CATEGORICAL STATE WASTE DISCHARGE PERMIT NUMBER ST0004511

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600
Nuclear Waste Program
3100 Port of Benton Blvd.
Richland, Washington 99354

In compliance with the provisions of the
State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington, as amended,

United States Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99354

is authorized to discharge wastewater in accordance with the special and general conditions which follow.

Facility Location: U.S. Department of Energy Hanford Site Richland, Washington	Discharge Location: Hanford Site (Only areas controlled by and discharges of U.S. Department of Energy)
Treatment Type: No treatment Industry Type: Clean-up Site	SIC Code: 9999 NAICS Code: 562910

Jane Hedges
Program Manager
Nuclear Waste Program

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SUMMARY OF PERMIT REPORT SUBMITTALS

Permit Section	Submittal	Frequency	First Submittal Date
S5.C.	Revisions to Pollution Prevention and Best Management Practices Plan	Upon Ecology request or voluntarily	Within 30 days of receiving a written request from Ecology or 30 days prior to desired implementation
S6.	Significant Discharge Log	Compiled annually by February 15. Submitted to Ecology on request	As Requested
S7.	Permittee Request for case by case additional permit coverage	As needed for instances where the flow will exceed permit condition S1.B.2.	At least 10 work days prior to desired discharge date
S9.	Application for permit renewal	1/permit cycle	By December 31, 2017
G1	Notice of Change in Authorization	As necessary	
G4	Permit Application for Substantive Changes to the Discharge	As necessary	
G5	Notice of Permit Transfer	As necessary	
G6	Payment of Fees	As assessed	
G7	Duty to Provide Information	As necessary	
G11	Noncompliance notification written report	As necessary	Within 30 days (or sooner if requested by Ecology) upon discovery of noncompliance

SPECIAL CONDITIONS

S1 PERMIT COVERAGE

S1.A Types of Activities Authorized

This Categorical State Waste Discharge Permit and the Permit Conditions authorizes the wastewater discharges from the following activities of the United States Department of Energy (USDOE) on the Hanford Site:

S1.A.1 Hydrotesting, Maintenance, and Construction Wastewater Discharges

S1.A.1.a Hydrotesting discharges such as system and component testing, research and development testing, and other experimental discharges.

S1.A.1.b Maintenance discharges such as drainage, flushing, and wash down activities.

S1.A.1.c Construction discharges such as concrete curing, concrete cutting (including rinsate and etching solutions), and pressure washing activities.

S1.A.2 Cooling Water, Condensate, and Miscellaneous Wastewater Discharges

S1.A.1.d Cooling water discharges from parts and components of heating, ventilation, and air conditioning systems, air compressors, engines, and ice machines that are discharged to an engineered structure.

S1.A.1.e Condensate discharges from heating, ventilation, and air conditioning systems, air compressors, and ice machines that discharge to an engineered structure. Steam condensate discharges from steam lines that do not discharge to an injection well.

S1.A.1.f Other miscellaneous discharges such as water tank overflows and incidental discharges from facilities on the Hanford Site. Miscellaneous discharges do not include noncompliance caused by operational error, lack of preventive maintenance, or careless and/or improper operation.

S1.A.3 Industrial Stormwater Discharges

Stormwater requiring permit coverage is industrial stormwater that discharges to ground and is collected in an engineered structure and is subsequently discharged to an engineered disposal structure. These terms are explained below. Stormwater discharges that meet all three of the following criteria are subject to the requirements of this Permit. Stormwater discharges that do not meet all three of the following criteria are not subject to the requirements of this permit:

S1.A.1.g Industrial stormwater is a stormwater discharge with the potential to come into contact with an industrial activity or that is collected within an area of industrial activity (i.e., one directly related to manufacturing, processing, or raw materials storage at an industrial plant).

S1.A.1.h Collected in an engineered structure means that the industrial stormwater must be collected in a structure such as a lined trench, basin, retention structure, secondary containment, tank, sump, roof, or other impervious surface directly associated with industrial activities.

S1.A.1.i Discharged to an engineered structure means that the industrial stormwater must be discharged to an engineered disposal structure such as an injection well, dry well, catch basin, infiltration basin, infiltration trench, lined trench, or retention basin.

