



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

17-AMRP-0004

OCT 20 2016

Ms. Alexandra K. Smith, Program Manager
 Nuclear Waste Program
 State of Washington
 Department of Ecology
 3100 Port of Benton Boulevard
 Richland, Washington 99354

Dear Ms. Smith:

CLOSURE EXTENSION REQUEST FOR MULTIPLE T PLANT, CENTRAL WASTE COMPLEX-WASTE RECEIVING AND PROCESSING FACILITY (CWC-WRAP), AND LOW-LEVEL BURIAL GROUNDS (LLBGs) DANGEROUS WASTE MANAGEMENT UNITS (DWMUs)

This letter requests an extension in the date of expected closure in accordance with WAC 173-303-400(3)(a), that includes by reference 40 CFR 265.112(d)(2)(i), which states that the date when closure is expected to begin must be "Within 30 days after the date on which any hazardous waste management unit receives the known final volume of hazardous wastes, or, if there is a reasonable possibility that the hazardous waste management unit will receive additional hazardous wastes, no later than one year after the date on which the unit received the most recent volume of hazardous waste. If the owner or operator of a hazardous waste management unit or facility has the capacity to receive additional hazardous wastes and he has taken, and will continue to take, all steps to prevent threats to human health and the environment, including compliance with all interim status requirements, the Regional Administrator (Department) may approve an extension to this one-year limit."

In order to ensure compliance with WAC 173-303-400(3)(a), the U.S. Department of Energy Richland Operations Office (RL) has determined that the Solid Waste Operations Complex DWMUs listed in the table below are affected by this requirement and still have the capacity to receive additional dangerous and/or mixed waste. These DWMUs are needed to support future Hanford Site waste management activities, as documented in RL's Project Management Baseline as well as RL's Ten Year Plan. RL is requesting that the expected dates to begin closure of the following DWMUs be extended until such time that the final receipt of waste has occurred. Additional information is included in the enclosure.

DWMUs Needing a Delay in the Start of Closure

Operating Unit Group (OUG)	DWMUs
T Plant	2706-T Yard 221-T Railroad Tunnel
CWC-WRAP	CWC Shipping and Receiving Area
LLBGs	LLBGs Trench 34 Waste Storage and Treatment Pad

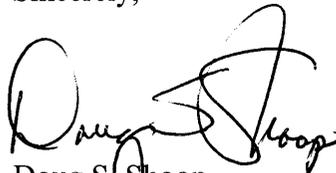
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If you have any questions, please contact me, or your staff may contact Ray Corey, Assistant Manager for the River and Plateau, on (509) 373-9931.

Sincerely,



Doug S. Shoop
Manager

AMRP:MSC

Enclosure

cc w/encl:

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DWMUs Needing a Delay in the Start of Closure

Operating Unit Group (OUG)	DWMUs
T Plant	2706-T Yard 221-T Railroad Tunnel
CWC-WRAP	CWC Shipping and Receiving Area
LLBGs	LLBGs Trench 34 Waste Storage and Treatment Pad

T Plant Dangerous Waste Management Units (DWMUs)

Anticipated Receipt of Additional Dangerous or Mixed Waste: Present plans are for the T Plant DWMUs included in this request to be used in the future for dangerous waste and mixed waste management activities in support of Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Action Plan Milestone M-091 and other Hanford Site cleanup actions. These waste management activities are dynamic in nature and schedules are driven by federal budget allocations. Future waste management campaigns include venting and repackaging of transuranic mixed waste stored in drums to meet disposal requirements, mainly the Waste Isolation Pilot Plant Waste Acceptance Criteria. Wastes to be managed include mixed low-level waste, transuranic mixed waste, and hazardous/dangerous waste. Closure of these units would be incompatible with the necessary continued operation of the T Plant Operating Unit Group (OUG).

