

**WASTE TREATMENT AND IMMOBILIZATION PLANT
CHAPTER 6A
INSPECTION PLAN
CHANGE CONTROL LOG**

Change Control Logs ensure that changes to this unit are performed in a methodical, controlled, coordinated, and transparent manner. Each unit addendum will have its own change control log with a modification history table. The “**Modification Number**” represents Ecology’s method for tracking the different versions of the permit. This log will serve as an up to date record of modifications and version history of the unit.

Modification History Table

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WASTE TREATMENT AND IMMOBILIZATION PLANT
CHAPTER 6A
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CHAPTER 6A
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ACRONYMS

ALARA	As Low As Reasonably Achievable
CCTV	Closed Circuit Television
CFR	Code of Federal Regulations
EMF	Effluent Management Facility
HDPE	High-Density Polyethylene
HLW	High-Level Waste
IHLW	Immobilized High-Level Waste
ILAW	Immobilized Low-Activity Waste
LAW	Low-Activity Waste
NDE	Non-Destructive Examination
OUG	Operating Unit Group
PA	Public Address (system)
WAC	Washington Administrative Code
WTP	Waste Treatment and Immobilization Plant

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CHAPTER 6A INSPECTION PLAN

6A. INSPECTION PLAN

The following sections describe the Waste Treatment and Immobilization Plant (WTP) dangerous waste inspection plan. The WTP inspection plan uses a graded approach to preventing and detecting malfunctions, deterioration, operator errors, and discharges that range from daily inspections to integrity assessments. This graded approach is comprised of activities that, at a minimum, meets the inspection requirements in Washington Administrative Code (WAC) 173-303-320 and includes more precautions for equipment at higher risk of failure. Monitoring via instrumentation will be used to perform remote inspections in areas of high radioactivity, including, but not limited to, the Pretreatment areas, Low-Activity Waste (LAW) vitrification area, Analytical Laboratory (Lab), Effluent Management Facility (EMF) and the High-Level Waste (HLW) vitrification area. Due to the radioactive nature of the waste and consistent with As Low As Reasonably Achievable (ALARA) principles, monitoring by instrumentation is the primary means of fulfilling the inspection requirements in these areas.

Direct-Feed Low-Activity Waste (DFLAW) Configuration refers to WTP Unit operations where LAW, Lab, and EMF (Unit-Specific Permit Conditions III.10.H, III.10.I, III.10.L, and III.10.M) are permitted to receive and vitrify pre-treated tank waste. The Pretreatment and HLW facilities will not operate in the DFLAW Configuration and are currently being managed under a preservation and maintenance program. Specific operating conditions in the WTP Permit do not apply to Pretreatment and HLW in the DFLAW Configuration.

The inspection schedule for various facilities is provided in Table 6A-1 through Table 6A-7 of this inspection plan. Each table addresses a particular dangerous waste management unit, or group of units, such as tanks. Within each dangerous waste management unit table, the inspections are presented by system, and are further broken down by individual component. Once a dangerous waste management unit receives dangerous and/or mixed waste, the inspection criteria and frequencies detailed in the tables for each specific unit (Table 6A-1 through 6A-7) will be active. Controlled copies of the inspection plan will be kept at the WTP facility. Inspection tables identified as Example (e.g., Pretreatment and HLW) are deferred from inspections, as they are not applicable to the DFLAW Configuration.

The WTP has no waste pile units, surface impoundment units, incinerator units, landfill units, or land treatment facilities. The requirements for inspection of these units and activities are not applicable to the WTP and are not included in this inspection schedule.

6A.1 General Inspection Requirements

This section describes general, WTP-wide inspection requirements used to help prevent, detect, or respond to environmental or human health hazards related to dangerous and/or mixed waste handling, treatment, and storage at the WTP.

Personnel performing these inspections will be appropriately trained and qualified in the system or activity being inspected as prescribed in Chapter 8.0, "Personnel Training."

