authorized State Dangerous

Waste Program (173-303 WAC) and the Hazardous and Solid Waste Amendments. Requirements for 5 6

each unit undergoing post-closure care are found in a chapter, within this part, dedicated to that unit.

These unit specific chapters may contain references to Standard Conditions (Part I) and General 7

8 Conditions (Part II), as well as the unit specific conditions, all of which are intended to ensure the unit is 9

managed in an efficient, environmentally protective manner.

10

3

Permit Number: WA7 89000 8967 Expiration Date: September 27, 2004 Page 8 of 42

Revision Number: 8C

Unit Status Table

PERMIT REVISION	REVISION DATE	UNITS INCORPORATED
Permit Revision 0	8/29/94	616 NDWSF, 305-B Storage Facility, 183-H SEB, 300 ASE, 2727-S, NRDWSF
Permit Revision 1	4/28/95	Simulated High-Level Waste Slurry, 218-E-9 Borrow Pit Demo Site, 200 W Area Ash Pit Demo Site, 2101-M Pond, 216-B-3 Expansion Ponds
Permit Revision 2	8/29/95	Hanford Patrol Academy Demolition Site, 105-DR Large Sodium Fire Facility, 304 Concretion Facility
Permit Revision 3	11/25/96	PUREX Storage Tunnels, 4843 Alkali Metal Storage Facility, 3718-F Alkali Metal Treatment & Storage Facility, 303-K Storage Facility, 300 APT
Permit Revision 4	1/28/98	LERF & 200 Area ETF, 242-A Evaporator, 325 HWTUs
Permit Revision 5	5/18/99	100 D Ponds, 1301-N & 1325-Liquid Waste Disposal Facility, 1324-N Surface Impoundment, 1324-NA Percolation Pond
Permit Revision 6	3/28/00	Permit Condition II.Y, Corrective Action
Permit Revision 7	2/27/01	Waste Treatment & Immobilization Plant, 300 Area WATS
Permit Revision 8	9/23/04	No new units, modification updates
Permit Revision 8A	3/6/06	Integrated Disposal Facility
Permit Revision 8B	1/2007	331-C Storage Unit, PFP Treatment Unit, 241-Z Treatment & Storage Tanks, 303-M Oxide Facility
Permit Revision 8C	8/2007	400 Area Waste Management Unit, 224-T TRUSAF

UNIT	Permit Revision		Comments/History
ONLY	Incorporated	Retired	Comments/History
PART III, OPERATING UNITS			
616 Non-Radioactive Dangerous Waste Storage Facility	Rev. 6	Rev. 7	Closed, 9/5/01
242-A Evaporator	Rev. 4		
305-B Storage Facility	Rev. 0		Closed, 7/2/07
325 Hazardous Waste Treatment Units	Rev. 4		RLWT procedural closure, 9/04
LERF & 200 Area ETF	Rev. 4		
PUREX Storage Tunnels	Rev. 3		
Waste Treatment and Immobilization Plant	Rev. 7		Permitted unit under construction
Integrated Disposal Facility	Rev. 8A		
331-C Storage Unit	Rev. 8B		
400 Area Waste Management Unit	Rev. 8C		
PART IV, CORRECTIVE ACTION			
100-NR-1 Operable Unit	Rev. 6		
100-NR-2 Operable Unit	Rev. 6	Rev. 8C	Retired, 9/30/09
PART V, UNDERGOING CLOSURE UNITS			
100-D Ponds	Rev. 5	Rev. 6	Closed, 8/9/99
105 DR Large Sodium Fire Facility	Rev. 2	Rev. 6	Closed, 7/1/04
1301-N Liquid Waste Disposal Facility	Rev. 5		
1324-N Surface Impoundment	Rev. 5		
1324-NA Percolation Pond	Rev. 5		
1325-N Liquid Waste Disposal Facility	Rev. 5		
200 West Area Ash Pit Demo Site	Rev. 1	Rev. 6	Closed, 11/28/95
2101-M Pond	Rev. 1	Rev. 6	Closed, 11/28/95
216-B-3 Expansion Ponds	Rev. 1	Rev. 6	Closed, 7/31/95
218-E-8 Borrow Demolition Site	Rev. 1	Rev. 6	Closed, 11/28/95
2727-S Storage Facility	Rev. 0	Rev. 6	Closed, 7/31/95
300 Area Solvent Evaporator	Rev. 0	Rev. 6	Closed, 7/31/95
300 Area Waste Acid Treatment System	Rev. 6	Rev. 8B	Closed, 1/21/05
303-K Storage Facility	Rev. 4	Rev. 6	Closed, 7/22/02
304 Concretion Facility	Rev. 2	Rev. 6	Closed, 1/21/96
311 Tanks (includes 300 Area WATS)	Rev. 6	Rev. 7	Closed, 5/20/02
3718-F Alkali Metal Treatment /Storage	Rev. 3	Rev. 6	Closed, 8/4/98
4843 Alkali Metal Storage Facility	Rev. 3	Life to A Child Color Co. Color Co.	Closed, 4/14/97
Hanford Patrol Academy Demo Site	Rev. 2	CONTRACTOR OF TAXABLE	Closed, 11/28/95
Simulated High Level Waste Slurry	Rev. 1		Closed, 9/6/95

1

Permit Number: WA7 89000 8967 Revision Number: 8C Expiration Date: September 27, 2004 Page 9 of 42

UNIT	Permit Revision			
UNIT	Incorporated		Comments/History	
PFP Treatment Unit (HA-20MB)	Rev. 8B	Rev. 8B	Closed 2/8/05	
241-Z Treatment and Storage Tanks	Rev. 8B	Rev. 8B	Closed 2/22/07	
303-M Oxide Facility	Rev. 8B	Rev. 8B	Closed 6/15/06	
224-T Transuranic Waste Storage and Assay Facility	Rev. 8C	Rev. 8C	Closed 11/12/08	
PART VI, POSTCLOSURE UNITS		V. Comment		
183-H Solar Evaporation Basin	Rev 4			
300 Area Process Trenches	Rev 3			
PROCEDURALLY CLOSED	The state of the s			
216-U-12 Crib	N/A	N/A	Closed 7/19/07	
221-T Test Facility	N/A	N/A	Closed 2/22/99	
2727-WA SRE Sodium Storage Bldg	N/A	N/A	Closed 2/22/99	
324 Pilot Plant	N/A	N/A	Closed 6/9/97	
332 Storage Facility	N/A	N/A	Closed 4/21/97	
437 Maintenance and Storage Facility	N/A	N/A	Closed 9/11/03	
Biological Treatment Test Facilities	N/A	N/A	Closed12/10/96	
Physical/Chemical Treatment Test Facilities	N/A	N/A	Closed 5/13/96	
Sodium Storage/Sodium Reaction	N/A	N/A	Closed 9/17/03	
Thermal Treatment Test Facilities	N/A	N/A	Closed 5/13/96	
TO BE INCORPORATED				
1706-KE Waste Treatment System		1		
207-A South Retention Basin				
216-A-10 Crib				
216-A-29 Ditch				
216-A-36B Crib				
216-A-37-1 Crib				
216-B-3 Main Pond				
216-B-63 Trench				
216-S-10 Pond & Ditch				
222-S Dangerous & Mixed Waste TSD Unit				
241-CX Tank System				
600 Area Purgewater Storage and Treatment Facility				
Central Waste Complex				
Contact Handled Transuranic Mixed Waste Packaging and Interim Storage Facility				
DST System/204-AR Waste Unloading Station				
Grout Treatment Facility				
Hexone Storage & Treatment Facility				
IHLW Interim Storage/Canister Storage Building				
Low-Level Burial Grounds				
Nonradioactive Dangerous Waste Landfill		1		
Single-Shell Tank System				
T Plant Complex				
Waste Encapsulation and Storage Facility				
Waste Receiving and Processing Facility				
TRANSITION UNDER HFFACO ACTION PLAN, SECTION 8 (Will not be incorporated into Permit)				
B Plant Complex				
PUREX Plant				

Revision Number: 8C Page 10 of 42

Definitions

1

2 Except with respect to those terms specifically defined below, all definitions contained in the HFFACO.

- 3 May 1989, as amended, and in <u>WAC 173-303-040</u> and other portions of <u>Chapter 173-303 WAC</u> are
- 4 hereby incorporated, in their entirety, by reference into this Permit. For terms defined in both
- 5 Chapter 173-303 WAC and the HFFACO, the definitions contained in Chapter 173-303 WAC will
- 6 control within this Permit. Nonetheless, this Permit is intended to be consistent with the HFFACO.
- Where terms are not defined in the regulations, the Permit, or the HFFACO, a standard dictionary
- 8 reference, or the generally accepted scientific or industrial meaning of the terms will define the meaning
- 9 associated with such terms.
- 10 As used in this Permit, words in the masculine gender also include the feminine and neuter genders,
- words in the singular include the plural, and words in the plural include the singular.
- 12 The following definitions apply throughout this Permit:
- 13 The term "Area of Concern" means any area of the Facility where a release of dangerous waste or
- dangerous constituents has occurred, is occurring, is suspected to have occurred, or threatens to occur.
- 15 The term "Contractor(s)" means, unless specifically identified otherwise in this Permit, or Attachments.
- Bechtel National, Inc. (BNI), CH2M HILL Plateau Remediation Company, Inc. (CHPRC), Mission
- 17 Support Alliance, LLC (MSA), Pacific Northwest National Laboratory (PNNL), Washington Closure
- Hanford, LLC (WCH), and Washington River Protection Solutions, LLC (WRPS).
- 19 The term "Critical Systems" as applied to determining whether a Permit modification is required, means
- 20 those specific portions of a TSD unit's structure, or equipment, whose failure could lead to the release of
- 21 dangerous waste into the environment, and/or systems which include processes which treat, transfer,
- store, or dispose of regulated wastes. A list identifying the critical systems of a specific TSD unit may be
- developed and included in Part III, V, and/or VI of this Permit. In developing a critical system list, or in
- 24 the absence of a critical system list, WAC 173-303-830 Modifications will be considered.
- 25 The term "Dangerous Constituent" means any constituent identified in WAC 173-303-9905 or
- 26 40 CFR Part 264 Appendix IX, any constituent which caused a waste to be listed or designated as
- 27 dangerous under Chapter 173-303 WAC, and any constituents within the meaning of hazardous substance
- 28 at RCW 70.105D.020(7).
- 29 The term "Dangerous Waste" means those solid wastes designated under Chapter 173-303 WAC as
- dangerous or extremely hazardous waste. As used in the Permit, the phrase "dangerous waste" will refer
- 31 to the full universe of wastes regulated by Chapter 70.105 RCW and Chapter 173-303 WAC (including
- dangerous waste, hazardous waste, extremely hazardous waste, mixed waste, and acutely hazardous
- 33 waste).
- The term "Days" means calendar days, unless specifically identified otherwise. Any submittal,
- notification, or recordkeeping requirement that would be due, under the Conditions of this Permit, on a
- 36 Saturday, Sunday, or federal, or state holiday, will be due on the following business day, unless
- 37 specifically stated otherwise in the Permit.
- 38 The term "Director" means the Director of the Washington State Department of Ecology, or a designated
- 39 representative. The Program Manager of the Nuclear Waste Program (with the address as specified on
- 40 page one [1] of this Permit) is a duly authorized and designated representative of the Director for
- 41 purposes of this Permit.
- The term "Ecology" means the Washington State Department of Ecology (with the address as specified
- on page one [1] of this Permit).

Revision Number: 8C Page 11 of 42

1 The term "Facility" means all contiguous land, structures, other appurtenances, and improvements on the

- 2 land used for recycling, reusing, reclaiming, transferring, storing, treating, or disposing of dangerous
- waste. The legal and physical description of the Facility is set forth in Permit Attachment 2.
- 4 The term "Facility" for the purposes of corrective action under Permit Condition II.Y, means all
- 5 contiguous property under the control of the Permittees and all property within the meaning of "facility"
- 6 at RCW 70.105D.020(3) as set forth in Permit Attachment 2.
- 7 The term "HFFACO" means the Hanford Federal Facility Agreement and Consent Order, as amended
- 8 (Commonly referred to as Tri-Party Agreement [TPA]).
- 9 The term "Permittees" means the United States Department of Energy (owner/operator), Bechtel
- National, Inc. (Co-operator), CH2M HILL Plateau Remediation Company (Co-operator), Mission
- Support Alliance, LLC (MSA), Pacific Northwest National Laboratory (Co-operator), Washington
- 12 Closure Hanford, LLC (Co-operator), Washington River Protection Solutions, LLC.
- 13 The term "Permittees" for purposes of corrective action under Permit Condition II.Y means only the
- 14 United States Department of Energy (owner/operator).
- 15 The term "Raw Data" means the initial value of analog or digital instrument output, and/or manually
- 16 recorded values obtained from measurement tools or personal observation. These values are converted
- into reportable data (e.g., concentration, percent moisture) via automated procedures and/or manual
- 18 calculations.
- 19 The term "RCRA Permit" means the Dangerous Waste Portion of the RCRA Permit for the Treatment,
- 20 Storage, and Disposal of Dangerous Waste (Dangerous Waste Permit) issued by the Washington State
- Department of Ecology, pursuant to <u>Chapter 70.105 RCW</u> and <u>Chapter 173-303 WAC</u>, coupled with the
- 22 HSWA Portion of the RCRA Permit for the Treatment, Storage, and Disposal of Hazardous Waste
- 23 (HSWA Permit) issued by EPA, Region 10, pursuant to 42 U.S.C. 6901 et seq. and 40 CFR Parts 124 and
- 24 <u>270</u>.
- 25 The term "Reasonable Times" means normal business hours; hours during which production, treatment.
- storage, construction, disposal, or discharge occurs, or times when Ecology suspects a violation requiring
- 27 immediate inspection.
- 28 The term "Release" means any intentional or unintentional spilling, leaking, pouring, emptying,
- discharging, injecting, pumping, escaping, leaching, dumping, or disposing of dangerous constituents into
- the environment and includes the abandonment or discarding of barrels, containers, and other receptacles
- 31 containing dangerous waste or dangerous constituents, and includes any releases within the meaning of
- 32 release at RCW 70.105D.020(20).
- 33 The term "Significant Discrepancy" in regard to a manifest or shipping paper, means a discrepancy
- 34 between the quantity or type of dangerous waste designated on the manifest, or shipping paper, and the
- 35 quantity or type of dangerous waste a TSD unit actually receives. A significant discrepancy in quantity is
- a variation greater than ten (10) percent in weight for bulk quantities (e.g., tanker trucks, railroad tank
- cars, etc.), or any variation in piece count for nonbulk quantities (i.e., any missing container or package
- would be a significant discrepancy). A significant discrepancy in type is an obvious physical or chemical
- difference which can be discovered by inspection or waste analysis (e.g., waste solvent substituted for
- 40 waste acid).
- 41 The term "Solid Waste Management Unit (SWMU)" means any discernible location at the Facility
- where solid wastes have been placed at any time, irrespective of whether the location was intended for the
- 43 management of solid or dangerous waste, and includes any area at the Facility at which solid wastes have
- been routinely and systematically released (for example through spills), and includes dangerous waste
- 45 treatment, storage, and disposal units.