S1.B Conditions on Activities Authorized

To be authorized by this Permit, each wastewater discharge as specified in Permit Condition S1.A.1, S1.A.2, and S1.A.3 must meet the following conditions, or comply with Permit Condition S7:

S1.A.2 Each individual discharge event must be less than 10 gallons per minute averaged annually. Annual average flow is calculated for each discharge as total gallons discharged in a calendar year, divided by the number of minutes in that year. For industrial stormwater discharges, the Permittee will not use this permit condition.

S1.A.3 Each individual discharge event must be less than 150 gallons per minute instantaneously. For industrial stormwater discharges and drinking water line flushing, the Permittee will not use this permit condition.

S1.A.4 Hydrotesting, maintenance, construction wastewater, cooling water, condensate, and miscellaneous discharge(s) as identified in Permit Conditions S1.A.1 and S1.A.2, must meet the Groundwater Quality Criteria (GWQC) pursuant to Washington Administrative Code (WAC) 173-200 unless;

S1.A.4.a The discharge is expected to have a contaminant that exceeds the GWQC solely because the source water, as defined in Permit Conditions S3.A and S3.B, has a contaminant that exceeds one or more of the GWQC; or

S1.A.4.b The discharge is expected to exceed the GWQC at the point of discharge, but is prevented from impacting groundwater quality as determined by Permit Condition S2.B.2.

S2 DISCHARGE LIMITATIONS

S2.A All discharges and activities authorized by this Permit will be consistent with the terms and conditions of this Permit. The discharge of any pollutant more frequently than, or at a concentration in excess of that authorized by this Permit, will constitute a violation of the terms and conditions of this Permit.

S2.B Beginning on March 1, 2013 and lasting through February 28, 2018 of this Permit, the Permittee is authorized to discharge to ground via infiltration, wastewater from all activities listed and described under Permit Condition S1.A subject to the following limitations:

S2.B.1 All discharges will follow appropriate Pollution Prevention and Best Management Practices (P2BMPs) described in this Permit and in the required permit submittals such as the Pollution Prevention and Best Management Practices Plan (Plan). P2BMPs in the required permit submittals are not required to be implemented until the submittal is reviewed and approved by Ecology. No sampling and analysis of the permitted discharges are required as long as the appropriate Ecology approved P2BMPs are complied with. If Ecology determines that the Permittee has failed to comply with the Plan, Ecology will require sampling and analysis of a particular discharge.

S2.B.2 At the point of discharge, contaminants in all wastewater covered under these activities and Permit will not exceed either the GWQC levels or 110% of the contaminant levels of the designated source water(s) unless approved permitted discharge P2BMPs are implemented. Implementation of approved P2BMPs to prevent impacts to groundwater is considered appropriate demonstration of compliance under this Permit for discharges authorized under Permit Conditions S1.A.1 and S1.A.2. For industrial stormwater discharges, the Permittee will not use this permit condition.

S2.B.3 For the wastewater discharges authorized under Permit Condition S1.A.1, the total volume of all permitted discharges will not exceed 2,000,000 gallons per day. The total volume of all measured significant discharges (as defined in Permit Condition S6) must be below 1,500,000 gallons per day.

S2.B.4 For all wastewater discharges authorized under Permit Condition S1.A.2, the total volume of all permitted discharges will not exceed 100,000 gallons per day. Each discharge must also meet the requirements of Permit Condition S1.B.

S2.B.5 For industrial stormwater discharges authorized under this Permit and pursuant to Permit Condition S1.A.3, contaminants in the permitted discharges will not exceed the GWQC levels. For an industrial stormwater discharge, compliance with P2BMPs requirements in the Permit (Permit Condition S4) and the P2BMPs Plan will be considered an appropriate demonstration of compliance unless the potential for contamination exists. Compliance with this permit condition can also be confirmed by sampling and analyzing the industrial stormwater discharged if required by Ecology.

S3 SOURCE WATER LIMITATIONS

S3.A For the purposes of this Permit, source waters allowed to be used for hydrotesting, maintenance, and construction discharges as defined in Permit Condition S1.A.1 are raw Columbia River water, potable water (treated Columbia River water or groundwater), or demineralized water.

S3.B For the purposes of this Permit, the source waters allowed to be used by cooling water, condensate, and miscellaneous wastewater permitted discharge activities as defined in Permit Condition S1.A.2 are raw Columbia River water, raw groundwater, potable water (treated Columbia River water or groundwater), or condensed water vapor from ambient air.