6A.1.1 Inspection Methods

The method of inspection is how an inspection is to be performed. The three primary methods of inspection identified and required by this inspection plan are described below.

Methods of Inspection	
Physical	An inspection conducted physically in person. A physical inspection requires the physical presence of the inspector at the item of inspection and is not to be confused with a remote inspection. Due to accessibility limitation, physical inspections may be conducted with the aid of instruments (e.g., borescope, mirrors).
Remote	An inspection conducted by Closed-Circuit Television (CCTV), observation windows, control panels, process control system, or any other inspection that is not conducted physically in person.
Functional	An inspection conducted by operating or testing the item being inspected to determine if equipment/instrument is operating correctly and capable of performing its function.

1
2 Design, process controls and safety requirements for some systems, structures and components necessitate
3 insulation, flashing or inaccessible enclosures/cabinets. In such instances the inspection methods may
4 include review for evidence of dislodged or bulging insulation, discoloration, or external signs of damage,
5 corrosion staining, or leak/release in the vicinity.

6 Due to the radioactive nature of the waste and consistent with ALARA principles, remote inspections are
7 the primary method of conducting inspections for several facilities at WTP. Areas of higher radiation
8 have been identified for all of the operating facilities, i.e., Lab, Pretreatment, LAW vitrification area,
9 HLW vitrification area and EMF. Unless otherwise stated in this permit, inspections of equipment, items,
10 and systems are performed as physical inspections.

11 **6A.1.2 Inspection Frequencies**

12 The frequency of inspection is how often (at a minimum) an inspection must be performed. For the
13 purposes of this inspection schedule, the various inspection frequencies have been established with
14 sufficient conservatism to be protective of human health and the environment. The inspection frequencies
15 most frequently used in this plan are outlined below.

16

Inspection Frequencies	
Frequency	Definition
Daily	Once per calendar day
Weekly	At least once during the period from Sunday to Saturday
Monthly	Once per calendar month
Bimonthly	Once every other calendar month
Quarterly	Once per calendar quarter
Semi-Annual	Once per 6-month calendar period
Annually	At least once during a 12-month period +/- 30 days

17
18 As a best management practice, the Permittees may implement an inspection frequency which is greater
19 than the frequency required in the Chapter 6A inspection schedule. However, such elective increases in
20 frequency will not constitute a basis for modifying the Chapter 6A inspection schedule to increase
21 permit-required frequencies.

1 **6A.1.3 Inspection Documentation**

2 Performance of inspections will be documented to demonstrate execution of the inspection schedule in
3 this plan. Preventative Maintenance work packages or standalone checklists will be utilized and will be
4 kept as a hardcopy or an electronic copy. Records of completed inspections will include the date and time
5 of inspection; the legible, printed name and hand written signature of the inspector (or equivalent), a
6 notation of the observations made, an account of spills or discharges and the date and nature of any
7 repairs or remedial actions taken. Inspection records will be placed in the WTP Unit Operating Record.

8 Completed and/or suspended inspection checklists are stored in the WTP Operating Record for at least
9 5 years from the date of the inspection.

10 For Suspended Inspections, further detail can be found in Section 6A.4.

11 **6A.1.4 Schedule for Remedial Action for Problems Revealed**

12 Problems revealed by inspections will be corrected on a schedule that prevents hazards to the public
13 health and environment. If inspections show that nonemergency maintenance is required, maintenance is
14 completed as soon as possible to prevent further damage and to reduce the need for subsequent
15 emergency response. Non-emergency corrective actions will be initiated within 24 hours if possible;
16 however, additional response time may be required because of the radioactive component of the waste
17 being managed at the WTP. Where a hazard is imminent or has already occurred, remedial actions are
18 taken immediately to prevent equipment damage and prevent hazards to human health and the
19 environment.