Capacity to Receive Additional Waste: The T Plant OUG is permitted under interim status and has process and design capacity for container storage and treatment. The storage design capacity and the date of the last dangerous waste received into each DWMUs is shown in the following table. The maximum treatment and storage capacities are from the SWOC Part B permit application (DOE/RL-2015-74) submitted in January 2016.

Currently, dangerous/mixed waste is being stored in the 2706-T Yard DWMU, but sufficient capacity remains for management of additional dangerous/mixed waste. The 221-T Railroad Tunnel currently has no dangerous/mixed waste being stored but could be used in the future for Building 2706-T/TA venting operations and has sufficient capacity for management of additional dangerous or mixed waste.

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Treatment and Storage Capacities and Date of Last Dangerous Waste Receipt for T Plant Complex Dangerous Waste Management Units

DWMU	Maximum Treatment Capacity (mt/day)^a (DOE/RL-2015-74)	Maximum Storage Capacity (Liters) (DOE/RL-2015-74)	Date of Last Dangerous Waste Receipt	Current Volume of Waste (liters)
2706-T Yard	0	246,300	6/29/2011	322
221-T Railroad Tunnel	296	345,300	1/11/2012	0

^a Individual treatment unit is permitted to process at the daily maximum treatment rate; however, the maximum treatment rate for all associated treatment units combined within T Plant cannot exceed 296 metric tons/day

Central Waste Complex-Waste Receiving and Processing Facility (CWC-WRAP) DWMUs

Anticipated Receipt of Additional Dangerous or Mixed Waste: As described in the current RCRA Part A Permit for this unit, the CWC-WRAP DWMUs included in this request are expected to be needed in the future for dangerous and mixed waste activities in support of Tri-Party Agreement Action Plan Milestone M-091 and other Hanford Site cleanup actions including Plutonium Finishing Plant remediation and retrieval activities at the 618-10 and 618-11 Burial Grounds. These waste management activities are dynamic in nature and schedules are driven by federal budget allocations. Future campaigns for these DWMUs will include storage and treatment of mixed low level waste and transuranic mixed waste. Closure of this unit would be incompatible with the necessary continued operation of the CWC-WRAP OUG.

Capacity to Receive Additional Waste: The CWC-WRAP OUG is permitted under interim status and has process and design capacity for container storage and treatment. The storage design capacity and the date of the last dangerous waste received into each DWMUs is shown in the following table. The maximum treatment and storage capacities are from the SWOC Part B permit application (DOE/RL-2015-74) submitted in January 2016.

Currently, no dangerous or mixed waste is being stored in the CWC Shipping and Receiving Area DWMU. The capacity is sufficient for management of additional dangerous or mixed waste.

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**Treatment and Storage Capacities and Date of Last Dangerous Waste
Receipt for Central Waste Complex-Waste Receiving and Processing Facility
Dangerous Waste Management Units**

DWMU	Maximum Treatment Capacity (mt/day)^a (DOE/RL-2015-74)	Maximum Storage Capacity (Liters) (DOE/RL-2015-74)	Date of Last Dangerous Waste Receipt	Current Volume of Waste (liters)
CWC Shipping and Receiving Area	0	1,977,000	9/29/2015	0
^a Individual treatment units are permitted to process at the daily maximum treatment rate; however, the maximum treatment rate for all associated treatment units combined within CWC cannot exceed 382 metric tons/day.				

Low-Level Burial Grounds (LLBGs) DWMUs

Anticipated Receipt of Additional Dangerous or Mixed Waste: As described in the current RCRA Part A Permit for this unit, the LLBGs Trenches 31, 34, and 94 DWMUs included in this request are expected to be needed in the future for dangerous and mixed waste activities in support of Tri-Party Agreement Action Plan Milestone M-091 and other Hanford Site cleanup actions.