S3.C For the purposes of this Permit, the only source water allowed for the industrial stormwater discharges is as described in Permit Condition S1.A.3.

S3.D The *Application of Renewal for State Waste Discharge Permit ST 4511* (09-EMD-0116, dated August 2009) and the *Supplemental Information for State Waste Discharge Permit ST 4511 Permit Application* (10-EMD-0064, dated April 2010) describes the quality of source waters and includes potential contaminates contained in each source. No sampling and analysis of the source water is required by this Permit, however potable water is routinely sampled as required under WAC 246-290-300. Based on this potable water monitoring, if new contaminants or levels of previously identified contaminants are detected at or above the GWQC, the Permittee shall notify Ecology and Ecology will evaluate if the water should still be used as source water. The Permittee is not required to notify Ecology of changes in concentration for those contaminants already identified in the permit application that exceed the GWQC.

S4 POLLUTION PREVENTION AND BEST MANAGEMENT PRACTICES (P2BMPS) FOR PERMITTED DISCHARGES

S4.A For all wastewater discharges authorized by this Permit as identified in Permit Conditions S1.A.1 (hydrotesting, maintenance, and construction); S1.A.2 (cooling water, condensate, and miscellaneous); S1.A.3 (industrial stormwater), the Permittee will implement at a minimum the following P2BMPs where appropriate:

S4.A.1 No discharge will be allowed within a surface contaminated area (areas with dangerous or hazardous waste and radioactive contaminants).

S4.A.2 No discharge will be allowed within a 300 foot horizontal radius of a known active or inactive crib, ditch, or trench used for disposal of dangerous and hazardous waste and radioactive contaminants.

S4.A.3 Except as authorized by a wastewater discharge permit, no discharge or runoff of wastewater is allowed to any surface waters of the state or to any land not owned by or under control of the Permittee.

S4.A.4 Reasonable efforts will be taken to prevent ponding due to discharge flow rates above the expected soil infiltration capacity.

S4.A.5 For discharges authorized by this Permit as identified in Permit Conditions S1.A.1 and S1.A.2, if the discharge meets the waste acceptance criteria for the Hanford 200 Area Treated Effluent Disposal Facility (200 Area TEDF), and the discharge is near a connection to the 200 Area TEDF collection system, all reasonable attempts will be made to discharge to the TEDF. Discharge to other permitted wastewater treatment facilities is also acceptable, provided the discharge meets the waste acceptance criteria of that facility.

S4.A.6 For discharges authorized by this Permit as identified in Permit Conditions S1.A.1 and S1.A.2, the Permittee will recycle, store, and reuse the wastewater where practical.

S4.A.7 The collection of stormwater in any tank, sump, pit, or other engineered structure that is contaminated from past or present operations or could potentially contaminate the stormwater with dangerous waste or hazardous substances and radioactive contaminate will be avoided. If such collection does occur, the industrial stormwater will be field screened or analyzed for contaminants of concern based on process knowledge. When laboratory tests show the industrial stormwater has not been contaminated, it may be discharged under this permit. Industrial stormwater that has become contaminated will require appropriate treatment followed by discharge under another State Waste Discharge Permit.

S5 POLLUTION PREVENTION AND BEST MANAGEMENT PRACTICES (P2BMP) PLAN REQUIREMENTS

S5.A Plan Elements

The Permittee will implement an approved Ecology P2BMP (Plan) for all discharges authorized by this Permit. This Plan will provide requirements on appropriate handling for wastewater discharge activities in accordance with Permit Condition S1. The Plan will at a minimum incorporate the requirements and conditions of this Permit. The Plan will be usable as a training document for those responsible for all wastewater discharges identified under this Permit.

S5.A.1 The Plan will be broken down by categories and sub-categories so that each individual discharge authorized by this Permit can point to a specific section in the Plan for the appropriate P2BMPs for the particular discharge. If an individual permitted discharge cannot point to a specific section of the Plan for the appropriate P2BMPs, then that discharge is not authorized by this Permit until the Plan has been revised and approved by Ecology to include the individual discharge and appropriate P2BMPs.

S5.A.2 Implementation and requirements in this Plan may be taken from the following sources: appropriate Ecology publications [e.g., Stormwater Pollution Prevention Planning for Industrial Facilities (WQ-R-93-015)], industrial association publications, the Associated General Contractors of Washington or from other sources with additional Hanford Site specific details added.