20 If an inspection identifies a fire, explosion, or release involving a dangerous waste, or an imminent hazard
21 to human health or the environment, the Building Emergency Plan (Chapter 7.0) is followed.

22 **6A.2 Specific Process or Waste Type Inspection Requirements**

23 **6A.2.1 Container Inspections**

24 The WTP will store Immobilized Low-Activity Waste (ILAW) in containers and Immobilized High-Level
25 Waste (IHLW) in canisters, and secondary dangerous and mixed waste in containers. In the DFLAW
26 Configuration, IHLW canisters will not be utilized. For purposes of IHLW, the term canisters are used to
27 specifically address the unique disposal requirements of the filled containers when operating in the
28 Baseline Configuration. Throughout this section, general references to containers also applies to the
29 IHLW canisters. Inspections of container storage areas will be performed weekly when waste is in the
30 storage areas.

31 **6A.2.1.1 Immobilized Low-Activity Waste Containers**

32 Filled ILAW containers will be radioactive and thus, inspections must be performed remotely. Therefore,
33 in lieu of conventional container inspections while the containers are in storage, each container will be
34 inspected before and after filling. The containers will not contain free liquids, will be chemically and
35 physically stable (not ignitable or reactive), and will have a pressed fitted closure seal (ILAW).

36 The WTP will inspect the LAW container storage or containment miscellaneous unit areas, when they are
37 in use, weekly. The LAW container storage or containment miscellaneous unit areas, with the exception
38 of the LAW Export Bay (L-0127), will be inspected remotely. The LAW Export Bay (L-0127) will be
39 physically inspected when the ILAW containers are placed inside the transportation container, and it is
40 properly closed. Physical inspections in LAW Export Bay (L-0127) can occur once the transportation
41 container is closed, because it provides the necessary shielding of the ILAW containers. As specified in
42 Unit-Specific Permit Condition III.10.D.4.b.ii, these remotely managed storage areas are exempt from the
43 30-inch aisle spacing. ILAW containers aisle spacing is anticipated to be in the range of 4 to 16 inches, as
44 described in Chapter 4E, Section 4E.1.2. Table 6A-3a details the methods and criteria used to inspect the
45 ILAW containers.

1 The dangerous waste container labeling requirements will be met by using a unique alphanumeric
2 identifier that will be welded to each container. Deterioration of the identifier is not expected due to the
3 permanent nature of these markings and provisions for subsequent handling that will safeguard against
4 damage to the containers and the identifying marks.

5 Using the identification on each container, a tracking system will record key movements of each
6 immobilized waste container through the facility. For each container of ILAW, the system will track the
7 following:

- 8 • The location of each container in process and storage areas.
- 9 • The date that waste was first placed in the container.
- 10 • The date the container was shipped from the facility, and its destination.
- 11 • Dangerous waste designation codes, and land disposal restriction requirements.

12 **6A.2.1.2 High-Level Waste Canisters**

13 Filled HLW canisters will be radioactive and thus, inspections must be performed remotely. Therefore, in
14 lieu of conventional container inspections while the containers are in storage, each container will be
15 inspected before and after filling, and when it is moved into and out of the HLW miscellaneous unit. The
16 containers will not contain free liquids, will be chemically stable (not ignitable or reactive), and will have
17 a welded closure. The IHLW canisters will be placed in special racks inside the storage areas that will
18 prevent from toppling.

19 The WTP will inspect the HLW containment miscellaneous unit areas; when they are in use, weekly by
20 remote means. As specified in Unit-Specific Permit Condition III.10.D.4.b.ii, these remotely managed
21 storage areas are exempt from the 30-inch aisle spacing. IHLW aisle spacing is anticipated to be in the
22 range of 4 to 16 inches, as described in Chapter 4F, Section 4F.1.2.1. Table 6A-5a details the methods
23 and criteria used to inspect the IHLW canisters.