Capacity to Receive Additional Waste: The LLBGs OUG is permitted under interim status and has process and design capacity for container storage and treatment. The storage design capacity and the date of the last dangerous waste received into each DWMUs is shown in the following table. The maximum treatment and storage capacities are from the SWOC Part B permit application (DOE/RL-2015-74) submitted in January 2016.

Currently, no dangerous or mixed waste is being stored in the LLBGs Trench 34 Waste Storage and Treatment Pad DWMU. The capacity is sufficient for management of additional dangerous or mixed waste.

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Treatment and Storage Capacities and Date of Last Dangerous Waste Receipt for Low-Level Burial Grounds Dangerous Waste Management Units

DWMU	Maximum Treatment Capacity (mt/day) ^a (DOE/RL-2015-74)	Maximum Storage Capacity (Liters) (DOE/RL-2015-74)	Date of Last Dangerous Waste Receipt	Current Volume of Waste (liters)
LLBGs Trench 34 Waste Storage and Treatment Pad	26	1,240,000	2/4/2010	0
^a Individual treatment units are permitted to process at the daily maximum treatment rate; however, the maximum treatment rate for all associated treatment units combined within LLBG cannot exceed 26 metric tons/day.				

Further description of the measures to prevent threats to human health and the environment are provided below.

WAC 173-303-300 General Waste Analysis

The T Plant Complex Waste Analysis Plan (WAP), CWC-WRAP WAP, and LLBG WAP demonstrate compliance with the requirements of WAC 173-303-300(1) through (5), as well as applicable federal and state land disposal requirements. The WAPs are applicable to waste management activities including the following: waste receipt, storage, non-destructive examination, physical/chemical screening, sampling, treatment, sorting and repackaging, waste notification and certification, shipment of waste offsite, and transfer of waste to another SWOC TSD location. Wastes managed at each OUG may include the following:

- Newly generated waste from onsite and offsite generators
- Waste previously accepted at other SWOC TSDs and then transferred
- Retrieved waste, including but not limited to contaminated debris, contaminated soil, absorbed oils, PCB-contaminated waste, and labpacks
- Operating Unit Group (OUG) generated waste from operations and maintenance activities, including debris, discarded PPE, and maintenance waste
- Wastes treated at T Plant, CWC-WRAP, and LLBG
- Decommissioned, defueled reactor compartments managed at LLBG Trench 94.

WAC 173-303-310 Security

Warning signs are posted stating “Danger-Unauthorized Personnel Keep Out” (or an equivalent legend) at each OUG. The signs have a font type and size written in English that ensures that it can be read from a distance of at least 25 feet. Requirements for a 24-hour

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surveillance (WAC 173-303-310(2)(b)) and an artificial or natural barrier system (WAC 173-303-310(2)(c)) are met at the Hanford Facility level as identified in Attachment 3, "Security" to the WA7890008967, Hanford Facility Resource Conservation and Recovery Act Permit. At all OUGs, visitors are required to sign in and are subject to escorting protocols.

WAC 173-303-320 General inspection

General inspections in accordance with WAC 173-303-320 are conducted for each OUG according to the following tables:

Inspection Requirements for Central Waste Complex Operating Unit Group

Requirement	Frequency	Inspection Description
Posted warning signs	Weekly	Signs are present, legible, and visible.
Fire suppression systems	Weekly	Water, air, and temperatures are within range; systems are operational and pressurized.
		Valves are open, seal/lock is intact, water and air pressures are within range, and system is calibrated.
Spill response kits	Monthly/ Quarterly	Equipment is present, and seal is intact.
Fire extinguishers	Monthly	Equipment is present, and seal is intact and not past the expiration date.
First aid equipment/CPR kit	Monthly	Equipment is present, and seal is intact.
Particulate eye wash bottles and Portable eyewash stations	Monthly	Equipment is present and functional, and seal is intact and not past the expiration date.
Emergency response	Weekly/ Quarterly	Equipment is present, and seal is intact.
Emergency telephones	Monthly	Equipment is present and operating.
Windsocks	Monthly	Equipment is present and operating.
Containers/container storage areas	Weekly	Container integrity is not compromised by punctures, dents, penetrating scratches, loose lids, bulging, excessive corrosion, damage, or deterioration. Containers are closed and stored in a manner that will not rupture the containers or cause them to leak. Aisle spacing between rows of containers is at least 76cm (30 in.). For any portable secondary containment used to meet the requirements of WAC 173-303-630(7), verify that there is no deterioration of secondary containment system caused by corrosion or other factors and no evidence of spills or leaks.