S5.A.3 In addition, to the extent practicable the Plan will identify how impacts to groundwater quality will be prevented. Similarly, when new or replacement chemical additives are added to a process, the Plan will include how the Permittee will ensure that appropriate actions are taken to protect the environment and quality of the groundwater.

S5.B Plan Compliance

Activities authorized by this Categorical State Waste Discharge Permit must, at all times, comply with the terms and conditions of the Plan. The discharge of any wastewater not done as specified in the Plan will constitute a violation of the terms and conditions of this Permit.

S5.B.1 Every permitted discharge will have an assigned responsible person onsite who is familiar with the section of the Plan and Permit that applies to the discharge. This responsible person will confirm compliance with the Plan and Permit and be available to answer any question from Ecology in the event of an inspection, investigation, non-compliance or other circumstance.

S5.C Plan Revisions

If Ecology determines the need for a revision to the Plan, Ecology will notify the Permittee in writing of the need for a revision. The Permittee must then complete a draft revision to the Plan and submit it to Ecology for approval within 30 days from the date of the written notification. The revision will become effective after Ecology has reviewed and approved the draft revision. If Ecology rejects any portion of the draft revision, Ecology will notify the Permittee in writing of the rejection and provide the necessary changes. If the Permittee does not object to Ecology's necessary changes within 21 days from the date of its written notification, then the necessary changes will become effective at the end of the 21-day period. If the Permittee and Ecology are unable to agree upon a revised Plan language, Ecology will issue a final version of the Plan as an agency-initiated permit modification. The Permittee may then appeal the permit modification in the appropriate administrative or judicial forum. The appeal alone will not stay the effectiveness of the permit modification. A stay will only be granted in accordance with the procedures set forth in Revised Code of Washington (RCW) 43.21B.320.

If the Permittee determines the need for revisions to the Plan, the Permittee must send a written request to Ecology at least 30 days prior to the desired implementation date of the revision. Ecology will approve, approve with permit modification, or disapprove the Permittee's draft revision. If Ecology does not act within 30 days of receiving the Permittee's request for a Plan revision, the Plan revision will become effective at the end of the 30-day period.

S6 MONITORING AND REPORTING REQUIREMENTS

S6.A A significant discharge is any single discharge that exceeds 14,500 gallons in a 24 hour period or any single discharge that exceeds 50,000 gallons total in a calendar year from sources identified in Permit Condition S1.A.1. Significant discharges authorized by this Permit will be recorded in a log. The Permittee will maintain the Significant Discharge Log as required by the Permit. The information required to be kept in this log will include, at a minimum, the following:

S6.A.1 Date and type of discharge

S6.A.2 Location of discharge

S6.A.3 Source water

S6.A.4 Chemical Additives (if any)

S6.A.5 Total discharge volume (gallons)

S6.A.6 Discharge rate (gallons/minute)

S6.A.7 Soil loading rate (gallons/minute/square feet)

S6.A.8 Name of assigned responsible person

S6.A.9 Any other information necessary to fully evaluate the situation

S6.B The Significant Discharge Log for each calendar year will be provided to Ecology upon request. Each calendar year begins January 1st and ends December 31st. The falsification of information submitted to Ecology will constitute a violation of the terms and conditions of this Permit. The information required to be kept in this log will be maintained for a minimum of five years. This time period may be extended by the Director in the event of an enforcement action or notification of investigation or permit inspection. The Permittees will not be required to keep the records longer than one year past the normal timeframe unless an enforcement action is issued or significant noncompliance is found.

S7 ADDITIONAL PERMIT COVERAGE

S1.C Case By Case Additions

If a planned discharge meets Permit Condition S1.A, S1.B.1, and S1.B.3, but fails to meet Permit Condition S1.B.2, or other permit conditions, the discharge will be authorized under this Permit if the following conditions are met:

S7.A.1 The Permittee submits to Ecology a written request that the planned discharge be authorized under this Permit. This request must be submitted to Ecology at least ten (10) business days prior to the proposed planned discharge. The request will provide at a minimum the following information:

S7.A.1.a Proposed date and type of discharge

S7.A.1.b Location of discharge

S7.A.1.c Source water

S7.A.1.d Chemical Additives (if any)

S7.A.1.e Total discharge Volume (gallons)

S7.A.1.f Discharge rate (gallons/minute)

S7.A.1.g Soil loading rate (gallons/minute/square feet)

S7.A.1.h Name of assigned responsible person

S7.A.1.i Specific section of the P2BMP Plan that applies

S7.A.1.j The reason why this proposed discharge should be authorized by this Permit and any other information necessary to justify permit authorization and to develop an appropriate course of action.