Revision Number: 8C Page 12 of 42

1 The term "Unit" or "TSD unit", as used in Parts I through VI of this Permit, means the contiguous area

of land on or in which dangerous waste is placed, or the largest area in which there is a significant likelihood of mixing dangerous waste constituents in the same area. A TSD unit, for purposes of this

Permit, is a subgroup of the Facility which has been identified in a Hanford Facility Dangerous Waste

5 Part A Form.

6

Expiration Date: September 27, 2004 Page 13 of 42 Revision Number: 8C

Acronyms	
ALARA	As Low As Reasonably Achievable
AMSF	Alkali Metal Storage Facility
APDS	Ash Pit Demolition Site
APP	Used to Denote Appendix Page Numbers
	Area Process Trenches
ARAR	Applicable, Relevant, and Appropriate Requirements
BNI	Bechtel National, Inc
BPDS	Borrow Pit Demolition Site
CD/RR	Chemical Disposal/Recycle Request
CERCLA	Comprehensive Environmental Response Compensation and Liability Act of
	1980 (as Amended by the Superfund Reauthorization Act of 1986)
CFR	Code of Federal Regulations
CHPRC	CH2M HILL Plateau Remediation Company
CIP	Construction Inspection Plan
CLARC	Cleanup Levels and Risk Calculations
CLP	Contract Laboratory Program
	Chemical Contaminants of Concern
CPP	CERCLA Past Practice
USDOE-RL	U.S. Department of Energy, Richland Operations Office
USDOE-ORP	U.S. Department of Energy, Office of River Protection
DQO	Data Quality Objective
DSC	Differential Scanning Colorimetry
EC	Emergency Coordinator
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ERA	Expedited Response Action
ETF	200 Area Effluent Treatment Facility
HFFACO	Hanford Federal Facility Agreement and Consent Order
GW	Ground Water
HPADS	Hanford Patrol Academy Demolition Site
	Hazardous and Solid Waste Amendments of 1984
HWMA	Hazardous Waste Management Act
ID	Identification
IRM	Interim Remedial Measure
LDR	Land Disposal Restrictions
LERF	Liquid Effluent Retention Facility
LSFF	105-DR Large Sodium Fire Facility
MSA MTCA	Mission Support Alliance, LLC Model Toxics Control Act
	ALARA AMSF APDS APP APT ARAR BNI BPDS CD/RR CERCLA CFR CHPRC CIP CLARC CLP COC CPP USDOE-RL USDOE-ORP DQO DSC EC Ecology EPA ERA ETF HFFACO GW HPADS HSWA HWMA ID IRM LDR LERF LSFF MSA

Expiration Date: September 27, 2004 Page 14 of 42 Revision Number: 8C

1	OSWER	Office of Solid Waste and Emergency Response
2	PNNL	Pacific Northwest National Laboratory
3 4 5	QA QAPP QC	Quality Assurance Quality Assurance Project Plan Quality Control
6 7 8 9 10	RCRA RCW ROD RPD RPP	Resource Conservation and Recovery Act of 1976 Revised Code of Washington Record of Decision Relative Percent Difference RCRA Past Practice
11 12 13 14 15	SAP SARA SCD SHLWS SOP SWMU	Sampling and Analysis Plan Superfund Amendments and Reauthorization Act of 1986 Security Control Devices Simulated High Level Waste Slurry Standard Operating Procedure Solid Waste Management Unit
17 18	TCLP TSD	Toxicity Characteristic Leaching Procedure Treatment, Storage, and/or Disposal
19 20	USDOE U.S.C.	United States Department of Energy United States Code
21 22 23 24 25	WAC WAP WCH WRPS WTP	Washington Administrative Code Waste Analysis Plan Washington Closure Hanford, LLC Washington River Protection Solutions, LLC Waste Treatment and Immobilization Plant
26 27	183-H 242-A	183-H Solar Evaporation Basins 242-A Evaporator
28 29 30 31 32	300 APT 300 ASE 303-K 305-B 325 HWTUs	300 Area Process Trenches 300 Area Solar Evaporator 303-K Storage Facility 305-B Storage Facility 325 Hazardous Waste Treatment Units
33 34	616-NRDWSF	616 Nonradioactive Dangerous Waste Storage Facility

Permit Number: WA7 89000 8967 Expiration Date: September 27, 2004 Page 15 of 42

Revision Number: 8C

1

PART I **STANDARD CONDITIONS**

2	I.A	EFFECT OF PERMIT
3 4 5 6 7 8 9		The Permittees are authorized to treat, store, and dispose of dangerous waste in accordance with the Conditions of this Permit and in accordance with the applicable provisions of Chapter 173-303 WAC (including provisions of the Chapter as they have been applied in the HFFACO). Any treatment, storage, or disposal of dangerous waste by the Permittees at the Facility that is not authorized by this Permit, or by WAC 173-303-400 (including provisions of this regulation as they have been applied in the HFFACO), for those TSD units not subject to this Permit, and for which a Permit is required by Chapter 173-303 WAC, is prohibited.
11 12 13 14		TSD units operating or closing under interim status will maintain interim status until that TSD unit is incorporated into Part III, V, and/or VI of this Permit, or until interim status is terminated under <u>WAC 173-303-805(8)</u> . Interim status units will be incorporated into this Permit through the Permit modification process.
15 16		The Conditions of this Permit will be applied to the Facility as defined by the Permit Applicability Matrix (Permit Attachment 9).
17 18	I.A.1	USDOE is responsible for activities which include, but are not limited to, the overall management and operation of the Facility.
19 20 21		BNI is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.
22 23 24		CHPRC is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.
25 26 27		MSA is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.
28 29 30		PNNL is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.
31 32 33		WCH is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.
34 35 36		WRPS is identified as a Permittee for activities subject to the Conditions of this Permit where its agents, employees, or subcontractors have operational and/or management responsibilities and control.
37	I.A.2	Coordination with the <u>HFFACO</u>
38 39 40 41 42 43		Each TSD unit will have an application for a final status Permit or closure/post-closure plan submitted to Ecology in accordance with the schedules identified in the HFFACO Milestone M-20-00 or in accordance with WAC 173-303-830 . After completion of the Permit application or closure/post-closure plan review, a final Permit decision will be made pursuant to WAC 173-303-840 . Specific Conditions for each TSD unit will be incorporated into this Permit in accordance with the Class 3 Permit modification procedure identified in Permit Condition I.C.3.

Expiration Date: September 27, 2004 Page 16 of 42 Permit Number: WA7 89000 8967 Revision Number: 8C

1	i.B	PERSONAL AND PROPERTY RIGHTS
2 3 4		This Permit does not convey property rights of any sort, or any exclusive privilege; nor does it authorize any injury to persons or property, or any invasion of other private rights, or any violation of federal, state, or local laws or regulations.
5	I.C	PERMIT ACTIONS
6	I.C.1	Modification, Revocation, Reissuance, or Termination
7 8		This Permit may be modified, revoked and reissued, or terminated by Ecology for cause per $\underline{\text{WAC } 173-303-810(7)}$ as specified in $\underline{\text{WAC } 173-303-830(3), (4), \text{ and } (5)}$.
9	I.C.2	Filing of a Request
10 11 12 13		The filing of a request for a Permit modification, or revocation and reissuance, or termination, or a notification of planned changes, or anticipated noncompliance on the part of the Permittees, will not stay any Permit condition [WAC 173-303-810(7)]except as provided in WAC 173-303-810(2) under an emergency permit.
14	I.C.3	Modifications
15 16 17 18	I.C.3.a	Except as provided otherwise by specific language in this Permit, the Permit modification procedures of <u>WAC 173-303-830(2)</u> , (3), and (4) will apply to modifications or changes in design or operation of the Facility, or any modification or change in dangerous waste management practices covered by this Permit.
19 20 21 22	I.C.3.b	As an exception, the Permittees will provide notifications to Ecology required by $\underline{WAC\ 173-303-830(4)(a)(i)(A)}$ on a quarterly basis. Each quarterly notification will be submitted within ten (10) days of the end of the quarter, and provide the required information for all such modification s put into effect during that reporting period.
23 24 25 26 27	I.C.3.c	Quarterly reporting periods will be based upon the state Fiscal Year. For notifications required by the Permittees to persons on the facility mailing list described in WAC 173-303-830(4)(a)(i)(B), -830(4)(b)(ii), -830(4)(c)(ii), and -830(4)(c)(ii)(C), use of appropriate HFFACO Community Relations Plan publications and/or list servers for public involvement satisfy the notification requirements.
28	I.D	SEVERABILITY
29	I.D.1	Effect of Invalidation
30 31 32 33 34 35		The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance is contested and/or held invalid, the application of such provision to other circumstances and the remainder of this Permit will not be affected thereby. Invalidation of any state statutory or regulatory provision which forms the basis for any Condition of this Permit does not affect the validity of any other state statutory or regulatory basis for said Condition.
36	I.D.2	Final Resolution
37 38 39 40 41 42 43		In the event that a Condition of this Permit is stayed for any reason, the Permittees will continue to comply with the related applicable and relevant interim status standards in WAC 173-303-400 until final resolution of the stayed Condition, unless Ecology determines compliance with the related applicable and relevant interim status standards would be technologically incompatible with compliance with other Conditions of this Permit, which have not been stayed, or unless the HFFACO authorizes an alternative action, in which case the Permittees will comply with the HFFACO.

Expiration Date: September 27, 2004 Page 17 of 42 Revision Number: 8C

1	I.E	DUTIES AND REQUIREMENTS
2	I.E.1	Duty to Comply
3 4 5 6 7 8		The Permittees will comply with all Conditions of this Permit, except to the extent and for the duration such noncompliance is authorized by an emergency Permit issued under WAC 173-303-804. Any Permit noncompliance other than noncompliance authorized by an emergency Permit constitutes a violation of Chapter 70.105 RCW, as amended, and is grounds for enforcement action, Permit termination, modification or revocation and reissuance of the Permit, and/or denial of a Permit renewal application.
9	I.E.2	Compliance Not Constituting Defense
10 11 12 13 14 15 16 17 18 19 20 21 22 23		Compliance with the terms of this Permit does not constitute a defense to any order issued or any action brought under Section 3007, 3008, 3013, or 7003 of RCRA (42 U.S.C. Sections 6927, 6928, 6934, and 6973), Section 104, 106(a) or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) [42 U.S.C. Sections 9604, 9606(a), and 9607], as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9601 et seq.), or any other federal, state, or local law governing protection of public health, or the environment; provided, however, that compliance with this Permit during its term constitutes compliance at those areas subject to this Permit for the purpose of enforcement with WAC 173-303-140, WAC 173-303-180, WAC 173-303-280 through -395, WAC 173-303-600 through -680, WAC 173-303-810, and WAC 173-303-830, except for Permit modification s and those requirements not included in the Permit that become effective by statute, or that are promulgated under 40 CFR Part 268 restricting the placement of dangerous waste in or on the land.
24	I.E.3	Duty to Reapply
25 26 27		If the Permittees wish to continue an activity regulated by this Permit after the expiration date of this Permit, the Permittees must apply for, and obtain a new Permit, in accordance with WAC 173-303-806(6).
28	I.E.4	Permit Expiration and Continuation
29 30 31 32 33		This Permit, and all Conditions herein, will remain in effect beyond the Permit's expiration date until the effective date of the new Permit, if the Permittees have submitted a timely, complete application for renewal per <u>WAC 173-303-806</u> and, through no fault of the Permittees, Ecology has not made a final Permit determination as set forth in <u>WAC 173-303-840</u> .
34	I.E.5	Need to Halt or Reduce Activity Not a Defense
35 36 37		It will not be a defense in the case of an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the Conditions of this Permit.
38	I.E.6	Duty to Mitigate
39 40 41		In the event of noncompliance with the Permit, the Permittees will take all reasonable steps to minimize releases to the environment, and will carry out such measures as are reasonable to minimize or correct adverse impacts on human health and the environment.

Expiration Date: September 27, 2004 Page 18 of 42 Revision Number: 8C

1	I.E.7	Proper Operation and Maintenance
2 3 4 5 6 7 8 9		The Permittees will at all times properly operate and maintain all facilities and systems of treatment and control, which are installed or used by the Permittees, to achieve compliance with the Conditions of this Permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of backup or auxiliary facilities, or similar systems only when necessary to achieve compliance with the Conditions of the Permit.
10	I.E.8	Duty to Provide Information
11 12 13 14 15		The Permittees will furnish to Ecology, within a reasonable time, any relevant information which Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The Permittees will also furnish to Ecology, upon request, copies of records required to be kept by this Permit.
16	I.E.9	Inspection and Entry
17 18		The Permittees will allow Ecology, or authorized representatives, upon the presentation of Ecology credentials, to:
19 20 21	I.E.9.a	During operating hours, and at all other reasonable times, enter and inspect the Facility or any unit or area within the Facility, where regulated activities are located or conducted, or where records must be kept under the Conditions of this Permit;
22 23	I.E.9.b	Have access to, and copy, at reasonable times, any records that must be kept under the Conditions of this Permit;
24 25 26	I.E.9.c	Inspect at reasonable times any portion of the Facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,
27 28 29	I.E.9.d	Sample or monitor, at reasonable times, for the purposes of assuring Permit compliance, or as otherwise authorized by state law, as amended, for substances or parameters at any location.
30	I.E.10	Monitoring and Records
31 32 33 34 35 36 37	I.E.10.a	Samples and measurements taken by the Permittees for the purpose of monitoring required by this Permit will be representative of the monitored activity. Sampling methods will be in accordance with WAC 173-303-110 or 40 CFR 261, unless otherwise specified in this Permit, or agreed to in writing by Ecology. Analytical methods will be as specified in the most recently published test procedure of the documents cited in WAC 173-303-110(3)(a) through (h), unless otherwise specified in this Permit, or agreed to in writing by Ecology.
38 39 40 41 42 43 44 45 46	I.E.10.b	The Permittees will retain at the TSD unit(s), or other locations approved by Ecology, as specified in Parts III, V, and/or VI of this Permit, records of monitoring information required for compliance with this Permit, including calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of reports and records required by this Permit, and records of data used to complete the application for this Permit for a period of at least ten (10) years from the date of the sample, measurement, report, or application, unless otherwise required for certain information by other Conditions of this Permit. This information may be retained on electronic media.