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Container labels	Weekly	Container marking/labeling is intact, unobscured, legible, and in good condition. Labels are visible, readable, and adequately identify risks.
Curbing, floor, and sumps	Weekly	Containment used meets the requirements of WAC 173-303-630(7). Verify no deterioration of containment curbing, flooring, and sumps caused by corrosion or other factors; no evidence of spills or leaks.
Ignitable or reactive waste	Annually	Storage is in compliance with WAC 173-303-630(8).

Inspection Requirements for T Plant Operating Unit Group

Requirement	Frequency	Inspection Description
Posted warning signs	Weekly	Signs are present, legible, and visible.
Fire suppression systems	Monthly	Water, air, and temperatures are within range; systems are operational and pressurized.
		Valves are open, seal/lock is intact, water and air pressures are within range, and system is calibrated.
Spill response kits	Monthly	Equipment is present, and seal is intact.
Fire extinguishers	Monthly	Equipment is present, and seal is intact and not past the expiration date.
First aid equipment/CPR kit	Monthly	Equipment is present, and seal is intact.
Particulate eye wash bottles and Portable eyewash stations	Portable: Weekly while in use	Equipment is present and functional, and seal is intact and not past the expiration date.
Emergency response	Monthly	Equipment is present, and seal is intact.
Emergency telephones	Monthly	Equipment is present and operating.
Windsocks	NA	Equipment is present and operating.
Containers/container storage areas	Weekly	<p>Container integrity is not compromised by punctures, dents, penetrating scratches, loose lids, bulging, excessive corrosion, damage, or deterioration. Containers are closed and stored in a manner that will not rupture the containers or cause them to leak. Aisle spacing between rows of containers is at least 76cm (30 in.).</p> <p>For any portable secondary containment used to meet the requirements of WAC 173-303-630(7), verify that there is no deterioration of secondary containment system caused by corrosion or other factors and no evidence of spills or leaks.</p>

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Container labels	Weekly	Container marking/labeling is intact, unobscured, legible, and in good condition. Labels are visible, readable, and adequately identify risks.
Curbing, floor, and sumps	Weekly	Containment used meets the requirements of WAC 173-303-630(7). Verify no deterioration of containment curbing, flooring, and sumps caused by corrosion or other factors; no evidence of spills or leaks.
Ignitable or reactive waste	Annually	Storage is in compliance with WAC 173-303-630(8).

Inspection Requirements for Low-Level Burial Grounds Operating Unit Group

Requirement	Frequency	Inspection Description
Posted warning signs	Weekly	Signs are present, legible, and visible.
Fire suppression systems	NA	Water, air, and temperatures are within range; systems are operational and pressurized.
		Valves are open, seal/lock is intact, water and air pressures are within range, and system is calibrated.
Spill response kits	Monthly	Equipment is present, and seal is intact.
Fire extinguishers	Monthly	Equipment is present, and seal is intact and not past the expiration date.
First aid equipment/CPR kit	Monthly	Equipment is present, and seal is intact.
Particulate eye wash bottles and Portable eyewash stations	Monthly	Equipment is present and functional, and seal is intact and not past the expiration date.
Emergency response	NA	Equipment is present, and seal is intact.
Emergency telephones	Monthly	Equipment is present and operating.
Windsocks	Monthly	Equipment is present and operating.
Containers/container storage areas	Weekly	<p>Container integrity is not compromised by punctures, dents, penetrating scratches, loose lids, bulging, excessive corrosion, damage, or deterioration. Containers are closed and stored in a manner that will not rupture the containers or cause them to leak. Aisle spacing between rows of containers is at least 76cm (30 in.).</p> <p>For any portable secondary containment used to meet the requirements of WAC 173-303-630(7), verify that there is no deterioration of secondary containment system caused by corrosion or other factors and no evidence of spills or leaks.</p>