S7.A.2 If Ecology determines that the proposed planned discharge submittal information and this Permit are appropriate to regulate and authorize the planned discharge, Ecology will give written authorization to the Permittee to discharge (the planned discharge) under the terms and conditions of this Permit. If the discharge requires a revision to the Plan, the revision will be completed prior to the discharge's authorization by this Permit.

S7.A.3 Discharges that exceed 1,000 gallons per minute or discharges that fall outside of the scope of this Permit will not be authorized by this Permit and the Permittee will need to submit to Ecology a Hanford Specific Permit Application for a One Time/Limited Duration Discharge Permit.

S7.B Blanket Addition for Water Line Flushing

Drinking water line flushing performed on the Hanford Site may exceed the 150 gallon per minute discharge rate listed in Permit Condition S1.B.2 .Drinking water line flushing activities include opening hydrants to flush contaminants from drinking water lines, flushing of drinking water lines which have been sanitized by the addition of chlorinated water, flushing of drinking water lines for flow testing, and flushing after hydrotesting of drinking water lines. These flushing activities are still appropriate to be authorized by this Permit as long as the activities are carried out according to all the other terms and conditions of this Permit and the required P2BMP. The P2BMP, as specified in this Permit and permit submittals, will protect the environment from contaminants flushed from these lines. These flushing activities will be allowed to exceed the 150 gallons per minute limit for up to 60 minutes, and at no time will be allowed to exceed 1,000 gallons per minute.

S7.B.1 Another category of water line flushing activities performed on the Hanford Site which may exceed Permit Condition S1.B.2 of this Permit is flushing of raw water lines to remove contaminants (e.g., microbes or sediment) and flushing of newly installed pipe lines for flow testing, after hydrotesting, after disinfection, or to remove construction debris. These flushing activities are still appropriate to be authorized by this Permit as long as the activities are carried out according to the other terms and conditions of this Permit and permit submittals. The proper P2BMPs, as specified in this Permit and permit submittals, will protect the environment from contaminants flushed from these lines. These flushing activities will be allowed to exceed the 150 gallons per minute limit for up to 60 minutes, and at no time will be allowed to exceed 3,500 gallons per minute.

S7.C Incidental Discharges

S7.C.1 Activities associated with operations and routine maintenance may result in small incidental discharges of wastewater within the facility's boundaries (e.g., water skid maintenance and pump testing) that do not meet the location or distance limits specified in Permit Conditions S4.A.1 or S4.A.2. These facility activities are subject to the following controls and limitations:

S7.C.1.a No discharge from a single activity will exceed 60 gallons released to the soil.

S7.C.1.b All appropriate best management practices will be implemented to prevent unnecessary discharges.

S7.C.1.c No ponding of liquids in contaminated areas is allowed.

S7.C.2 In addition, the Permittee will perform the following activities:

S7.C.2.a During pre-job planning, measures to limit soil erosion will be incorporated into the work plan.

S7.C.2.b During performance of the work, all measures to limit ponding and/or erosion will be implemented.

S7.D Waste Treatment and Immobilization Plant Balance of Facilities Fire Water Discharge

The Waste Treatment and Immobilization Plant (WTP)/Balance of Facilities (BOF) has the potential for an unplanned raw water discharge to the ground. In the unlikely event of a total loss of site power, or a break in the cooling tower supply/return lines, fire water (raw water) will be used to cool the High Level Waste (HLW) and Low Activity Waste (LAW) melters and the LAW pour cave walls. Fire water may be returned to the cooling water tower basin after which it will be discharged to the ground.

S7.D.1 WTP/BOF may route this unplanned cooling water discharge to the ground via the stormwater drainage system under the following permit conditions:

S7.D.1.a The fire water is introduced into the supply lines such that all protective measures are in place to ensure no cross-contamination occurs during normal supply of cooling water and remain in place during the alternate supply from the fire water system. This includes at a minimum double isolation (primary/secondary heat exchangers) and maintenance of positive pressure inward from the utility side.