Permit Number: WA7 89000 8967 Expiration Date: September 27, 2004
Revision Number: 8C Page 19 of 42

1 2 3 4 5 6	I.E.10.c	The Permittees will retain at the Facility, or other approved location, records of all monitoring and maintenance records, copies of all reports and records required by this Permit, and records of all data used to complete the application for this Permit, which are not associated with a particular TSD unit, for a period of at least ten (10) years from the date of certification of completion of post-closure care, or corrective action for the Facility, whichever is later. This information may be retained on electronic media.
7 8 9 10	I.E.10.d	The record retention period may be extended by request of Ecology at any time by notification, in writing, to the Permittees, and is automatically extended during the course of any unresolved enforcement action regarding this Facility to ten (10) years beyond the conclusion of the enforcement action.
11	I.E.10.e	Records of monitoring information shall include:
12	I.E.10.e.i	The date, exact place and time of sampling or measurements;
13	I.E.10.e.ii	The individual who performed the sampling or measurements and their affiliation;
14	I.E.10.e.iii	The dates the analyses were performed;
15	I.E.10.e.iv	The individual(s) who performed the analyses and their affiliation;
16	I.E.10.e.v	The analytical techniques or methods used; and,
17	I.E.10.e.vi	The results of such analyses
18	I.E.11	Reporting Planned Changes
19 20 21		The Permittees will give notice to Ecology, as soon as possible, of any planned physical alterations, or additions to the Facility subject to this Permit. Such notice does not authorize any noncompliance with, or modification of, this Permit.
22	I.E.12	Certification of Construction or Modification
23 24	I.E.12.a	The Permittees may not commence treatment, storage, or disposal of dangerous wastes in a new or modified portion of TSD units subject to this Permit until:
25 26 27 28	I.E.12.b	The Permittees have submitted to Ecology, by certified mail, overnight express mail, or hand delivery, a letter signed by the Permittees, and a registered professional engineer, stating that the TSD unit has been constructed or modified in compliance with the Conditions of this Permit; and,
29 30	I.E.12.c	Ecology has inspected the modified or newly constructed TSD unit, and finds that it is in compliance with the Conditions of this Permit; or
31 32 33	I.E.12.d	Within fifteen (15) days of the date of receipt of the Permittees' letter, the Permittees have not received notice from Ecology of its intent to inspect, prior inspection is waived, and the Permittees may commence treatment, storage, and disposal of dangerous waste.
34	I.E.13	Anticipated Noncompliance
35 36 37		The Permittees will give at least thirty (30) days advance notice to Ecology of any planned changes in the Facility subject to this Permit, or planned activity which might result in noncompliance with Permit requirements.
38 39 40		If thirty (30) days advance notice is not possible, then the Permittees will give notice immediately after the Permittees become aware of the anticipated noncompliance. Such notice does not authorize any noncompliance with, or modification of, this Permit.

Expiration Date: September 27, 2004 Page 20 of 42 Revision Number: 8C

1	I.E.14	Transfer of Permits
2 3 4 5	I.E.14.a	This Permit may be transferred to a new owner/operator only if it is modified, or revoked and reissued, pursuant to <u>WAC 173-303-830(3)(b)</u> . Unit-specific portion may be transferred to a new Co-operator as a Class ¹ 1 modification with prior approval of the Department's director.
6 7 8	I.E.14.b	Before transferring ownership or operation of the Facility during its operating life, the owner/operator will notify the new owner/operator in writing, of the requirements of WAC 173-303-290(2), -600 and -806, and this Permit.
9	I.E.15	Immediate Reporting
10 11 12 13	I.E.15.a	The Permittees will verbally report to Ecology any release of dangerous waste or hazardous substances, or any noncompliance with the Permit which may endanger human health or the environment. Any such information will be reported immediately after the Permittees become aware of the circumstances.
14 15 16	I.E.15.b	The immediate verbal report will contain all the information needed to determine the nature and extent of any threat to human health and the environment, including the following:
17 18	I.E.15.b.i	Name, address, and telephone number of the Permittee responsible for the release or noncompliant activity;
19	I.E.15.b.ii	Name, location, and telephone number of the unit at which the release occurred;
20	I.E.15.b.iii	Date, time, and type of incident;
21	I.E.15.b.iv	Name and quantity of material(s) involved;
22	I.E.15.b.v	The extent of injuries, if any;
23 24	I.E.15.b.vi	An assessment of actual or potential hazard to the environment and human health, where this is applicable;
25	I.E.15.b.vii	Estimated quantity of released material that resulted from the incident; and,
26	I.E.15.b.viii	Actions which have been undertaken to mitigate the occurrence.
27 28 29 30 31 32 33 34	I.E.15.c	The Permittees will report, in accordance with Permit Conditions I.E.15.a and I.E.15.b, any information concerning the release, or unpermitted discharge, of any dangerous waste or hazardous substances that may cause an endangerment to drinking water supplies, or ground or surface waters, or of a release, or discharge of dangerous waste, or hazardous substances, or of a fire or explosion at the Facility, which may threaten human health or the environment. The description of the occurrence and its cause will include all information necessary to fully evaluate the situation and to develop an appropriate course of action.
35 36 37 38 39 40	I.E.15.d	For any release or noncompliance not required to be reported to Ecology immediately, a brief account must be entered within two (2) working days, into the TSD Operating Record, for a TSD unit, or into the Facility Operating Record, inspection log, or separate spill log, for non-TSD units. This account must include: the time and date of the release, the location and cause of the release, the type and quantity of material released, and a brief description of any response actions taken or planned.
41 42	I.E.15.e	All releases, regardless of location of release, or quantity of release, will be controlled and mitigated, if necessary, as required by <u>WAC 173-303-145(3)</u> .

Expiration Date: September 27, 2004 Page 21 of 42 Revision Number: 8C

1	I.E.16	Written Reporting
2 3 4 5 6 7 8 9		Within fifteen (15) days after the time the Permittees become aware of the circumstances of any noncompliance with this Permit, which may endanger human health or the environment, the Permittees will provide to Ecology a written report. The written report will contain a description of the noncompliance and its cause (including the information provided in the verbal notification); the period of noncompliance including exact dates and times; the anticipated time noncompliance is expected to continue, if the noncompliance has not been corrected; corrective measures being undertaken to mitigate the situation, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
11	I.E.17	Manifest Discrepancy Report
12 13 14 15 16	I.E.17.a	For dangerous waste received from outside the Facility, whenever a significant discrepancy in a manifest is discovered, the Permittees will attempt to reconcile the discrepancy. If not reconciled within fifteen (15) days of discovery, the Permittees will submit a letter report in accordance with <u>WAC 173-303-370(4)</u> , including a copy of the applicable manifest or shipping paper, to Ecology.
17 18 19 20 21	I.E.17.b	For dangerous waste which is being transported within the Facility (i.e., shipment of onsite generated dangerous waste), whenever a significant discrepancy in the shipping papers (see Permit Condition II.Q.1) is discovered, the Permittees will attempt to reconcile the discrepancy. If not reconciled within fifteen (15) days of discovery, the Permittees will note the discrepancy in the receiving unit's Operating Record.
22	I.E.18	Unmanifested Waste Report
23 24 25 26		The Permittees will follow the provisions of <u>WAC 173-303-370</u> for the receipt of any dangerous waste shipment from off-site. The Permittees will also submit a report in accordance with <u>WAC 173-303-390(1)</u> to Ecology within fifteen (15) days of receipt of any unmanifested dangerous waste shipment received from off-site sources.
27	I.E.19	Other Noncompliance
28 29 30		The Permittees will report to Ecology all instances of noncompliance, not otherwise required to be reported elsewhere in this Permit, at the time the Annual Dangerous Waste Report is submitted.
31	I.E.20	Other Information
32 33 34 35		Whenever the Permittees become aware that they have failed to submit any relevant facts in a Permit application, closure plan, or post-closure plan, or submitted incorrect information in a Permit application, closure plan, or post-closure plan, or in any report to Ecology, the Permittees will promptly submit such facts or corrected information.
36	I.E.21	Reports, Notifications, and Submissions
37 38 39 40		All written reports, notifications or other submissions, which are required by this Permit to be sent, or given to the Director or Ecology, should be sent certified mail, overnight express mail, or hand delivered, to the current address and telephone number shown below. This address and telephone number may be subject to change.

Permit Number: WA7 89000 8967
Revision Number: 8C
Expiration Date: September 27, 2004
Page 22 of 42

1 2 3 4 5		Washington State Department of Ecology Nuclear Waste Program 3100 Port of Benton Blvd Richland, Washington 99354 Telephone: (509) 372-7950
6 7		Telephonic and oral reports/notifications also need to be provided to Ecology's Richland Office.
8 9 10 11 12 13		Ecology will give the Permittees written notice of a change in address or telephone number. It is the responsibility of the Permittees to ensure any required reports, notifications, or other submissions are transmitted to the addressee listed in this Condition. However, the Permittees will not be responsible for ensuring verbal and written correspondence reaches a new address or telephone number until after their receipt of Ecology's written notification.
14	I.E.22	Annual Report
15 16		The Permittees will comply with the annual reporting requirements of WAC 173-303-390(2)(a) through (e), and (g).
17	l.F	SIGNATORY REQUIREMENT
18 19 20 21		All applications, reports, or information submitted to Ecology, which require certification, will be signed and certified in accordance with WAC 173-303-810(12) and (13). All other reports required by this Permit and other information requested by Ecology will be signed in accordance with WAC 173-303-810(12).
22	I.G	CONFIDENTIAL INFORMATION
23 24		The Permittees may declare as confidential any information required to be submitted by this Permit, at the time of submission, in accordance with <u>WAC 173-303-810(15)</u> .
25	I.H	DOCUMENTS TO BE MAINTAINED AT FACILITY SITE
26 27 28 29		The Permittees will maintain at the Facility, or some other location approved by Ecology, the following documents and amendments, revisions, and modifications to these documents: (1) This Permit and all Attachments; and (2) The Hanford Facility Operating Record.
30 31 32		All dangerous waste Part B permit applications, post closure permit applications, and closure plan applications are maintained in the Administrative Record located at 2440 Stevens, Room 1101, Richland, WA.
33 34 35 36 37 38		Other approved locations: (1) 700 Area, (2) Locations within the City of Richland under control of one or more of the Permittees, (3) Administrative Record locations within the Stevens Center complex, (4) Consolidated Information Center at Washington State University, Tri-Cities. (5) Archived records at the National Archives and Records Administration (NARA), Pacific Alaska Region, 6125 Sand Point Way NE, Seattle, Washington, 98115-7999.
39 40 41		These documents will be maintained for ten (10) years after post-closure care or corrective action for the Facility, whichever is later, has been completed and certified as complete.

Permit Number: WA7 89000 8967 Expiration Date: September 27, 2004

Revision Number: 8C Page 23 of 42

GENERAL FACILITY CONDITIONS

PART II

1

II.B.4

II.B.5

36

37

38

39

40 41

42 43

2 II.A **FACILITY CONTINGENCY PLAN** 3 II.A.1 The Permittees will immediately carry out applicable provisions of the Hanford Emergency Management Plan as provided in Permit Attachment 4, pursuant to 4 5 WAC 173-303-360(2), whenever there is an incident meeting the criteria of Permit 6 Attachment 4, Section 4.2. Enforceable portions of Permit Attachment 4, Hanford Emergency Management Plan (DOE/RL-94-02) are identified in Permit Attachment 4, 7 8 Appendix A. 9 II.A.2 The Permittees will comply with the requirements of WAC 173-303-350(4), as provided in the Hanford Emergency Management Plan (Permit Attachment 4). The Hanford 10 Emergency Management Plan provides reference to the need for unit-specific 11 12 contingency documentation. Unit-specific contingency documentation for Part III TSD units is included in Part III of this Permit. Unit-specific contingency documentation for 13 Part V and VI TSD units required by this Permit condition is maintained in the Hanford 14 15 Facility Operating Record, Unit-Specific files. 16 II.A.3 The Permittees will review and amend, if necessary, the applicable portions of the Hanford Emergency Management Plan, as provided in Permit Attachment 4, pursuant to 17 WAC <u>173-303-350(5)</u>, and in accordance with the provisions of <u>WAC 173-303-830(4)</u>. 18 19 The Permittees will be able to demonstrate how Amendments to the applicable portions 20 are controlled. The plan will be amended within a period of time agreed upon by 21 Ecology. 22 II.A.4 The Permittees will comply with the requirements of WAC 173-303-350(3) and -360(1)23 concerning the emergency coordinator, except the names and home telephone numbers will be on file with the single point-of-contact, phone number (509) 373-3800 or 24 25 375-2400 (for PNNL units) as described in the Hanford Emergency Management Plan. II.B PREPAREDNESS AND PREVENTION 26 27 **II.B.1** The Permittees will equip the Facility with the equipment specified in WAC 173-303-340(1) as specified in the Hanford Emergency Management Plan (Permit 28 Attachment 4). Unit-specific preparedness and prevention provisions are included in 29 30 Parts III, V, and/or VI of this Permit. The Permittees will test and maintain the equipment specified in Permit Condition II.B.1 31 II.B.2 32 as necessary to assure proper operation in the event of emergency. The Permittees will maintain access to communications or alarms pursuant to 33 II.B.3 WAC 173-303-340(2), as provided in the Hanford Emergency Management Plan (Permit 34 Attachment 4) and unit-specific contingency plans. 35

documented in Permit Attachment 4, Table 3-1, the Permittees will maintain the Memorandums of Understanding to comply with <u>WAC 173-303-350(4)(b)</u>. The Hanford Facility Memorandums of Understanding with local authorities provides emergency planning and coordination equivalent to submittal of the contingency plan to local authorities

The Permittees will comply with <u>WAC 173-303-340(4)</u> and <u>WAC 173-303-355(1)</u>

Based on the arrangements with local authorities required by WAC 173-303-340(4)

pertaining to arrangements with local authorities.