24 The dangerous waste container labeling requirements will be met by using a unique alphanumeric
25 identifier that will be welded to each container. Deterioration of the identifier is not expected due to the
26 permanent nature of these markings and provisions for subsequent handling that will safeguard against
27 damage to the containers and the identifying marks.

28 Using the identification on each container, a tracking system will record key movements of each
29 immobilized waste container through the facility. Information about the waste canister tracking system is
30 in Chapter 4.0. For each container of IHLW produced, the system will track the following:

- 31 • The location of each container in process and storage areas.
- 32 • The date the waste was first placed in the container.
- 33 • The date the container was shipped from the facility, and its destination.
- 34 • Dangerous waste designation codes, and land disposal restriction requirements.

35 **6A.2.1.3 Secondary and Miscellaneous Waste in Containers**

36 Secondary waste refers to newly generated waste (or a waste by-product from treating the Hanford tanks
37 waste) that is designated as dangerous waste and/or mixed waste. Secondary waste will be generated at
38 the WTP, for example, waste associated with laboratory activities, maintenance activities and failed
39 contaminated equipment. Containerized secondary and miscellaneous waste that has been designated as
40 dangerous or mixed waste will be inspected weekly. Additional inspection criteria are included in the
41 container storage inspection tables at the end of this chapter.

1 **6A.2.1.4 Container Storage Areas**

2 Container storage areas managing secondary and/or miscellaneous mixed wastes are inspected weekly.
3 Inspections of container storage areas include verifying major risk labels are present and legible, that all
4 containers are closed, and area and aisle space is free of liquid and debris. Additional inspection criteria
5 are included in the container storage inspection tables at the end of this chapter.

6 **6A.2.1.5 Tanks and Miscellaneous Units**

7 In the DFLAW Configuration, the secondary containment systems for the WTP Unit Tank Systems listed
8 in Inspection Tables 6A-3c and 6A-4b, are free of cracks or gaps to prevent migration of dangerous
9 and/or mixed waste or accumulated liquid out of the system to the soil, groundwater, or surface water at
10 any time that waste is in the tank system. Any indication that a crack or gap may exist in the containment
11 systems will be investigated and repaired in accordance with WAC 173-303-320, WAC 173-303-
12 640(4)(b)(i), WAC 173-303-640(4)(e)(i)(C), WAC 173-303-640(6), and WAC 173-303-806(4)(c)(vii).

13 **6A.2.1.6 Secondary Containment Leak Detection/Correction**

14 Leak detection systems are used for secondary containment of the WTP Unit tank systems. If liquids
15 (e.g., dangerous and/or mixed waste leaks and spills, precipitation, fire water liquids from damaged or
16 broken pipes) cannot be removed from the secondary containment system within twenty-four (24) hours,
17 Department of Ecology (Ecology) will be verbally notified within twenty-four (24) hours of discovery.
18 The notification will provide the information in A, B, and C listed below. The Permittees will provide
19 Ecology with a written summary within fourteen (14) business days; identifying at a minimum the
20 following:

- 21 A. Reasons for delayed renewal.
- 22 B. Measures implemented to ensure continued inspection protection of human health and the
23 environment.
- 24 C. Current actions being taken to remove liquids from secondary containment.

25 Throughout the active life of the secondary containment system, if the Permittees detect a condition that
26 could lead to or has caused a release of dangerous and/or mixed waste, the Permittees must repair the
27 condition promptly.

28 The inspection data for the secondary containment system will be recorded in the inspection
29 documentation, as described in Section 6A.1.3 and in accordance with WAC 173-303-640(4)(c)(iv),
30 WAC 173-303-640(7)(b)(ii), WAC 173-303-806(4)(c)(vii).