S7.D.1.b The cooling water discharge is of similar quality to other discharges authorized by this Permit.

S7.D.1.c Best Management Practices (BMPs) for this discharge will be included in the required P2BMP Plan.

S7.D.1.d Should this unplanned cooling water discharge from the WTP/BOF Facility occur, the Permittee will verbally report the occurrence to Ecology within 24 hours. A written report will be submitted to the Ecology Water Quality Coordinator in Richland within 30 days unless requested earlier by Ecology. The written report should include but not be limited to the following information:

- Discharge date
- Duration time of discharge
- Estimated volumes discharged (gallons)
- Estimated discharge rate (gallons/minute)
- Source water
- Chemical Additives (if any)
- Location of discharge
- Name of assigned responsible person
- Any other information necessary to fully evaluate the situation

S7.E Waste Treatment and Immobilization Plant Balance of Facilities Non-Routine and Special Case Construction Discharges

S7.E.1 Discharges to the ground of WTP construction related water are anticipated to be infrequent. Once WTP is operational, these construction related water discharges as identified in Table 1, are no longer allowed under this Permit (e.g., new tanks and vessels, during the building/construction phase of the facility and prior to start-up). Beginning on the effective date of this Permit, a WTP vessel or tank that exceeds 50,000 gallons total volume may discharge these special case discharges to the ground on a case by case basis approved by Ecology and under the following conditions:

S7.E.1.a The construction related water discharge is of similar quality to other discharges authorized by this Permit.

S7.E.1.b The discharge does not meet the waste acceptance criteria for the 200 Area TEDF and/or the discharge is not near a connection to the TEDF collection system. All reasonable attempts will be made to discharge to the 200 Area TEDF.

S7.E.1.c Best Management Practices (BMPs) for this discharge are included in the required P2BMP Plan.

S7.E.1.d No authorized discharge from a single activity may exceed 3,500 gallons per minute released to the ground.

S7.E.1.e During performance of the work, all measures to limit ponding and/or erosion will be implemented.

Table 1 – Description WTP BOF Vessels and Tanks Greater than 50,000 Gallons

Pretreatment Plant Tank Systems	Maximum Capacity Gallons
Waste Feed Receipt Vessel #1	474,000
Waste Feed Receipt Vessel #2	474,000
Waste Feed Receipt Vessel #3	474,000
Waste Feed Receipt Vessel #4	474,000
Waste Feed Evaporator Feed Vessel #1	85,496
Waste Feed Evaporator Feed Vessel #2	85,496
Ultrafiltration Feed Preparation Vessel #1	75,593
Ultrafiltration Feed Preparation Vessel #2	75,593
High Level Waste Feed Blending Vessel	142,200
High Level Waste Feed and Lag Storage Vessel	127,260
High Level Waste Feed and Lag Storage Vessel	127,260
High Level Waste Feed Receipt Vessel	270,600
Cesium Ion Exchange Feed Vessel	103,350
Low Activity Waste Submerged Bed Scrubber Condensate Receipt Vessel #1	130,010
Low Activity Waste Submerged Bed Scrubber Condensate Receipt Vessel #2	130,010
Treated Low Activity Waste Concentrate Storage Vessel	146,740
Spent Resin Dewatering Moisture Separation Vessel	**RESERVED**
Process Condensate Tank #1	343,734
Process Condensate Tank #2	343,734
Acid/Alkaline Effluent Vessel #1	119, 150
Plant Wash Vessel	103,024
Acid/Alkaline Effluent Vessel #2	119,150

Decontamination Soak Tank	**RESERVED**

Balance of Facilities Plant Tank Systems	Maximum Capacity Discharged to Ground (Gallons)
High Level Waste Plant Tank Systems – None Over 50,000 Gallons	
N/A	N/A
Analytical Laboratory Plant Tank Systems – None Over 50,000 Gallons	
N/A	N/A
Low Activity Waste Plant Tank Systems – None Over 50,000 Gallons	
N/A	N/A
Non-radioactive Liquid Waste Disposal	620,000
Firewater A	345,000
Firewater B	345,000
Process Service Water A	190,000
Process Service Water B	130,000
Fuel	345,000
Domestic Water	63,000
Demineralized Water	58,000

S7.E.2 The construction related water discharge(s) from the WTP authorized by Ecology and this Permit and listed in Table 1 will be tracked and recorded. These discharges will be recorded in a WTP Significant Discharge Log (separate from the Hanford sitewide Significant Discharge Log) and at a minimum provide the following information:

S7.E.2.a The nature of the activity that is generating the discharge.