Expiration Date: September 27, 2004 Page 24 of 42 Revision Number: 8C

1	II.C	PERSONNEL TRAINING
2 3 4 5	II.C.1	The Permittees will conduct personnel training as required by <u>WAC 173-303-330</u> . The Permittees will maintain documents in accordance with <u>WAC 173-303-330(2) and (3)</u> . Training records may be maintained in the Hanford Facility Operating Record, or on electronic data storage.
6 7 8 9	II.C.2	All Hanford Facility personnel will receive general Facility training within six (6) months of hire. This training will provide personnel with orientation of dangerous waste management activities being conducted at the Hanford Facility. This training will include:
10	II.C.2.a	Description of emergency signals and appropriate personnel response;
11 12	II.C.2.b	Identification of contacts for information regarding dangerous waste management activities;
13	II.C.2.c	Introduction to waste minimization concepts;
14	II.C.2.d	Identification of contact(s) for emergencies involving dangerous waste; and
15 16	II.C.2.e	Familiarization with the applicable portions of the <i>Hanford Emergency Management Plan</i> .
17 18	II.C.3	Description of training plans for personnel assigned to TSD units subject to this Permit are delineated in the unit-specific Chapters in Parts III, V, and/or VI of this Permit.
19 20 21 22	II.C.4	The Permittees will provide the necessary training to non-Facility personnel (i.e., visitors, sub-contractors), as appropriate, for the locations of such personnel, and the activities that will be undertaken. At a minimum, this training will describe dangerous waste management hazards at the Facility.
23	II.D	WASTE ANALYSIS
24 25 26 27 28 29	II.D.1	All waste analyses required by this Permit will be conducted in accordance with a written waste analysis plan (WAP), or sampling and analysis plan (SAP). Operating TSD units will have a WAP, which will be approved through incorporation of the TSD unit into Part III of this Permit. Closing TSD units, and units in post-closure, should have a SAP and, if necessary, a WAP, which will be approved through incorporation of the TSD unit into Part V and/or VI of this Permit.
30 31 32 33	II.D.2	Until a WAP is implemented in accordance with Permit Condition II.D.1., any unit(s) identified in Parts III, V, and/or VI of this Permit, without a unit-specific WAP approved by Ecology, will not treat, store, or dispose of dangerous waste, unless specified otherwise by Ecology in writing.
34	II.D.3	Each TSD unit WAP will include:
35 36 37 38	II.D.3.a	The parameters for which each dangerous waste will be analyzed, and the rationale for selecting these parameters; (i.e., how analysis for these parameters will provide sufficient information on the waste properties to comply with <u>WAC 173-303-300(1), (2), (3), and (4)</u> ;
39	II.D.3.b	The methods of obtaining or testing for these parameters;
40 41	II.D.3.c	The methods for obtaining representative samples of wastes for analysis (representative sampling methods are discussed in $\underline{WAC\ 173-303-110(2)}$;

Expiration Date: September 27, 2004 Page 25 of 42 Permit Number: WA7 89000 8967 Revision Number: 8C

1 2	II.D.3.d	The frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current;
3	II.D.3.e	The waste analyses which generators have agreed to supply;
4 5 6 7	II.D.3.f	Where applicable, the methods for meeting the additional waste analysis requirements for specific waste management methods, as specified in $\underline{WAC\ 173-303-140(4)(b)}$, $\underline{173-303-395(1)}$, $\underline{173-303-630}$ through $\underline{173-303-670}$, and $\underline{40\ CFR\ 264.1034}$, $\underline{264.1063}$, $\underline{284(a)}$, and $\underline{268.7}$, for final status facilities;
8 9 10	II.D.3.f.i	For off-site facilities, the procedures for confirming that each dangerous waste received matches the identity of the waste specified on the accompanying manifest, or shipping paper. This includes at least:
11	II.D.3.f.i.a	The procedure for identifying each waste movement at the Facility; and,
12 13	II.D.3.f.i.b	The method for obtaining a representative sample of the waste to be identified, if the identification method includes sampling.
14 15 16	II.D.3.f.ii	For surface impoundments exempted from Land Disposal Restrictions (LDR) under 40 CFR 268.4(a), incorporated by reference in WAC 173-303-140(2), the procedures and schedules for:
17	II.D.3.f.iii	The sampling of impoundment contents;
18	II.D.3.f.iv	The analysis of test data; and
19 20	II.D.3.f.v	The annual removal of residues that are not delisted under 40 CFR 260.22, or which exhibit a characteristic of hazardous waste and either;
21	II.D.3.f.v.a	Do not meet applicable treatment standards of 40 CFR Part 268, Subpart D; or
22	II.D.3.f.v.b	Where no treatment standards have been established:
23 24	II.D.3.f.v.b.1	Such residues are prohibited from land disposal under 40 CFR 268.32, or RCRA Section 3004(d); or
25	II.D.3.f.v.b.2	Such residues are prohibited from land disposal under 40 CFR 268.33(f); and
26 27 28 29	II.D.4	Should waste analysis be required by this Permit at a location on the Facility, other than at a TSD unit, a SAP will be maintained by the Permittees, and made available upon request from Ecology. Any SAP required by this Permit, not associated with a particular TSD unit, will include the elements of Permit Conditions II.D.3.a.
30	II.E	QUALITY ASSURANCE/QUALITY CONTROL
31 32 33 34 35 36	II.E.1	All WAPs and SAPs required by this Permit will include a quality assurance/quality control (QA/QC) plan, or equivalent, to document all monitoring procedures to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented in accordance with HFFACO Action Plan §6.5 , Quality Assurance, and reported/made available in accordance with HFFACO Action Plan §9.6 , Data Access and Delivery Requirements.
37 38 39 40	II.E.2	The level of QA/QC for the collection, preservation, transportation, and analysis of each sample required for implementation of this Permit may be based upon an Ecology-approved DQO for the sample. These DQOs will be approved by Ecology in writing or through incorporation of unit plans and Permits into Parts III, V, and/or VI of this Permit.

Expiration Date: September 27, 2004 Page 26 of 42 Revision Number: 8C

1	II.F	GROUND WATER AND VADOSE ZONE MONITORING
2 3 4 5 6 7 8 9 10 11 12 13		The Permittees will comply with the ground water monitoring requirements of WAC 173-303-645. This Condition will apply only to those wells the Permittees use for the ground water monitoring programs applicable to the TSD units incorporated into Parts III, V, and/or VI of this Permit. Where releases from TSD units subject to this Permit have been documented or confirmed by investigation, or where vadose zone monitoring is proposed for integration with ground water monitoring, the Permittees will evaluate the applicability of vadose zone monitoring. The Permittees will consult with Ecology regarding the implementation of these requirements. If agreed to by Ecology, integration of ground water and vadose zone monitoring, for reasons other than this Permit, may be accommodated by this Permit. Results from other investigation activities will be used whenever possible to supplement and/or replace sampling required by this Permit.
14	II.F.1	Purgewater Management
15 16		Purgewater will be handled in accordance with the requirements set forth in Permit Attachment 10, Purgewater Management Plan.
17	II.F.2	Well Remediation and Abandonment
18 19 20 21 22 23	II.F.2.a	The Permittees will inspect the integrity of active resource protection wells as defined by WAC 173-160-030, subject to this Permit, at least once every five (5) years. These inspections will be recorded in the Operating Record. The Permittees will prepare and maintain a plan and schedule by January 26, 1995, specifying the schedule and technical standards for this program. The Permittees will provide a copy of this plan upon the request of Ecology.
24 25 26 27 28 29 30 31 32	II.F.2.b	The Permittees will evaluate resource protection wells subject to this Permit according to Sections 4.0 and 5.0 of the Hanford Well Maintenance Inspection Plan (Permit Attachment 8) and the Policy on Remediation of Existing Wells and Acceptance Criteria for RCRA and CERCLA, June 1990 (Permit Attachment 7), to determine if a well has a potential use as a qualified well. The Permittees will abandon or remediate unusable wells according to the requirements of Chapter 18.104 RCW, Chapter 173-160 WAC, and Chapter 173-162 WAC to ensure that the integrity of wells subject to this Permit is maintained. The time for this remediation will be specified in Parts III, V, and/or VI of this Permit.
33 34 35	II.F.2.c	Ecology will receive notice in writing at least seventy-two (72) hours before the Permittees remediate (excluding maintenance activities), or abandon any well subject to this Permit.
36 37 38 39	II.F.2.d	For wells subject to this Permit, the Permittees will achieve full compliance with <u>Chapter 173-160 WAC</u> and <u>Chapter 18.104 RCW</u> consistent with a rolling five (5) year schedule agreed to by Ecology and the Permittees. This process will be completed by the year 2012.
40	II.F.3	Well Construction
41 42		All wells constructed pursuant to this Permit will be constructed in compliance with Chapter 173-160 WAC.
43	II.G	SITING CRITERIA
44 45		The Permittees will comply with the applicable notice of intent and siting criteria of WAC 173-303-281 and WAC 173-303-282, respectively.

Expiration Date: September 27, 2004 Page 27 of 42 Revision Number: 8C

1	II.H	RECORDKEEPING AND REPORTING
2 3 4		The provisions of <u>WAC 173-303-620</u> are not applicable to the Hanford Facility because the USDOE is both owner and operator of the Hanford Facility. <u>WAC 173-303-620(1)(c)</u> .
5	11.1	FACILITY OPERATING RECORD
6 7 8 9 10 11 12 13 14 15 16	II.I.1	The Permittees will maintain a written Facility Operating Record until ten (10) years after post-closure, or corrective action is complete and certified for the Facility, whichever is later. Except as specifically provided otherwise in this Permit, the Permittees will also record all information referenced in this Permit in the Facility Operating Record within seven (7) working days after the information becomes available. A TSD unit-specific Operating Record will be maintained for each TSD unit at a location identified in Parts III, V, and VI of this Permit. This information may be maintained on electronic media. Each TSD unit-specific Operating Record will be included by reference in the Facility Operating Record. Information required in each TSD unit-specific Operating Record is identified on a unit-by-unit basis in Part III, V, or VI of this Permit. The Facility Operating Record will include, but not be limited to, the following information.
17 18 19 20 21 22 23 24	II.I.1.a	A description of the system(s) currently utilized to identify and map solid waste management units and their locations. The description of the system(s) is required to include an identification of on-site access to the system's data, and an on-site contact name and telephone number. In addition to, or as part of, this system(s), the Permittees will also maintain a list identifying active ninety (90)-day waste storage areas, and dangerous waste satellite accumulation areas and their locations. The list will identify the location, the predominant waste types managed at the area, and a date identifying when the list was compiled. Maps will be provided by the Permittees upon request by Ecology;
25	II.I.1.b	Records and results of waste analyses required by WAC 173-303-300;
26 27 28 29	II.I.1.c	An identification of the system(s) currently utilized to generate Occurrence Reports. The identification of the system(s) is required to include a description, an identification of an on-site location of hard-copy Occurrence Reports, an identification of on-site access to the system's data, and an on-site contact name and telephone number;
30	II.I.1.d	Copies of all unmanifested waste reports;
31 32 33	II.I.1.e	The Hanford Emergency Management Plan, as well as summary reports, and details of all incidents that require implementing the contingency plan, as specified in WAC 173-303-360(2)(k);
34 35 36 37	II.I.1.f	An identification of the system(s) currently utilized and being developed to record personnel training records and to develop training plans. The identification of the system(s) is required to include a description, an identification of on-site access to the system's data, and an on-site contact name and telephone number;
38 39 40	II.I.1.g	Preparedness and prevention arrangements made pursuant to <u>WAC 173-303-340(4)</u> and documentation of refusal by state or local authorities that have declined to enter into agreements in accordance with <u>WAC 173-303-340(5)</u> ;
41	II.I.1.h	Reserved Condition;
42	II.I.1.i	Reserved Condition;
43 44 45	II.I.1.j	Documentation (e.g., waste profile sheets) of all dangerous waste transported to or from any TSD unit subject to this Permit. This documentation will be maintained in the receiving unit's Operating Record from the time the waste is received;

Expiration Date: September 27, 2004 Page 28 of 42 Permit Number: WA7 89000 8967

Revision Number: 8C

1 2 3 4 5	II.I.1.k	An identification of the system(s) currently utilized to cross-reference waste locations to specific manifest document numbers. The identification of the system(s) is required to include a thorough description, an identification of an on-site location of a hard-copy data report, an identification of on-site access to the system's data, and an on-site contact name and telephone number;
6	II.I.1.1	Reserved Condition;
7	II.I.1.m	Annual Reports required by this Permit;
8 9 10 11 12 13 14	II.I.1.n	An identification of all systems currently utilized to record monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation. The identification of systems will include a description of the systems. The descriptions will include a confirmation that the criteria of Permit Condition I.E.10 is provided by the utilization of the system. The identification of the systems will also include an identification of on-site access to the system's data, an on-site contact name and telephone number;
15	II.I.1.o	Reserved Condition;
16 17	II.I.1.p	Summaries of all records of ground water corrective action required by WAC 173-303-645;
18 19 20 21 22 23	II.I.1.q	An identification of the system(s) currently being utilized and being developed to evaluate compliance with the Conditions of this Permit and with <u>Chapter 173-303 WAC</u> . The identification of the system(s) will include a description of the system(s), an identification of on-site access to the system's data, and an on-site contact name and telephone number. The description of the system(s) will also include a definition of which portion(s) of the system(s) is accessible to Ecology;
24	II.I.1.r	All deed notifications required by this Permit (to be included by reference);
25	II.I.1.s	All inspection reports required by this Permit; and
26 27	II.I.1.t	All other reports as required by this Permit, including design change documentation and nonconformance documentation.
28	II.J	FACILITY CLOSURE
29 30 31 32 33	II.J.1	Final closure of the Hanford Facility will be achieved when closure activities for all TSD units have been completed, as specified in Parts III, IV, V, or VI of this Permit. Completion of these activities will be documented using either certifications of closure, in accordance with <u>WAC 173-303-610(6)</u> , or certifications of completion of post-closure care, in accordance with <u>WAC 173-303-610(11)</u> .
34 35	II.J.2	The Permittees will close all TSD units as specified in Parts III, V, and/or VI of this Permit.
36 37 38 39 40	II.J.3	The Permittees will submit a written notification of, or request for, a Permit modification in accordance with the provisions of <u>WAC 173-303-610(3)(b)</u> , whenever there is a change in operating plans, facility design, or the approved closure plan. The written notification or request must include a copy of the amended closure plan for review, or approval, by Ecology.