31 **6A.2.1.7 Instrument Calibration**

32 Each instrument must be calibrated in accordance with documented preventive maintenance instructions.
33 A computerized tracking system is used to identify and schedule preventive maintenance and calibration
34 activities. All instrument calibrations must be accomplished using measuring and test equipment with
35 accuracy and reliability. Certain equipment calibration might not be possible when LAW is operating.
36 If the LAW campaign prohibits instrument calibration, these activities will be scheduled during outages to
37 avoid interference with operating activities.

38 **6A.2.1.8 Tank System Remedies**

39 If a leak or spill of dangerous and/or mixed waste is detected in a secondary containment system during
40 the course of an inspection, the Permittees will follow the remedial actions found in Unit-specific Permit
41 Condition III.10.E.5.i.

1 If the source of the dangerous wastes and/or mixed waste is determined to be a leak from a primary WTP
2 Unit Tank System, or the system is unfit for use as determined through an integrity assessment or other
3 inspection, the Permittees must comply with the requirements of WAC 173-303-640(7) and take the
4 following actions [WAC 173-303-640(5)(c)]:

- 5 A. Close the tank system according to procedures in WAC 173-303-640(8); or
- 6 B. Repair and re-certify [in accordance with WAC 173-303-640(7)(f) and 173-303-810(13)].

7 Minor or routine remedial actions (e.g., repairing floor coating, instrument replacement) that are not
8 major repairs or as specified in the Operating Unit Group (OUG) 10 Part III Conditions do not require
9 recertification by an independent qualified registered professional engineer prior to being placed back into
10 service.

11 **6A.2.1.9 Integrity Assessments**

12 Periodic integrity assessments will be performed over the life of the regulated tank systems to assure they
13 retain their structural integrity and will not collapse, rupture, or fail. The frequency of integrity
14 assessments will be based on the potential for corrosion and erosion. For the Lab, LAW, and EMF
15 operations, integrity assessments will be completed after reducing inventory in the affected tank(s) and/or
16 miscellaneous unit(s) (MU) making the area accessible. Details on facility specific integrity assessment
17 programs can be found in Appendix 7.15.

18 Lower Potential

19 Assessment of equipment with lower potential for corrosion and erosion with accessible areas or hot cells
20 is made during the routine or maintenance outages and within 10 years after start of hot commissioning at
21 selected accessible points where baseline Non-Destructive Examination (NDE) measurements had been
22 taken. Subsequent integrity assessments will be based on the results of the previous integrity assessments,
23 the age of equipment, materials of construction, characteristics of the waste, and any other relevant factors
24 [WAC 173-303-640(2)], but there will be no more than 10 years between integrity assessments.

25 Higher Potential

26 Assessment of equipment with higher potential for corrosion and erosion with accessible areas is made
27 during routine or maintenance outages and within 7 years after the start of hot commissioning at selected
28 accessible points where baseline NDE measurements had been taken. Subsequent integrity assessments
29 will be based on the results of previous integrity assessments, the age of equipment, materials of
30 construction, characteristics of the waste, and any other relevant factors but there will be no more than
31 7 years between integrity assessments.

32 **6A.2.2 Low-Activity Waste Containment Miscellaneous Units**

33 The containment miscellaneous units will be inspected in accordance with Table 6A-3a.

34 **6A.2.3 Storage of Ignitable or Reactive Wastes**

35 Small amounts of ignitable (D001) and reactive (D003) waste may be generated as secondary waste
36 during lab maintenance activities or laboratory operations. Management of this waste will be performed
37 either in Lab Pack Room (A-0139A), Waste Management Room (A-0139) or the WTP waste storage pad
38 in accordance with WAC 173-303-395. Annual inspections of areas managing D001 and D003 waste will
39 be conducted in compliance with the International Fire Code, or in the presence of the local, state, or
40 federal fire marshal. The date and time of the inspection, the name of the inspector or fire marshal, a
41 notation of the observation made, and any remedial actions, will be documented in an inspection
42 checklist.