S7.E.2.b Any alternatives to the discharge such as reuse, storage, or recycling of the water.

S7.E.2.c The total volume of water expected to be discharged.

S7.E.2.d The date of proposed discharge, and the rate at which the water will be discharged, in gallons per minute.

S7.E.2.e The location where discharge will occur.

S7.E.2.f Name of the responsible person leading the activity.

S7.E.2.g Reason why the 200 Area TEDF is not being used for the discharge.

S7.E.2.h Any other information that would be appropriate.

S7.E.3 After more WTP construction is completed, the Permittees shall review and amend, if necessary, the applicable portions of Permit Table 1 to reflect changes and/or additions. The Permittees will update, resubmit, and receive approval from Ecology for amendments to Permit Table 1. Incorporation of this information will not require a permit modification under Permit Condition G3.

S8 UPSET CONDITIONS

For the purpose of this Permit and the Hanford Site, "upset condition" means an exceptional incident in which there is a wastewater discharge that exceeds the limitations of this Permit resulting from factors beyond the reasonable control of the Permittee.

An upset constitutes an affirmative defense to an action brought for noncompliance with such permit discharge limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset will demonstrate, through relevant evidence that 1) an upset occurred and that the Permittee can identify the cause(s) of the upset, and 2) the permitted facility was being properly operated at the time of the upset. Any upset which exceeds any discharge limitation in this Permit must be reported to Ecology within 24 hours from the time the Permittee becomes aware of the circumstances. The Permittee will take appropriate measures to minimize or prevent any adverse environmental impacts caused by such upset.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

S9 APPLICATION FOR PERMIT RENEWAL OR MODIFICATION FOR FACILITY CHANGES

The Permittee must submit an application for renewal of this permit by December 31, 2017. The Permittee must submit a paper copy and an electronic copy (preferably as a PDF).

The Permittee must also submit a new application or supplement at least 60 days prior to commencement of discharges, resulting from the activities listed below, which may result in permit violations. These activities include any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility.

GENERAL CONDITIONS

G1 Signatory Requirements

All applications, reports, or information submitted to Ecology must be signed as follows:

1. All permit applications must be signed by either a principal executive officer or ranking elected official.
2. All reports required by this permit and other information requested by Ecology must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
   a. The authorization is made in writing by the person described above and is submitted to Ecology at the time of authorization, and
   b. The authorization specifies either a named individual or any individual occupying a named position.
3. Changes to authorization. If an authorization under paragraph G1.2.b. above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section must make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my

knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G2 Right of Entry

Representatives of Ecology have the right to enter at all reasonable times in or upon any property, public or for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times include normal business hours; hours during which production, treatment, or discharge occurs; or times when Ecology suspects a violation requiring immediate inspection. Representatives of Ecology must be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

G3 Permit Actions

This permit is subject to modification, suspension, or termination, in whole or in part by Ecology for any of the following causes:

5. Violation of any permit term or condition;
6. Obtaining a permit by misrepresentation or failure to disclose all relevant facts;
7. A material change in quantity or type of waste disposal;
8. A material change in the condition of the waters of the state; or
9. Nonpayment of fees assessed pursuant to RCW 90.48.465.

Ecology may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of regulations or new information.

G4 Compliance with Other Laws and Statutes

Nothing in the permit excuses the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G5 Transfer of this Permit

This permit is automatically transferred to a new owner or operator if:

1. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to Ecology;
2. A copy of the permit is provided to the new owner and;
3. Ecology does not notify the Permittee of the need to modify the permit.

Unless this permit is automatically transferred according to Section G5.1 above, this permit may be transferred only if it is modified to identify the new Permittee and to incorporate such other requirements as determined necessary by Ecology.

G6 Payment of Fees

The Permittee must submit payment of fees associated with this permit as assessed by Ecology. Ecology may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G7 Duty to Provide Information

The Permittee must submit to Ecology, within a reasonable time, all 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 Permittee must also submit to Ecology upon request, copies of records required to be kept by this permit.

G8 Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of chapter 90.48 RCW and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G9 Removed Substances

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters will not be re-suspended or reintroduced to the effluent stream for discharge.