Permit Number: WA7 89000 8967 Revision Number: 8C Expiration Date: September 27, 2004 Page 29 of 42

1	II.J.4	The Permittees will close the Facility in a manner that:
2	II.J.4.a	Minimizes the need for further maintenance;
3 4 5 6	II.J.4.b	Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of dangerous waste, dangerous constituents, leachate, contaminated run-off, or dangerous waste decomposition products, to the ground, surface water, ground water, or the atmosphere; and
7 8	II.J.4.c	Returns the land to the appearance and use of surrounding land areas to the degree possible, given the nature of the previous dangerous waste activity.
9	II.J.4.d	Meets the requirements of WAC 173-303-610(2)(b).
10	II.K	SOIL/GROUND WATER CLOSURE PERFORMANCE STANDARDS
11 12 13 14	II.K.1	For purposes of Permit Condition II.K, the term "clean closure" shall mean the status of a TSD unit at the Facility which has been closed to the cleanup levels prescribed by WAC 173-303-610(2)(b), provided certification of such closure has been accepted by Ecology.
15 16 17 18 19	II.K.2	The Permittees may close a TSD unit to background levels as defined in Ecology approved Hanford Site Background Documents, if background concentrations exceed the levels prescribed by Permit Condition II.K.1. Closure to these levels, provided the Permittees comply with all other closure requirements for a TSD unit as identified in Parts III, V, and/or VI of this Permit, shall be deemed as "clean closure".
20 21 22 23 24 25	II.K.3	Except for those TSD units identified in Permit Conditions II.K.1, II.K.2, or II.K.4, the Permittees may close a TSD unit to a cleanup level specified under Method C of Chapter 173-340 WAC. Closure of a TSD unit to these levels, provided the Permittees comply with all other closure requirements for the TSD unit as specified in Parts III, V, and/or VI of the Permit, and provided the Permittees comply with Permit Conditions II.K.3.a through II.K.3.c, shall be deemed as a "modified closure".
26 27 28 29 30	II.K.3.a	For "modified closures", the Permittees shall provide institutional controls in accordance with WAC 173-340-440 which restricts access to the TSD unit for a minimum of five (5) years following completion of closure. The specific details and duration of institutional controls shall be specified in Parts III, V, and/or VI of this Permit for a particular TSD unit.
31 32 33 34 35 36 37 38 39 40 41 42 43 44	II.K.3.b	For "modified closures", the Permittees shall provide periodic assessments of the TSD unit to determine the effectiveness of the closure. The specific details of the periodic assessments shall be specified in Parts III, V, and/or VI of this Permit. The periodic assessments shall include, as a minimum, a compliance monitoring plan in accordance with WAC 173-340-410 that will address the assessment requirements on a unit-by-unit basis. At least one (1) assessment activity shall take place after a period of five (5) years from the completion of closure, which will demonstrate whether the soils and ground water have been maintained at or below the allowed concentrations as specified in Parts III, V, or VI of this Permit. Should the required assessment activities identify contamination above the allowable limits as specified in Parts III, V, and/or VI, the TSD unit must be further remediated, or the requirements of II.K.4 must be followed. Should the required assessment activities demonstrate that contamination has diminished, or remained the same, the Permittees may request that Ecology reduce, or eliminate the assessment activities and/or institutional controls.
45 46	II.K.3.c	For "modified closures", the Permittees shall specify the particular activities required by this Condition in a Post-Closure Permit application.

Permit Number: WA7 89000 8967 Expiration Date: September 27, 2004 Revision Number: 8C Page 30 of 42

		2
1 2 3 4	II.K.4	Any TSD unit for which Permit Conditions II.K.1, II.K.2, or II.K.3, are not chosen as the closure option, closing the TSD unit as a landfill may be selected. Closure and post-closure of the TSD unit as a landfill, must follow the procedures and requirements specified in <u>WAC 173-303-610</u> .
5 6 7 8 9	II.K.5	The cleanup option selected shall be specified in Parts III, V, and/or VI of this Permit, and shall be chosen with consideration of the potential future site use for that TSD unit/area. Definitions contained within <u>Chapter 173-340 WAC</u> shall apply to Permit Condition II.K. Where definitions are not otherwise provided by this Permit, the <u>HFFACO</u> , or <u>Chapter 173-303 WAC</u> .
10 11 12 13 14	II.K.6	Deviations from a TSD unit closure plan required by unforeseen circumstances encountered during closure activities, which do not impact the overall closure strategy, but provide equivalent results, shall be documented in the TSD unit-specific Operating Record and made available to Ecology upon request, or during the course of an inspection.
15 16 17 18 19 20 21 22 23	II.K.7	Where agreed to by Ecology, integration of other statutorily or regulatory mandated cleanups may be accommodated by this Permit. Results from other cleanup investigation activities shall be used whenever possible to supplement and/or replace TSD unit closure investigation activities. All, or appropriate parts of, multipurpose cleanup and closure documents can be incorporated into this Permit through the Permit modification process. Cleanup and closures conducted under any statutory authority, with oversight by either Ecology or the EPA, which meet the equivalent of the technical requirements of Permit Conditions II.K.1 through II.K.4, may be considered as satisfying the requirements of this Permit.
24	11.L	DESIGN AND OPERATION OF THE FACILITY
25	II.L.1	Proper Design and Construction
26 27 28 29		The Permittees will design, construct, maintain, and operate the Facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous substances to air, soil, ground water, or surface water, which could threaten human health, or the environment.
30	II.L.2	Design Changes, Nonconformance, and As-Built Drawings
31 32 33 34 35 36	II.L.2.a	After completing the Permit modification process in Permit Condition I.C.3, the Permittees will conduct all construction subject to this Permit in accordance with the approved designs, plans and specifications that are required by this Permit, unless authorized otherwise in Permit Conditions II.L.2.b or II.L.2.c. For purposes of Permit Conditions II.L.2.b and II.L.2.c, an Ecology construction inspector, or TSD unit manager, are designated representatives of Ecology.
37 38 39 40 41 42 43 44 45 46 47	II.L.2.b	During construction of a project subject to this Permit, changes to the approved designs, plans and specifications will be formally documented. All design change documentation will be maintained in the TSD unit-specific Operating Record and will be made available to Ecology upon request or during the course of an inspection. The Permittees will provide copies of design change documentation affecting any critical system to Ecology within five (5) working days of initiating the design change documentation. Identification of critical systems will be included by the Permittees in each TSD unit-specific dangerous waste Permit application, closure plan or Permit modification, as appropriate. Ecology will review a design change documentation modifying a critical system, and inform the Permittees in writing within two (2) working days, whether the proposed design change documentation, when issued, will require a Class 1, 2, or 3

Expiration Date: September 27, 2004 Page 31 of 42 Revision Number: 8C

1 2		Permit modification. If after two (2) working days Ecology has not responded, it will be deemed as acceptance of the design change documentation by Ecology.
3 4 5 6 7 8 9 10 11 12 13 14	II.L.2.c	During construction of a project subject to this Permit, any work completed which does not meet or exceed the standards of the approved design, plans and specifications will be formally documented with nonconformance documentation. All nonconformance documentation will be maintained in the TSD unit-specific Operating Record and will be made available to Ecology upon request, or during the course of an inspection. The Permittees will provide copies of nonconformance documentation affecting any critical system to Ecology within five (5) working days after identification of the nonconformance. Ecology will review nonconformance documentation affecting a critical system and inform the Permittees in writing, within two (2) working days, whether a Permit modification is required for any nonconformance, and whether prior approval is required from Ecology before work proceeds, which affects the nonconforming item. If Ecology does not respond within two (2) working days, it will be deemed as acceptance and no Permit modification will be required.
16 17 18 19 20 21 22	II.L.2.d	Upon completion of a construction project subject to this Permit, the Permittees will produce as-built drawings of the project which incorporate the design and construction modifications resulting from all project design change documentation and nonconformance documentation, as well as modifications made pursuant to WAC 173-303-830 . The Permittees will place the drawings into the Operating Record within twelve (12) months of completing construction, or within an alternate period of time specified in a unit-specific Permit Condition in Part III or V of this Permit.
23	II.L.2.e	Facility Compliance
24 25 26		The Permittees in receiving, storing, transferring, handling, treating, processing, and disposing of dangerous waste, will design, operate, and/or maintain the Facility in compliance with all applicable federal, state, and local laws and regulations.
27	II.M	SECURITY
28 29 30		The Permittees will comply with the security provisions of <u>WAC 173-303-310</u> . The Permittees may comply with the requirements of <u>WAC 173-303-310(2)</u> on a unit-by-unit basis.
31	II.N	RECEIPT OF DANGEROUS WASTES GENERATED OFF-SITE
32	II.N.1	Receipt of Off-Site Waste
33 34 35		The Permittees will comply with Permit Conditions II.N.2 and II.N.3 for any dangerous wastes which are received from sources outside the United States, or from off-site generators.
36	II.N.2	Waste from Sources Outside the United States
37 38		The Permittees will meet the requirements of <u>WAC 173-303-290(1)</u> for waste received from outside the United States.
39	II.N.3	Notice to Generator
40 41 42 43 44		For waste received from off-site sources (except where the owner/operator is also the generator), the Permittees will inform the generator in writing that they have the appropriate Permits for, and will accept, the waste the generator is shipping, as required by WAC 173-303-290(3). The Permittees will keep a copy of this written notice as part of the TSD unit-specific Operating Record.

Permit Number: WA7 89000 8967 Expiration Date: September 27, 2004
Revision Number: 8C Page 32 of 42

II.O **GENERAL INSPECTION REQUIREMENTS** 1 2 II.O.1 The Permittees will inspect the Facility to prevent malfunctions and deterioration. 3 operator errors, and discharges, which may cause or lead to the release of dangerous 4 waste constituents to the environment, or threaten human health. Inspections must be 5 conducted in accordance with the provisions of WAC 173-303-320(2). In addition to the 6 TSD unit inspections specified in Parts III, V, and/or VI, the following inspections will 7 also be conducted: 8 II.O.1.a The 100, 200 East, 200 West, 300, and 400 areas will be inspected annually. The Permittees will inspect the banks of the Columbia River, contained within the 9 II.O.1.b 10 Facility boundary, once a year. The inspection will be performed from the river, by boat, and the inspectors will follow the criteria in Permit Condition II.O.1.c. 11 12 The Permittees will visually inspect the areas identified in Permit Conditions II.O.1.a and II.O.1.c II.O.1.b for malfunctions, deterioration, operator errors, and discharges which may cause 13 14 or lead to the release of dangerous waste constituents to the environment, or that threaten human health. Specific items to be noted are as follows: 15 Remains of waste containers, labels, or other waste management equipment; II.O.1.c.i 16 II.O.1.c.ii 17 Solid waste disposal sites not previously identified for remedial action: 18 II.O.1.c.iii Uncontrolled waste containers (e.g., orphan drums): Temporary or permanent activities that could generate an uncontrolled waste form; and 19 II.O.1.c.iv 20 II.O.1.c.v Unpermitted waste discharges. II.O.1.d The Permittees will notify Ecology at least seven (7) days prior to conducting these 21 inspections in order to allow representatives of Ecology to be present during the 22 23 inspections. 24 ILO.2 If the inspection by the Permittees, conducted pursuant to Permit Condition II.O.1, reveals any problems, the Permittees will take remedial action on a schedule agreed to by 25 26 Ecology. 27 II.O.3 The inspection of high radiation areas will be addressed on a case-by-case basis in either Part III of this Permit, or prior to the inspections required in Permit Condition II.O.1. 28 29 II.P **MANIFEST SYSTEM** The Permittees will comply with the manifest requirements of WAC 173-303-370 for II.P.1 30 waste received from off-site and WAC 173-303-180 for waste shipped off-site. 31 32 II.P.2 Transportation of dangerous wastes along roadways, if such routes are not closed to general public access at the time of transport, can be manifested pursuant to an alternate 33 tracking system as allowed by WAC 173-303-180(6). The alternate tracking system can 34 be a paper system or an electronic system. The roadways addressed by this condition are 35 36 a public or private right-of-way within or along the border of contiguous property where the movement is under control of the USDOE. The alternate tracking system will consist 37 38 of documentation between the offering Hanford Facility location and the receiving Hanford Facility location containing the following information: 39 II.P.2.a Hanford Facility offeror name, location, and telephone number; 40 II.P.2.b Hanford Facility receiver name, location, and telephone number; 41 II.P.2.c Description of waste; 42 43 II.P.2.d Number and type of containers;

Expiration Date: September 27, 2004 Page 33 of 42 Revision Number: 8C

1	II.P.2.e	Total quantity of waste;
2	II.P.2.f	Unit volume/weight;
3	II.P.2.g	Dangerous waste number(s) or U.S. Department of Transportation hazard class; and
4	II.P.2.h	Special handling instructions including emergency contacts.
5 6	II.P.3	The Hanford Facility offeror and receiver will resolve any discrepancies of information found related to Permit Conditions II.P.2.a through II.P.2.h.
7 8 9 10	II.P.4	If the discrepancies cannot be resolved at the Hanford Facility receiving location, a new Hanford Facility receiver location will be agreed upon, or the dangerous waste will be returned to the offeror location. The documentation accompanying the movement of dangerous waste will be updated to reflect the new receiving location.
11	II.Q	ON-SITE TRANSPORTATION
12 13 14 15 16	II.Q.1	Documentation must accompany any on-site dangerous waste which is transported to or from any TSD unit subject to this Permit, through or within the 600 Area, unless the roadway is closed to general public access at the time of shipment. Waste transported by rail or by pipeline is exempt from this Condition. This documentation will include the following information, unless other unit-specified provisions are designated in Part III or V of this Permit:
18	II.Q.1.a	Generator's name, location, and telephone number;
19	II.Q.1.b	Receiving TSD unit's name, location, and telephone number;
20	II.Q.1.c	Description of waste;
21	II.Q.1.d	Number and type of containers;
22	II.Q.1.e	Total quantity of waste;
23	II.Q.1.f	Unit volume/weight;
24	II.Q.1.g	Dangerous waste number(s); and
25	II.Q.1.h	Any special handling instructions.
26 27 28	II.Q.2	All non-containerized solid, dangerous waste transported to or from TSD units, subject to this Permit, will be covered to minimize the potential for material to escape during transport.
29	II.R	EQUIVALENT MATERIALS
30 31 32 33 34	II.R.1	The Permittees may substitute an equivalent or superior product for any equipment or materials specified in this Permit. Use of equivalent or superior products will not be considered a modification of this Permit. A substitution will not be considered equivalent unless it is at least as effective as the original equipment or materials in protecting human health and the environment.
35 36 37 38	II.R.2	The Permittees will place in the Operating Record (within seven [7] days after the change is put into effect) the substitution documentation, accompanied by a narrative explanation, and the date the substitution became effective. Ecology may judge the soundness of the substitution.
39 40 41 42 43	II.R.3	If Ecology determines that a substitution was not equivalent to the original, it will notify the Permittees that the Permittees' claim of equivalency has been denied, of the reasons for the denial, and that the original material or equipment must be used. If the product substitution is denied, the Permittees will comply with the original approved product specification, or find an acceptable substitution.