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Container labels	Weekly	Container marking/labeling is intact, unobscured, legible, and in good condition. Labels are visible, readable, and adequately identify risks.
Curbing, floor, and sumps	NA	Containment used meets the requirements of WAC 173-303-630(7). Verify no deterioration of containment curbing, flooring, and sumps caused by corrosion or other factors; no evidence of spills or leaks.
Ignitable or reactive waste	Annually	Storage is in compliance with WAC 173-303-630(8).

WAC 173-303-330 Personnel Training

The Dangerous Waste Training Plans for each OUG meet the requirements of WAC 173-303-330 and contain the following:

- For each position related to the DW management of the facility, the job title, job description, and the name of the employee filling each job. The job description must include the requisite skills, education, other qualifications, and duties for each position.
- A written description of the type and amount of both introductory and continuing training required for each position.
- Records documenting facility personnel have received and completed the training required by this section.

Introductory and continuing training programs are designed to prepare personnel to manage and maintain the facilities in a safe, effective, and environmentally sound manner. In addition to prepare personnel to manage and maintain the facilities under normal conditions, the training programs ensure that personnel are prepared to respond in a prompt and effective manner should abnormal or emergency conditions occur.

WAC 173-303-340 Preparedness and Prevention

The purposes of preparedness and prevention are to minimize the damage caused by a fire or explosion and help avoid or mitigate any unplanned sudden or non-sudden release of dangerous waste constituents to air, soil, surface water, or groundwater. The requirements of WAC 173-303-340 can be found throughout various procedures and include:

- Internal/External communications
- Emergency equipment
- Fire control
- Aisle Space Requirements
- Arrangements with local authorities

WAC 173-303-350 Contingency Plan and Emergency Procedures

WAC 173-303-360 Emergencies

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The Building Emergency Plans (BEPs) for each OUG (HNF-IP-0263-CWC, HNF-IP-0263-TPC, HNF-IP-0263-BG) describe both the facility hazards and the basic responses to upset and/or emergency conditions within the facilities. These events may include spills or releases caused by processing, fires and explosions, transportation activities, movement of materials, packaging, storage of hazardous materials, and natural and security contingencies. When used in conjunction with Permit Attachment 4, Hanford Management Plan, the plans meets the requirements for contingency planning as required by WAC 173-303.

The Building Emergency Plans cover the following:

- Building emergency response organization
- Plan implementation
- Facility hazards (HW, DW, Industrial Hazards, Radioactive Materials, Criticality)
- Potential emergency conditions (facility operations emergencies, natural phenomena, security contingencies, unexpected/unidentified odors)
- Incident response (protective action, emergencies, prevention of recurrence, natural phenomena, security)
- Termination of event, incident recovery and restart of operations
- Emergency equipment
- Coordination agreements
- Required reports
- Plan location and amendments
- Facility/building emergency response organization

WAC 173-303-610 Closure and post-closure

A closure plan specific to each DWMU above was developed to comply with the requirements of WAC 173-303-610(2) through (6) and utilizing the U.S. Environmental Protection Agency (EPA) guidance document EPA/240/R-02/005, Guidance on Choosing a Sampling Design for Environmental Data Collection (QA/G-5S), and Ecology Publication #94-111, Guidance for Clean Closure of Dangerous Waste Units and Facilities. Closure plans for each DWMU above were submitted to the Department of Ecology in the SWOC Part B permit application (DOE/RL-2015-74).