1 **6A.2.4 Cathodic Protection System**

2 The treated LAW feed is transferred through underground High-Density Polyethylene (HDPE) jacketed
3 co-axial (pipe-in-pipe) transfer lines from the Tank Farms to the LAW facility, and then between EMF
4 and the Lab, LAW facility, and the Tank Farms. The annular space of the outer co-axial pipe provides
5 secondary containment and all transfer line piping is sloped to a leak detection box equipped with a
6 thermal level switch to provide leak detection. In addition, inspections of the Cathodic Protection System
7 will be conducted in accordance with the governing National Association of Corrosion Engineers
8 (NACE) standards, WAC 173-303-640(6)(c)(ii) and WAC 173-303-320.

9 The insulated HDPE-jacket co-axial/duplex underground piping does not require cathodic protection
10 because its secondary containment, carbon steel pipe, is isolated from soil moisture.

11 Table 6A-2b identifies leak detection boxes, frequency, and methods of inspection.

12 Cathodic protection systems are further defined in Chapter 4I, Section 4I.10.

13 **6A.2.5 Routinely Non-Accessible Inspections**

14 Rooms in the WTP Unit, in the DFLAW Configuration, are determined to be routinely non-accessible
15 because of high radiation dose and confined space entry. Remote inspections will be conducted via
16 instrument readouts. Visual inspections cannot be performed. During outages, detailed inspections will be
17 completed. Table 6A-3d describes the locations for DFLAW facilities.

18 All routinely non-accessible access points will be marked with labels or signs to identify the waste
19 contained in the units. The label, or sign, will be placed at the entrance to the routinely non-accessible
20 room or process cell. The label or sign must be legible at a distance of at least fifty (50) feet or posted at
21 each entrance and bear a legend which identifies the waste in a manner that adequately warns employees,
22 emergency response personnel, and the public of the major risk(s) associated with the waste being stored
23 or treated in the miscellaneous unit system(s). This applies for the following systems:

- 24 • LAW, Lab and EMF Tank Systems.
- 25 • LAW and Lab Miscellaneous Units Systems.
- 26 • LAW and HLW Vitrification Sub-systems.
- 27 • Pretreatment Facility.

28 **6A.2.5.1 Tank System Inspections**

29 A description of the tank systems, and their safety and interlock controls, at the WTP can be found in
30 Chapter 4.0. Access to regulated tanks for inspection and integrity assessments must be consistent with
31 keeping radiation exposure ALARA. Each tank or grouping of identical tanks is shown as a line item in
32 the facility specific inspection schedule, in Table 6A-3b, Table 6A-4a, Table 6A-5b, and Table 6A-6b.
33 Each inspection item includes a description of problems to look for and the frequency of inspection. The
34 inspection will address the tanks overflow and spill control equipment, data gathered from monitoring and
35 leak detection equipment, the area immediately surrounding the externally accessible portion of the tank
36 as well as secondary containment system.

37 **6A.2.6 Secondary Containment Equivalent Device Areas**

38 Special protective coating systems, as defined in the Engineering Specification for Field Applied Special
39 Protective Coatings for Secondary Containment Areas and incorporated into Appendix 7.7, have been
40 approved by Ecology for use as equivalent devices on a case-by-case basis, as allowable under
41 WAC 173-303-640(4)(d)(iv). The secondary containment areas identified in OUG 10 Part III Conditions
42 Table III.10.C.B are approved to use special protective coating systems as an equivalent device.
43 Inspections required for these areas will be performed per the frequencies and methods identified in

1 Table III.10.C.B and associated tank and/or miscellaneous unit system identified in the Chapter 6A
2 inspection tables.

3 **6A.3 Air Emissions Control and Detection**

4 **6A.3.1 Air Emissions from Process Vents (Subpart AA)**

5 The WTP does not use any of the regulated devices or processes listed; therefore, the WTP will not be
6 subject to regulation under Subpart AA (40 Code of Federal Regulations [CFR] 264).