Expiration Date: September 27, 2004 Page 34 of 42 Revision Number: 8C

1	II.S	LAND DISPOSAL RESTRICTIONS (LDR)
2 3		Unless specifically identified otherwise in the <u>HFFACO</u> , the Permittees will comply with all LDR requirements as set forth in <u>WAC 173-303-140</u> .
4	II.T	ACCESS AND INFORMATION
5 6 7		To the extent that work required by this Permit must be done on property not owned or controlled by the Permittees, the Permittees must utilize their best efforts to obtain access and information at these locations.
8	II.U	MAPPING OF UNDERGROUND PIPING
9	II.U.1	Reserved.
10	II.U.2	Reserved.
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	II.U.3	The Permittees will maintain piping maps for existing, newly identified, and/or new dangerous waste underground pipelines (including active, inactive, and abandoned pipelines, which contain or contained dangerous waste subject to the provisions of Chapter 173-303 WAC) at the Hanford Facility. The maps will identify the origin, destination, direction of flow, size, depth and type (i.e., reinforced concrete, stainless steel, cast iron, etc.), of each pipe, and the location of their diversion boxes, valve pits, seal pots, catch tanks, receiver tanks, and pumps, and utilize Washington State Plane Coordinates, NAD 83(91), meters. If the type of pipe material is not documented on existing drawings, the most probable material type will be provided. The maps will also identify whether the pipe is active, inactive, or abandoned. The age of all pipes requiring identification pursuant to this Condition will be documented in an Attachment to the submittal. If the age cannot be documented, an estimate of the age of the pipe will be provided based upon best engineering judgment. These maps need not include the pipes within a fenced tank farm or within a building/structure. These maps will be compiled using documented QA/QC control methods and procedures outlined in DOE/RL-96-50 , Hanford Facility RCRA Permit Mapping and Marking of Dangerous Waste Underground Pipelines Report, September 1996. These maps and any Attachments will be maintained in the Facility Operating Record and be updated annually as required by Permit Condition II.U.4.
30 31 32 33 34	II.U.4	Permittees will maintain current all maps required by Permit Condition II.U.3. These maps will be updated to incorporate new or revised information available by March 30th of each year. By September 30th of each year, the Permittees will submit to Ecology a list of maps that have been updated. The updated maps (including any Attachments) and the annual list submitted to Ecology will be maintained in the Facility Operating Record.
35	II.V	MARKING OF UNDERGROUND PIPING
36 37 38 39 40 41		The Permittees will maintain marking of underground pipelines located outside the 200 East, 200 West, 300, 400, 100N, and 100K Areas. These pipelines will be marked at the point they pass beneath an area fence, at their origin and destination, at any point they cross an improved road, and every 100 meters along the pipeline corridor where practicable. The markers will be labeled with a sign that reads "Buried Dangerous Waste Pipe" and will be visible from a distance of fifteen (15) meters.

Permit Number: WA7 89000 8967 Revision Number: 8C Expiration Date: September 27, 2004 Page 35 of 42

1	II.W	OTHER PERMITS AND/OR APPROVALS
2 3 4 5 6	II.W.1	The Permittees will be responsible for obtaining all other applicable federal, state, and local permits authorizing the development and operation of the Facility. To the extent that work required by this Permit must be done under a permit and/or approval pursuant to other regulatory authority, the Permittees will use their best efforts to obtain such permits.
7 8	II.W.2	All other permits related to dangerous waste management activities are severable and enforceable through the permitting authority under which they are issued.
9 10 11 12 13	II.W.3	All air emissions from units subject to this Permit will comply with all applicable state and federal regulations pertaining to air emission controls, including but not limited to, <u>Chapter 173-400 WAC</u> , General Regulations for Air Pollution Sources; <u>Chapter 173-480 WAC</u> , Controls for New Sources of Toxic Air Pollutants; and <u>Chapter 173-480 WAC</u> , Ambient Air Quality Standards and Emission Limits for Radionuclides.
14	II.X	SCHEDULE EXTENSIONS
15 16 17 18 19 20 21 22 23	II.X.1	The Permittees will notify Ecology in writing, as soon as possible, of any deviations or expected deviations, from the schedules of this Permit. The Permittees will include with the notification all information supporting their claim that they have used best efforts to meet the required schedules. If Ecology determines that the Permittees have made best efforts to meet the schedules of this Permit, Ecology will notify the Permittees in writing by certified mail, that the Permittees have been granted an extension. Such an extension will not require a Permit modification under Permit Condition I.C.3. Should Ecology determine that the Permittees have not made best efforts to meet the schedules of this Permit, Ecology may take such action as deemed necessary.
24 25		Copies of all correspondence regarding schedule extensions will be kept in the Operating Record.
26 27 28	II.X.2	Any schedule extension granted through the approved change control process identified in the <u>HFFACO</u> will be incorporated into this Permit. Such a revision will not require a Permit modification under Permit Condition I.C.3.
29	II.Y	CORRECTIVE ACTION
30 31 32 33 34 35 36 37 38 39 40 41 42 43		In accordance with <u>WAC 173-303-646</u> and <u>WAC 173-303-815(2)(b)(ii)</u> , the Permittee must conduct corrective action, as necessary to protect human health and the environment, for releases of dangerous waste and dangerous constituents from solid waste management units and areas of concern at the facility, including releases that have migrated beyond the facility boundary. The Permittee may be required to implement measures within the facility to address releases, which have migrated beyond the facility's boundary. As specified in Permit Conditions II.Y.1.g, II.Y.2.a.iii, and II.Y.2.a.ii, the Permittee's right to challenge Ecology's authority to impose corrective action with respect to radionuclides, CERCLA Past Practice (CPP) Units (as identified under Permit Condition II.Y.2.a.) and selected solid waste management units not covered by the <u>HFFACO</u> at property currently subleased to US Ecology, Inc. (as identified under Permit Condition II.Y.3.a.i), is reserved until such time as Ecology chooses to impose corrective action in accordance with the Permit modification procedures of <u>WAC 173-303-830</u> .

Expiration Date: September 27, 2004 Page 36 of 42 Revision Number: 8C

1	II.Y.1	Compliance with Chapter 173-340 WAC
2 3 4 5 6		In accordance with <u>WAC 173-303-646</u> , the Permittee must conduct corrective action "as necessary to protect human health and the environment". To ensure that corrective action will be conducted as necessary to protect human health and the environment, except as provided in Permit Condition II.Y.2, the Permittee must conduct corrective action in a manner that complies with the following provisions of <u>Chapter 173-340 WAC</u> :
7 8	II.Y.1.a	As necessary to select a cleanup action in accordance with <u>WAC 173-340-360</u> and <u>WAC 173-340-350</u> State Remedial Investigation and Feasibility Study;
9	II.Y.1.b	WAC 173-340-360 Selection of Cleanup Actions;
10	II.Y.1.c	WAC 173-340-400 Cleanup Actions;
11	II.Y.1.d	WAC 173-340-410 Compliance Monitoring Requirements;
12	II.Y.1.e	WAC 173-340-420 Periodic Site Reviews;
13	II.Y.1.f	WAC 173-340-440 Institutional Controls; and
14 15 16 17 18 19 20 21 22	II.Y.1.g	WAC 173-340-700 through -760 Cleanup Standards, except that to the extent that Ecology seeks to impose corrective action with respect to radionuclides regulated under the provisions of the Atomic Energy Act, as amended, 42 U.S.C. § 2011 et.seq. (AEA), the Permittee may challenge Ecology's authority to impose such corrective action through a timely appeal of the permit modification issued by Ecology without argument from Ecology that such right has been waived by a failure to fully litigate that issue through an appeal taken within thirty (30) days of the issuance of this permit, and without argument from the Permittee that such requirement fails to satisfy a cause for Permit modification under WAC 173-303-830(3)(a).
23 24	II.Y.2	Acceptance of Work under Other Authorities or Programs and Integration with the <u>HFFACO</u> .
25 26 27 28 29		Corrective action is necessary to protect human health and the environment for all units identified in <u>Appendix B</u> and <u>Appendix C</u> of the <u>HFFACO</u> . Notwithstanding Permit Condition II.Y.1, work under other cleanup authorities or programs, including work under the <u>HFFACO</u> , may be used to satisfy corrective action requirements, provided it protects human health and the environment.
30 31 32 33 34	II.Y.2.a	For units identified in <u>Appendix C</u> of the <u>HFFACO</u> , as amended, as CERCLA Past Practice (CPP) Units, Ecology accepts work under the <u>HFFACO</u> , as amended, and under the CERCLA program, as satisfying corrective action requirements to the extent provided for in, and subject to the reservations and requirements of, Permit Conditions II.Y.2.a.i through II.Y.2.a.iv.
35 36 37 38 39 40 41 42 43 44	II.Y.2.a.i	For any unit identified in <u>Appendix C</u> of the <u>HFFACO</u> as a CPP unit, the Permittee must comply with the requirements and schedules related to investigation and cleanup of the CPP unit(s) developed and approved under the <u>HFFACO</u> , as amended. The requirements and schedules related to investigation and cleanup of CPP units currently in place under the <u>HFFACO</u> , as amended, and in the future developed and approved under the FFAOC, as amended, are incorporated into this Permit by this reference and apply under this Permit as if they were fully set forth herein. If the Permittee is not in compliance with requirements of the <u>HFFACO</u> , as amended, that relate to investigation or cleanup of CPP unit(s), Ecology may take action to independently enforce the requirements as corrective action requirements under this Permit.

Permit Number: WA7 89000 8967 Expiration Date: September 27, 2004

Revision Number: 8C Page 37 of 42

1 II.Y.2.a.ii For any unit identified in Appendix C of the HFFACO as a CPP unit, in the case of an 2 interim ROD, a final decision about satisfaction of corrective action requirements will be 3 made in the context of issuance of a final ROD. 4 II.Y.2.a.iii If EPA and Ecology, after exhausting the dispute resolution process under Section XXVI 5 of the HFFACO, cannot agree on requirements related to investigation or cleanup of CPP 6 unit(s), Ecology will notify the Permittee, in writing, of the disagreement and impose, in accordance with the Permit Modification Procedures of WAC 173-303-830, a 7 8 requirement for the Permittee to conduct corrective action for the subject units(s) in 9 accordance with Permit Condition II.Y.1. The Permittee may challenge Ecology's 10 authority to impose such corrective action requirements through a timely appeal of such permit modification, without argument from Ecology that the Permittee's right to raise 11 such challenge has been waived by a failure to fully litigate that issue through an appeal 12 taken within thirty (30) days of the issuance of this permit, and without argument from 13 the Permittee that such requirement fails to satisfy a cause for Permit modification under 14 15 WAC 173-303-830(3)(a). Within sixty (60) days of receipt of the above permit modification, or within some other reasonable period of time agreed to by Ecology and 16 the Permittee, the Permittee must submit for Ecology review and approval, a plan to 17 conduct corrective action in accordance with Permit Condition II.Y.1 for the subject 18 19 unit(s). The Permittee's plan may include a request that Ecology evaluate work under 20 another authority or program. Approved corrective action plans under this Condition will 21 be incorporated into this Permit in accordance with the Permit Modification Procedures of WAC 173-303-830. 22 23 II.Y.2.a.iv The Permittee must maintain information on corrective action for CPP units covered by the HFFACO in accordance with the HFFACO Action Plan §9.0 and §10.0. In addition. 24 25 the Permittee must maintain all reports and other information developed in whole, or in part, to implement the requirements of Permit Condition II.Y.2.a, including reports of 26 investigations and all raw data, in the Facility Operating Record in accordance with 27 Permit Condition II.I. Information that is maintained in the Hanford Site Administrative 28 Record may be incorporated by reference into the Facility Operating Record. 29 II.Y.2.b For units identified in Appendix C of the HFFACO, as amended, as RPP units, Ecology 30 accepts work under the HFFACO, as amended, as satisfying corrective action 31 32 requirements to the extent provided for, and subject to the reservations and requirements of, Permit Conditions II.Y.2.b.i through II.Y.2.b.iv. 33 For any unit identified in Appendix C of the HFFACO, as amended, as RPP unit, until a 34 II.Y.2.b.i Permit modification is complete under Permit Condition II.Y.2.b.iii., the Permittee must 35 comply with the requirements and schedules related to investigation and cleanup of RPP 36 37 units developed and approved under the HFFACO, as amended. The requirements and schedules related to investigation and cleanup of RPP units currently in place under the 38 HFFACO, as amended, and in the future developed and approved under the HFFACO. 39 40 as amended, are incorporated into this Permit by this reference and apply under this Permit as if they were fully set forth herein. Until a permit modification is complete 41 under Permit Condition II.Y.2.b.iii, if the Permittee is not in compliance with 42 requirements and schedules related to investigation and cleanup of RPP units developed 43 and approved under the HFFACO, as amended, Ecology may take action to 44 45 independently enforce the requirements as corrective action requirements under this Permit. 46 II.Y.2.b.ii When the Permittee submits a corrective measures study for an individual RPP unit or a 47 group of RPP units, the Permittee must, at the same time, recommend a remedy for the 48 unit(s). The remedy recommendation must contain all the elements of a draft cleanup 49 action plan under WAC 173-340-360(10). 50