G10 Record Keeping Requirements

The Permittee will retain records of all monitoring information, including all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this Permit, and records of all data used to complete the application for this Permit, for a period of at least three (3) years. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director of Ecology.

For each measurement or sample required by this Permit, the Permittee will record the following information:

- Date, exact place, and time of sampling
- Dates the analyses were performed
- Who performed the analyses
- Analytical techniques or methods used
- Results of the analyses reported to the Method Detection Limit
- Name of the individual who performed the sampling or provided the measurement

G11 Noncompliance Notifications

In the event the Permittee, upon discovery of the circumstances, is unable to comply with any of the permit terms and conditions due to any cause, the Permittee will:

G11.A Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem**.**

G11.B Immediately notify Ecology's designated Water Quality Permit Coordinator, Richland Office at (509) 372-7950 of the failure to comply.

G11.C Submit a detailed written report to Ecology within 30 days, unless requested earlier by Ecology, which shall include but not be limited to the following:

G11.C.1 A description of the noncompliance, including location, cause, name, title, and telephone number of the individual reporting.

G11.C.2 The estimated quantity that resulted from the incident.

G11.C.3 Whether the noncompliance has been corrected and the release has been cleaned up.

G11.C.4 The steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

G11.C.5 The period(s) in which the incident occurred.

G11.C.6 Any other information necessary to fully evaluate the situation and to develop an appropriate course of action.

G11.D Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this Permit or the resulting liability for failure to comply.

G11.E If the Permittee is in compliance with the terms and conditions of this Permit, but the activities authorized by this Permit have been shown to violate the groundwater protection provisions of WAC 173-200, Ecology is electing to precede any civil or criminal penalty with a compliance order or permit modification per the provisions of WAC 173-200-100(5).

G12 Wastewater Discharge Stream Exemptions

By prior agreement and practice (DOE/RL-97-67) with Ecology, the United States Environmental Protection Agency (EPA), and USDOE and in accordance with this Permit, the following wastewater and stormwater streams are not subject to permitting under WAC 173-216 or registration under WAC 173-218 on the Hanford Site and will be exempt:

G12.A Purgewater resulting from well sampling, well development, well rehabilitation, and aquifer testing when managed consistent with *Hanford Site Strategy for Management of Investigation Derived Waste* (DOE/RL-2011-41 Rev. 0).

G12.B Raw Columbia River water or potable water that is discharged to the ground for beneficial use.

G12.C Fire system/test water that potentially is not contaminated. This includes, but is not limited to, water generated from fire system operation, fire system functional tests, flushing and draining of fire systems before or after testing, fire system maintenance and repair, fire system pressure relief valve operation and testing, fire hydrant flushing/flow testing/maintenance, and fire department training.

G12.D Industrial wastewater that is discharged to the ground for beneficial use (e.g., irrigation, aesthetics, dust control). However, this water must meet the WAC 173-200 GWQC at the point of discharge unless the discharge is expected to have a contaminant that exceeds the GWQC solely because the source water (i.e., potable water or raw water) has a contaminant that exceeds one or more of the GWQC. The discharge may also exceed the GWQC, if it can be demonstrated to the satisfaction of Ecology that the site-specific characteristics will degrade or attenuate contaminants before reaching the groundwater, and will not generate additional contaminants by discharging wastewater into the environment.

G12.E Wastewater from washing the exterior of vehicles when managed consistent with *Vehicle and Equipment Wastewater Discharges* (WQ-R-95-56).

G12.F Wastewater resulting from washing concrete trucks, pumps, forms, and associated equipment.

G12.G Stormwater that is not considered industrial stormwater (see Special Permit Condition S1.A.3, Industrial Stormwater Discharges).

G12.H Small leaks from pumps and valves because of factors beyond the reasonable control of the Permittee.

G12.I Spills, which are regulated under *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) *of 1980* Part 40 Code of Federal Regulations (CFR) 302 and *Resource Conservation and Recovery Act* (RCRA) and the State of Washington Department of Ecology *Dangerous Waste Regulations* Section WAC 173-303-145.

G12.J Discharges to the ground from cleanup activities conducted under *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) *of 1980*.

G12.K Wastewater from eye-wash stations and safety showers.

G12.L Wastewater from the following tank farm interim barrier evaporation basin:

- TY Tank Farm Interim Barrier Evapotranspiration Basin.