7 **6A.3.2 Air Emission Standards for Equipment Leaks (Subpart BB)**

8 The WAC 173-303-691 and Subpart BB (40 CFR 264) applies to equipment that contains or contacts
9 hazardous wastes with organic concentrations of at least 10 percent by weight. This provision will not
10 apply to the facility because the WTP will not accept or treat wastes with organic concentrations at or
11 above 10 percent by weight. Compliance with this provision will be documented through analyses of
12 verification samples, as described in the Waste Analysis Plan.

13 **6A.3.3 Air Emission Standards for Tanks and Containers (Subpart CC)**

14 The regulations specified under WAC 173-303-692 and 40 CFR Part 264 Subpart CC, incorporated by
15 reference, do not apply to the WTP mixed waste tank systems and containers. These tanks and containers
16 qualify as waste management units that are "...used solely for the management of radioactive mixed
17 waste in accordance with all applicable regulations under the authority of the Atomic Energy Act and the
18 Nuclear Waste Policy Act" and are excluded under WAC 173-303-692(1)(b)(vi).

19 Containers or tanks bearing nonradioactive, dangerous waste, such as maintenance and laboratory waste,
20 that are not excluded under WAC 173-303-692(1)(b)(ii) or 40 CFR 264.1082(c), will comply with the
21 container and tank standards specified under 40 CFR Part 264 Subpart CC.

22 **6A.4 Suspended Inspections**

23 When a dangerous waste management unit is no longer receiving, containing, managing, or treating
24 waste, the unit's specific inspections may be suspended. During these situations, inspections can be
25 suspended until the affected system is placed back into dangerous waste operation. Prior to resuming
26 dangerous waste operations, "initial" inspections will be conducted when the system is brought back
27 online and regularly scheduled inspections are resumed. Inspections detailed in Table 6A-1 cannot be
28 suspended.

29 In the case an inspection has been suspended prior to the expiration of the next scheduled inspection, the
30 inspection requirement is satisfied by performing the inspection prior to resuming dangerous waste
31 operations. In the case of suspended daily inspections, the initial (restart) inspection satisfies the daily
32 inspection requirement for that day. All suspended inspections will be documented in the inspection
33 records described in Section 6A.1.3. Ecology WTP Permit Coordinator will receive a written notification
34 (e.g., email) when an inspection has been suspended.

35

Table 6A-1 General Facility Inspections¹

Item	Inspections	Frequency	Method
Security Devices³			
WTP fence (i.e., perimeter and inner dividing fence)	Check for appearance, damage and tampering.	Monthly	Physical

Table 6A-1 General Facility Inspections¹

Item	Inspections	Frequency	Method
Warning signs to read “Danger – Unauthorized Personnel Keep Out”	Verify signs are present, legible from a distance of 25 ft, and visible; ensure buildings or rooms containing dangerous and/or missed waste are posted.		
Points of access to active portions locked gates, doors, and/or magnetic encoded bar readers	Verify operability.	Monthly	Functional
Emergency Preparedness Equipment³			
Safety showers and eyewash stations	Verify operability.	Weekly	Physical
Fire alarms and signaling systems	Perform visual inspection of Fire Alarm System for damage and changes that impact system performance.	Semi-Annual	Physical
	Verify operability.	Annually	Functional
Automatic fire suppression system(s)	Verify operability.	Annually	Functional
Portable fire extinguishers (all types)	Check for adequate charge.	Monthly	Physical
Emergency and exit lighting	Test operability.	Monthly	Functional
Spill kit and spill control equipment	The spill kit is present and the seal is intact.	Quarterly	Physical
Communications Equipment³			
Emergency WTP Alert System (e.g., sirens, alarms, and alert beacons)	Verify operability.	Monthly	Functional
Voice paging system (e.g., pagers or Public Address [PA] system)			
Emergency telephones or two-way radios			
Power Supply Inspections			
Emergency uninterruptible power supply system(s)	Verify operability.	Annual	Functional
Emergency turbine generator ²	Perform no-load test and verify sufficient fuel.	RESERVED	Functional

¹Inspections apply to active portions (i.e., Laboratory) of the Facility in the DFLAW Configuration.