Expiration Date: September 27, 2004 Page 38 of 42 Revision Number: 8C

1 2 3 4 5 6 7 8	II.Y.2.b.iii	After considering the Permittees' corrective measures study and remedy recommendation, Ecology will make a tentative remedy selection decision and publish the decision for public review and comment. Public review and comment may be accomplished by publishing the tentative decision as a draft Permit under WAC 173-303-840(10), or by a method that provides an equivalent opportunity for public review and participation. Following public review and comment, Ecology will make a final remedy selection decision. Final remedy decisions will be incorporated into the Permit using the Permit Modification Procedures of WAC 173-303-830.
9 10 11 12 13 14 15 16	II.Y.2.b.iv	The Permittee must maintain information on corrective action for RPP units covered by the <u>HFFACO</u> , as amended, in accordance with <u>HFFACO Action Plan §9.0</u> and §10.0. In addition, the Permittee must maintain all reports and other information developed in whole, or in part, to implement the requirements of Permit Condition II.Y.2.b, including reports of investigations and all raw data, in the Facility Operating Record in accordance with Permit Condition II.I. Information that is maintained in the Hanford Site Administrative Record may be incorporated into the Facility Operating Record by reference.
17 18 19	II.Y.2.c	For each TSD unit or group of units, when the Permittee submits a certification of closure or a certification of completion of post-closure care, or at an earlier time agreed to by Ecology and the Permittee, the Permittee must, at the same time, either:
20 21	II.Y.2.c.i	Document that the activities completed under closure and/or post-closure satisfy the requirements for corrective action; or
22 23 24 25 26 27	II.Y.2.c.ii	If the activities completed under closure and/or post-closure care do not satisfy corrective action requirements, identify the remaining corrective action requirements and the schedule under which they will be satisfied, if remaining corrective action requirements will be satisfied by work developed and carried out under the HFFACO provisions for RPP units or CPP units, a reference to the appropriate RPP or CPP process and schedule will suffice.
28 29 30 31	II.Y.2.c.iii	Ecology will make final decisions as to whether the work completed under closure and/or post-closure care satisfies corrective action, specify any unit-specific corrective action requirements, and incorporate the decision into this Permit in accordance with the Permit Modification Procedures of <u>WAC 173-303-830</u> .
32 33	II.Y.2.d	Notwithstanding any other condition in this Permit, Ecology may directly exercise any administrative or judicial remedy under the following circumstances:
34 35	II.Y.2.d.i	Any discharge or release of dangerous waste, or dangerous constituents, which are not addressed by the <u>HFFACO</u> , as amended;
36 37 38	II.Y.2.d.ii	Discovery of new information regarding dangerous constituents or dangerous waste management, including but not limited to, information about releases of dangerous waste or dangerous constituents which are not addressed under the <u>HFFACO</u> , as amended; or
39 40 41	II.Y.2.d.iii	A determination that action beyond the terms of the <u>HFFACO</u> , as amended, is necessary to abate an imminent and substantial endangerment to the public health, or welfare, or to the environment.
42	II.Y.3	Releases of Dangerous Waste or Dangerous Constituents Not Covered By the HFFACO
43	II.Y.3.a	US Ecology
44	II.Y.3.a.i	The following solid waste management units are not covered by the HFFACO:
45	II.Y.3.a.i.a	US Ecology, Inc., SWMU 1: Chemical Trench;

Expiration Date: September 27, 2004 Page 39 of 42 Revision Number: 8C

II.Y.3.a.i.b II.Y.3.a.i.c II.Y.3.a.ii	US Ecology, Inc., SWMU 2-13: Low-level radioactive waste trenches 1 through 11A; and US Ecology, Inc., SWMU 17: Underground resin tank. Selected solid waste management units identified in Permit Condition II.Y.3.a.i are currently being investigated by US Ecology in accordance with the Comprehensive Investigation US Ecology – Hanford Operations Workplan. Following completion of this investigation and any closure required of such solid waste management unit under the authority of the Washington State Department of Health, or within one (1) year of the effective date of this Permit Condition, whichever is earlier, Ecology will make a tentative decision as to whether additional investigation or cleanup is necessary to protect human health or the environment for the solid waste management units identified in Permit Condition II.Y.3.a.i, and publish that decision as a draft permit in accordance with WAC 173-303-840(10). Following the associated public comment period, and consideration of any public comments received during the public comment period, Ecology will publish as final permit conditions under WAC 173-303-840(8) either:
II.Y.3.a.ii	Selected solid waste management units identified in Permit Condition II.Y.3.a.i are currently being investigated by US Ecology in accordance with the Comprehensive Investigation US Ecology – Hanford Operations Workplan. Following completion of this investigation and any closure required of such solid waste management unit under the authority of the Washington State Department of Health, or within one (1) year of the effective date of this Permit Condition, whichever is earlier, Ecology will make a tentative decision as to whether additional investigation or cleanup is necessary to protect human health or the environment for the solid waste management units identified in Permit Condition II.Y.3.a.i, and publish that decision as a draft permit in accordance with WAC 173-303-840(10). Following the associated public comment period, and consideration of any public comments received during the public comment period, Ecology will publish as final permit conditions under WAC 173-303-840(8) either:
	currently being investigated by US Ecology in accordance with the Comprehensive Investigation US Ecology – Hanford Operations Workplan. Following completion of this investigation and any closure required of such solid waste management unit under the authority of the Washington State Department of Health, or within one (1) year of the effective date of this Permit Condition, whichever is earlier, Ecology will make a tentative decision as to whether additional investigation or cleanup is necessary to protect human health or the environment for the solid waste management units identified in Permit Condition II.Y.3.a.i, and publish that decision as a draft permit in accordance with WAC 173-303-840(10). Following the associated public comment period, and consideration of any public comments received during the public comment period, Ecology will publish as final permit conditions under WAC 173-303-840(8) either:
II.Y.3.a.ii.a	A decision that compative action is not used.
	A decision that corrective action is not necessary to protect human health or the environment;
II.Y.3.a.ii.b	An extension to the schedule established under Permit Condition II.1.Y.3.a.ii; or
II.Y.3.a.ii.c	A decision that corrective action in accordance with Permit Condition II.Y.1 is necessary to protect human health or the environment.
II.Y.3.a.iii	If Ecology decides under Permit Condition II.Y.3.a.ii that corrective action is necessary to protect human health or the environment, the Permittee may challenge Ecology's authority to impose such corrective action requirements through a timely appeal of such permit modification, without argument from Ecology that the right to raise such challenge has been waived by a failure to fully litigate that issue through an appeal taken within thirty (30) days of the issuance of this permit, and with argument from the Permittee that such requirement fails to satisfy a cause for permit modification under WAC 173-303-830(3)(a). Within one hundred and eighty (180) days of receipt of the above Permit modification, the Permittee must submit, for Ecology review and approval, a plan to conduct corrective action in accordance with Permit Condition II.Y.1. Approved corrective action plans under this condition will be incorporated into this Permit in accordance with the Permit Modification Procedures of WAC 173-303-830.
II.Y.3.b	Newly Identified Solid Waste Management Units and Newly Identified Releases of Dangerous Waste or Dangerous Constituents.
	The Permittee must notify Ecology of all newly-identified solid waste management units and all newly-identified areas of concern at the Facility. For purposes of this condition, a 'newly-identified' solid waste management unit or a 'newly-identified' area of concern is a unit or area not identified in the HFFACO, as amended, on the effective date of this condition and not identified by Permit Condition II.Y.3.a. Notification to Ecology must be in writing and must include, for each newly-identified unit or area, the information required by WAC 173-303-806(4)(a)(xxiii) and WAC 173-303-806(4)(a)(xxiv). Notification to Ecology must occur at least once every calendar year, in January, and must include all units and areas newly identified since the last notification, except that if a newly identified unit or area may present an imminent and substantial endangerment to human health or the environment, notification must occur within five (5) days of identification of the unit or area. If information required by WAC 173-303-806(4)(a)(xxiii) or WAC 173-303-806(4)(a)(xxiv) is already included in

Expiration Date: September 27, 2004 Page 40 of 42 Revision Number: 8C

1 2		the Waste Information Data System, it may be incorporated by reference into the required notification.
3	II.Z	WASTE MINIMIZATION
4 5 6		In accordance with WAC 173-303-380(1)(q), and Section 3005(h) of RCRA, 42 U.S.C. 6925(h), the Permittee must place a certification in the Hanford Facility Operating Record, Unit-Specific Files on an annual basis that:
7 8	II.Z.1.a	A program is in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable; and,
9 10 11	II.Z.1.b	The proposed method of treatment, storage or disposal is that practicable method currently available to the Permittee, which minimizes the present and future threat to human health and the environment.
12 13	II.Z.2	The Permittee will maintain each such certification of waste minimization in the operating record as required by Permit Condition II.I.1.
14	II.AA	AIR EMISSION STANDARDS FOR PROCESS VENTS
15 16 17 18 19 20 21 22 23 24		The Permittees will comply with applicable requirements of <u>WAC 173-303-690</u> for process vents associated with Part III units performing specific separations processes unless exempted by <u>WAC 173-303-690(1)(d)</u> . Threshold limits applied to process vents potentially requiring emission controls subject to <u>WAC 173-303-690</u> are evaluated based on the summation of applicable emission sources for the entire Hanford Facility. When the summed emissions fall below threshold limits in <u>40 CFR 264.1032(a)(1)</u> , no emission control devices are required. If threshold limits in <u>40 CFR 264.1032(a)(1)</u> are predicted to be exceeded, the Permittees will notify Ecology to determine the appropriate course of action. Unit-specific information is contained in Part III of the Permit for applicable units.
25	II.BB	AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS
26 27 28 29 30 31		The Permittees will comply with applicable requirements of WAC 173-303-691 for certain equipment leaks associated with Part III units unless exempted by WAC 173-303-691(1)(e) or (f). Air emission standards apply to equipment that contacts or contains hazardous wastes with organic concentrations of at least 10 percent by weight. Unit-specific information is contained in Part III of the Permit for applicable units.
32 33	II.CC	AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS
34 35 36 37		The Permittees shall comply with applicable requirements of <u>WAC 173-303-692</u> for containers, tanks, and surface impoundment areas associated with Part III units unless exempted by <u>WAC 173-303-692(1)(b)</u> . Unit-specific information is contained in Part III of the Permit for applicable units.

Permit Number: WA7 89000 8967 Expiration Date: September 27, 2004

Revision Number: 8C Page 41 of 42

1 PART III UNIT-SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS

- 2 Operating Unit 2, PUREX Storage Tunnels
- 3 Operating Unit 3, Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility
- 4 Operating Unit 4, 242-A Evaporator
- 5 Operating Unit 5, 325 Hazardous Waste Treatment Units
- 6 Operating Unit 10, Waste Treatment and Immobilization Plant
- 7 Operating Unit 11, Integrated Disposal Facility
- 8 Operating Unit 15, 331-C Storage Unit
- 9 Operating Unit 16, 400 Area Waste Management Unit

10 PART IV UNIT SPECIFIC CONDITIONS FOR CORRECTIVE ACTION

11 Corrective Action Unit 1, 100-NR-1

12 PART V UNIT-SPECIFIC CONDITIONS FOR UNITS UNDERGOING CLOSURE

- 13 Closure Unit 1, 1325-N Liquid Waste Disposal Facility
- 14 Closure Unit 2, 1301-N Liquid Waste Disposal Facility
- 15 Closure Unit 3, 1324-N Surface Impoundment and 1324-NA Percolation Pond

16 PART VI UNIT-SPECIFIC CONDITIONS FOR UNITS IN POST-CLOSURE

- 17 Post Closure Unit 1, 300 Area Process Trenches
- 18 Post Closure Unit 2, 183-H Solar Evaporation Basins

19 UNITS RETIRED FROM THE PERMIT

- 20 100 D Ponds (Closed 8/9/99)
- 21 105-DR Large Sodium Fire Facility (Closed 7/1/04)
- 22 100-NR-2 Operable Unit (9/30/09)
- 23 200 West Area Ash Pit Demolition Site (Closed 11/28/95)
- 24 2101-M Pond (Closed 11/28/95)
- 25 216-B-3 Expansion Ponds (Closed 7/31/95)
- 26 218-E-8 Borrow Pit Demolition Site (Closed 11/28/95)
- 27 224-T Transuranic Waste Storage and Assay Facility (Closed 11/12/08)
- 28 241-Z Treatment and Storage Tanks (Closed 2/22/07)
- 29 2727-S Nonradioactive Dangerous Waste Storage Facility (Closed 7/31/95)
- 30 300 Area Solvent Evaporator (Closed 7/31/95)
- 31 300 Area Waste Acid Treatment System (Closed 10/30/2005)
- 32 303-K Storage Facility (Closed 7/22/02)
- 33 303-M Oxide Facility (Closed 6/15/06)
- 34 304 Concretion Facility (Closed 1/21/96)
- 35 305-B Storage Facility (Closed 7/2/07)
- 36 3718-F Alkali Metal Treatment and Storage Facility Closure Plan (Closed 8/4/98)
- 37 4843 Alkali Metal Storage Facility Closure Plan (Closed 4/14/97)
- 38 Hanford Patrol Academy Demolition Site (Closed 11/28/95)
- 39 Plutonium Finishing Plant Treatment Unit (Closed 2/8/05)
- 40 Simulated High Level Waste Slurry Treatment and Storage Unit (Closed 10/23/95)

41

Revision Number: 8C

Expiration Date: September 27, 2004 Page 42 of 42

1 2 3

4 5

This page intentionally left blank.

Permit Attachment 9

Permit Applicability Matrix

	CONDITION			QUALIFIERS					
PART	TITLE	Α	В	С	D	E	F	G	
I.A.	EFFECT OF PERMIT								
I.A.1.		*	*	*	*	*	*	*	
I.A.2.		*	*	*	*	*	*	*	
I.A.3.		*	*		*	*	*	*	
I.A.4.	Coordination with the HFFACO		*		*	*	*	*	
I.B.	PERSONAL AND PROPERTY RIGHTS		*	-	*	*	*	*	
I.C.	PERMIT ACTIONS						-		
I.C.1.	Modification, Revocation, Reissuance,		*		*	*	*	*	
	or Termination		•		-	1	•	*	
I.C.2.	Filing of a Request		*		*	*	*	*	
I.C.3.	Modifications		*		*	*	*	*	
I.D.	SEVERABILITY					-			
I.D.1.	Effect of Invalidation		*		*	*	*	*	
I.D.2.	Final Resolution		*		*	*	*	*	
I.E.	DUTIES AND REQUIREMENTS								
I.E.1.	Duty to Comply		*		*	*	*	*	· · · · · · · · · · · · · · · · · · ·
I.E.2.	Compliance Not Constituting Defense	1	*		*	*	*	*	
I.E.3.	Duty to Reapply		*		*	*	*	*	
I.E.4.	Permit Expiration & Continuation		*		*	*	*	*	
I.E.5.	Need to Halt or Reduce Activity Not a		*		*	*	*		
	Defense		•		*	•	*	*	
I.E.6.	Duty to Mitigate		*		*	*	*	*	
I.E.7.	Proper Operation & Maintenance		*			*	*	*	······································
I.E.8.	Duty to Provide Information		*		*	*	*	*	
I.E.9.	Inspection & Entry		*		*	*	*	*	
I.E.10.	Monitoring & Records								
I.E.11.	Reporting Planned Changes		*			*	*	*	
I.E.12.	Certification of Construction or		*	1	1			1 1	
	Modification		*		,		*		
I.E.13.	Anticipated Noncompliance		*		*	*	*	*	
I.E.14.	Transfer of Permits		*			*	*	*	
I.E.15.	Immediate Reporting		*		*	*	*	*	
I.E.16.	Written Reporting	1	*		*	*	*	*	
I.E.17.	Manifest Discrepancy Report	1			†	1			
I.E.17.a			*			*	*	*	
I.E.17.b		 	*		*	*	*	*	······································

- A. Leased Land
- B. North Slope and ALE
- C. Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (in Part V)
- F. TSD Operating Units (in Part III)
- G. TSD Units in Post-Closure/Modified Closure (in Part VI)
- * Condition applies to this category, as modified by applicable footnotes and qualifiers.
- 1 For Category B, Part I Conditions only apply if future TSD activities are begun on the North Slope or ALE.
- 2 For Category C, all Part I Conditions apply to activities subject to Conditions II.U. and II.V.
- 3 For Category D, Part I Conditions only apply to activities subject to Conditions II.A., II.C., II.D.4., II.G., II.I., II.L.3., II.O., II.Q., II.S., II.T., II.X., and II.Y.

		PART	l 🌅			enter de la Sid			
	CONDITION			CA	TEGO	RY			QUALIFIERS
PART	TITLE	A	В	С	D	E	F	G	
I.E.18.	Unmanifested Waste Report		*	 		*	*	*	
I.E.19.	Other Noncompliance	1	*		*	*	*	*	
1.E.20.	Other Information	\dagger	*	†	*	*	*	*	
I.E.21.	Reports, Notifications, & Submissions	\top	*	 	*	*	*	*	
1.E.22.	Annual Report		*		*	*	*	*	
I.F.	SIGNATORY REQUIREMENT	_	*	<u> </u>	*	*	*	*	
I.G.	CONFIDENTIAL INFORMATION	\top	*		*	*	*	*	
I.H.	DOCUMENTS TO BE MAINTAINED AT FACILITY SITE		*		*	*	*	*	

- A. Leased Land
- B. North Slope and ALE
- C. Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (in Part V)
- F. TSD Operating Units (in Part III)
- G. TSD Units in Post-Closure/Modified Closure (in Part VI)
- * Condition applies to this category, as modified by applicable footnotes and qualifiers.
- 1 For Category B, Part I Conditions only apply if future TSD activities are begun on the North Slope or ALE.
- 2 For Category C, all Part I Conditions apply to activities subject to Conditions II.U. and II.V.
- 3 For Category D, Part I Conditions only apply to activities subject to Conditions II.A., II.C., II.D.4., II.G., II.I., II.L.3., II.O., II.Q., II.S., II.T., II.X., and II.Y.

			CA	QUALIFIERS					
PART	TITLE	Α	В	С	D	E	F	G	
II.A.	FACILITY CONTINGENCY PLAN								
II.A.1.					*	*	*	*	For Category D, II.A Conditions only apply to releases of hazardous substances that threater human health or the environment.
II.A.2.					*	*	*	*	
II.A.3.					*	*	*	*	
II.A.4.					*	*	*	*	
II.B.	PREPAREDNESS AND PREVENTION								
II.B.1.		ļ				*	*		
II.B.2.						*	*		
II.B.3.						*	*		
11.B.4.						*	*		
II.B.5						*	*		
II.C.	PERSONNEL TRAINING								
II.C.1.						*	*	*	
II.C.2.					*	*	*	*	
II.C.3.						*	*	*	
II.C.4.					*	*	*	*	For Category D, Condition II.C.4 will not apply to unrestricted (publicly accessible) areas.
II.D.	WASTE ANALYSIS								
II.D.1.						*	*	*	
II.D.2.						*	*	*	
II.D.3						*	*	*	
II.E.	QUALITY ASSURANCE/ QUALITY CONTROL								
II.E.1.						*	*	*	
II.E.2.						*	*	*	
II.C.Z.	.l			L		ł	l	1	1

Well Construction **CATEGORIES ARE DEFINED AS FOLLOWS:**

Purgewater Management

Well Remediation and Abandonment

MONITORING

A. Leased Land

II.F.1.

II.F.2.

II.F.3.

- B. North Slope and ALE
- Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (Part V)
- F. TSD Operating Units (Part III)
- G. TSD Units in Post Closure/Modified Closure (Part VI)

*

*

*

^{*}Condition applies to this category, as modified by applicable footnotes and qualifiers.

CONDITION			RT II	CA	and the	QUALIFIERS			
PART	TITLE	A	В	С	D	E	F	G	QUALITERS
II.G.	SITING CRITERIA				*		*		For Category D, Condition II.G only applies if a new TSD unit is to be sited.
II.H.	RECORDKEEPING AND REPORTING					*	*	*	
11.1.	FACILITY OPERATING RECORD								For Category D,
11.1.1.		*	*		*	*	*	*	II.I Conditions only apply to activities subject to
II.I.1.a.		*	*		*	*	*	*	this Permit as defined by
II.I.1.b.							*	*	this matrix.
II.I.1.c.					*	*	*	*	For Category E, Condition applicability to be
II.I.1.d.						*	*	*	specified in Part V.
II.I.1.e.			*		*				Condition II.I only applies
H.I.1.f.					*	*	*	*	to existing records and records prepared after
II.I.1.g.						*	*	*	the date of Permit issuance.
II.I.1.h.	Reserved Condition								
II.I.1.i.	Reserved Condition								
II.I.1.j.						*	*	*	
II.I.1.k.					*	*	*	*	
11.1.1.1.	Reserved Condition								
II.I.1.m.						*	*	*	
II.I.1.n.					*	*	*	*	
II.I.1.o.	Reserved Condition					<u></u>			
II.I.1.p.			*		*	*	*	*]
II.I.1.q.			*		*	*	*	*]
li.l.1.r.					*	*	*	*	
II.I.1.s.					*	*	*	*	
II.I.1.t.					*	*	*	*	
II.J.	FACILITY CLOSURE								
II.J.1.			ļ			*	*	*	
II.J.2.						*	*	*	
II.J.3.						*	*	*	
II.J.4.						*	*	*	

- A. Leased Land
- B. North Slope and ALE
- C. Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (Part V)
- F. TSD Operating Units (Part III)
- G. TSD Units in Post Closure/Modified Closure (Part VI)
- *Condition applies to this category, as modified by applicable footnotes and qualifiers.

CONDITION				CA	QUALIFIERS				
PART	TITLE	Α	В	С	D	E	F	G	
II.K.	SOIL/GROUND WATER CLOSURE PERFORMANCE STANDARDS								
II.K.1.						*	*	*	
II.K.2.						*	*	*	
II.K.3.						*	*	*	
II.K.4.						*	*	*	
II.K.5.						*	*	*	
II.K.6.						*	*	*	
II.K.7.						*	*	*	
II.L.	DESIGN AND OPERATION OF FACILITY								
II.L.1.	Proper Design and Construction					*	*	*	
II.L.2.	Design Changes, Nonconformance and as-built Drawings					*	*	*	Condition II.L.2, applies to Categories E & G only if it is a landfill closure.
II.L.2.a.						*	*	*	
II.L.2.b.						*	*	*	
II.L.2.c.						*	*	*	
II.L.2.d.						*	*	*	
II.L.2.e	Facility Compliance				*	*	*	*	
II.M.	SECURITY					*	*	*	
II.N.	RECEIPT OF DANGEROUS WASTES GENERATED OFF-SITE								
II.N.1.	Receipt of Off-Site Waste						*		
II.N.2.	Waste From Sources Outside the U.S.						*		
II.N.3.	Notice to Generator						*		
II.O.	GENERAL INSPECTION REQUIREMENTS								
II.O.1.					*	*	*	*	
II.O.1.a.					*				
II.O.1.b.					*				
II.O.1.c.					*				
II.O.1.d.					*				
II.O.2.					*	*	*	*	
II.O.3.					*	*	*	*	
II.P.	MANIFEST SYSTEM						· ·		
II.P.1.						*	*	*	
II.P.2.						*	*	*	

- A. Leased Land
- B. North Slope and ALE
- C. Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (Part V)
- F. TSD Operating Units (Part III)
- G. TSD Units in Post Closure/Modified Closure (Part VI)

^{*}Condition applies to this category, as modified by applicable footnotes and qualifiers.

CONDITION				CA	QUALIFIERS				
PART	TITLE	Α	В	С	D	E	F	G	
II.Q.	ON-SITE TRANSPORTATION								
II.Q.1.					*	*	*	*	
II.Q.2.					*	*	*	*	
II.R.	EQUIVALENT MATERIALS								
II.R.1.						*	*	*	
II.R.2.						*	*	*	
II.R.3.						*	*	*	
II.S.	LAND DISPOSAL RESTRICTIONS				*	*	*	*	
H.T.	ACCESS AND INFORMATION				*	*	*	*	
II.U.	MAPPING OF UNDERGROUND PIPING								
II.U.1.	Reserved Condition			1					
II.U.2.	Reserved Condition	7							
II.U.3.				*		*	*	*	
II.U.4.				*	<u> </u>	*	*	*	
II.V.	MARKING OF UNDERGROUND PIPING			*		*	*	*	
II.W.	OTHER PERMITS AND/OR APPROVALS								
II.W.1.						*	*	*	
II.W.2.						*	*	*	
II.W.3.						*	*	*	-
II.X.	SCHEDULE EXTENSIONS								Condition II.X, only
II.X.1.				*	*	*	*	*	applies to Category C if activities are subject to Conditions II.U, and II.V.
II.X.2.				*	*	*	*	*	Condition II.X, only applies to Category D if activities are subject to this Permit as defined by this matrix.
II.Y.	CORRECTIVE ACTION	*	*	*	*	*	*	*	
II.Y.1.	Compliance with Chapter 173-340 WAC	*	*	*	*	*	*	*	
II.Y.1.a.		*	*	*	*	*	*	*	
II.Y.1.b.		*	*	*	*	*	*	*	
II.Y.1.c.		*	*	*	*	*	*	*	
II.Y.1.d.		*	*	*	*	*	*	*	
II.Y.1.e.		*	*	*	*	*	*	*	
II.Y.1.f.		*	*	*	*	*	*	*	
II.Y.1.g.		*	*	*	*	*	*	*	

- A. Leased Land
- B. North Slope and ALE
- C. Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (Part V)
- F. TSD Operating Units (Part III)
- G. TSD Units in Post Closure/Modified Closure (Part VI)

^{*}Condition applies to this category, as modified by applicable footnotes and qualifiers.

		PA	RT II		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
	CONDITION	CATEGORY							QUALIFIERS
PART	TITLE	Α	В	С	D	E	F	G	
II.Y.2.	Acceptance of Work Under Other Authorities or Programs and Integration with the FFACO	*	*	*	*	*	*	*	
II.Y.2.a.		*	*	*	*	*	*	*	
II.Y.2.b.		*	*	*	*	*	*	*	
II.Y.2.c.		*	*	*	*	*	*	*	
II.Y.2.d.		*	*	*	*	*	*	*	
II.Y.3.	Releases of Dangerous Waste or Dangerous Constituents Not Covered by the FFACO	*	*	*	*	*	*	*	
II.Y.3.a.	U.S. Ecology	*	*	*	*	*	*	*	
II.Y.3.b.	Newly Identified Solid Waste Management Units and Newly Identified Releases of Dangerous Waste or Dangerous Waste Constituents	*	*	*	*	*	*	*	
II.Z	WASTE MINIMIZATION			<u> </u>					
II.Z.1							*		
II.Z.1.a							*		
II.Z.1.b				<u> </u>			*		
11.Z.2		ļ <u>-</u>			 		*	 	
II.AA	AIR EMISSION STANDARDS FOR PROCESS VENTS						*		
II.BB	AIR EMISSION STANDARDS FOR EQUIPMENT LEAKS						*		
II.CC	AIR EMISSION STANDARDS FOR TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS						*		

- A. Leased Land
- B. North Slope and ALE
- C. Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (Part V)
- F. TSD Operating Units (Part III)
- G. TSD Units in Post Closure/Modified Closure (Part VI)

^{*}Condition applies to this category, as modified by applicable footnotes and qualifiers.

	CONDITION			QUALIFIERS					
PART	TITLE	Α	В	С	D	E	F	G	
III. 	UNIT SPECIFIC CONDITIONS FOR FINAL STATUS OPERATIONS								
III.2	PUREX Storage Tunnels						*		
III.3	Liquid Effluent Retention Facility & 200 Area Effluent Treatment Facility						*		
III.4	242-A Evaporator						*		
111.5	325 Hazardous Waste Treatment Units				T		*		
III.10	Waste Treatment and Immobilization Plant						*		
111.11	Integrated Disposal Facility						*		
111.15	331-C Storage Unit						*		
III.16	400 Area Waste Management Unit	garkin s		or Lagge			*		
IV.	UNIT SPECIFIC CONDITIONS FOR CORRECTIVE ACTION								<u> </u>
IV.1	100-NR-1			 	*	*			
	PART				in the second	200) 	
V.	UNIT SPECIFIC CONDITIONS FOR UNITS UNDERGOING CLOSURE								
V.1	1325-N Liquid Waste Disposal Facility					*			
V.2	1301-N Liquid Waste Disposal Facility				_	*			
V.3	1324-N Surface Impoundment &1324-NA Surface Impoundment					*			
e and fa	PART	/1	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	or talle Selections					
VI.	UNIT SPECIFIC CONDITIONS FOR UNITS IN POST CLOSURE								
VI.1	300 Area Process Trenches						\top	*	
VI.2	183-H Solar Evaporation Basins		_	\top	\neg	_	+	*	
V1.2	103-11 30iai Evaporation basins	1		- 1	ı			"	

- A. Leased Land
- B. North Slope and ALE
- C. Interim Status TSD Units
- D. Areas Between TSDs (excluding A and B)
- E. TSD Unit Closures (Part V)
- F. TSD Operating Units (Part III)
- G. TSD Units in Post Closure/Modified Closure (Part VI)

^{*}Condition applies to this category, as modified by applicable footnotes and qualifiers.