²Only applies to Baseline Configuration (HLW facility).

³For additional information (e.g., room/location), reference Chapter 7.0, *Building Emergency Plan for the WTP Site*.

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Table 6A-2 Lab Inspection Plan**Table 6A-2a Lab Container Storage Inspections**

Item	Inspection	Frequency	Method
Dangerous and Mixed Waste Container Storage Areas			
Laboratory waste management areas (A-0139) (A-0139A/B/C/D)	Verify major risk labels (e.g., toxic) present and legible, ensure all containers are closed; Check that container storage areas are free of liquid and debris; Check for cracks, gaps, and other signs of deterioration of storage area floors; Verify minimum 30 inches of aisle space between containers; Verify that any dangerous and or mixed waste container holding free liquids have portable secondary containment and no liquids accumulated in portable secondary containment	Weekly	Physical
Container storage areas storing ignitable or reactive waste	Inspection must be performed in the presence of a professional person who is familiar with the International Fire code, or in the presence of the local, state, or federal fire marshal ¹	Annual	Physical

¹WAC 173-303-395(1)(d).

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Table 6A-2b Lab Tank System and Ancillary Equipment Inspections

Item	Types of Problems/Inspection	Frequency	Method
Analytical Laboratory Tank Systems			
RLD-VSL-00164 ⁵ RLD-VSL-00165 ^{1,5}			
Tank level switches and transmitters for spill control equipment/overflow controls	Check for proper operation and review of alarm status	Daily	Control panels/ Process Control System
Tank ancillary equipment (e.g., pumps, piping)	Check for indications of corrosion, physical damage, and leaks/releases	Daily ²	Control panels/ Process Control System
Tank integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ⁴	7 or 10 years	Physical

Table 6A-2b Lab Tank System and Ancillary Equipment Inspections

Item	Types of Problems/Inspection	Frequency	Method
Secondary Containment Sump Systems⁵			
Sumps associated with RLD-VSL-00164: RLD-SUMP-00041, -00045			
Sumps associated with RLD-VSL-00165: RLD-SUMP-00042, -00043A/B, -00044			
Level switches and transmitters	Check for proper operation and review of alarm status	Daily	Control panels/ Process Control System
Sump integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ^{3,4}	10 years	Physical
Leak Detection Boxes⁵			
Leak Detection Boxes associated with RLD-VSL-00164: RLD-LDB-00005, -00006, -00007, -00008, -00011			
Leak Detection Boxes associated with RLD-VSL-00165: RLD-LDB-00002, -00004, -00009			
Level switches and transmitters	Check for proper operation and review of alarm status	Daily	Control panels/ Process Control System
Integrity assessment	Review Operating History	2 years	Physical

¹RLD-VSL-00165, including associated sumps and leak detection boxes, will not be active under the DFLAW Configuration. Inspections apply to active portions of the facility in the DFLAW Configuration.

²Per WAC 173-303-640(6)(b).

³Nondestructive examination will only be conducted for sumps that were found to have managed dangerous waste during the operating history review.

⁴For integrity assessment details, reference Appendix 7.15, 24590-WTP-PER-M-08-001, *Integrity Assessment Program and Schedule for DWP Regulated Equipment in the Analytical Laboratory, Low-Activity Waste Vitrification Facility, Balance of Facilities, and Effluent Management Facility*. Lower potential – 10 years and Higher potential – 7 years.

⁵Due to ALARA considerations for these areas, physical inspections will only be conducted at intervals coinciding with maintenance activities to mitigate risk to workers.

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Table 6A-3 Low-Activity Waste Inspection Plan

Table 6A-3a Low-Activity Waste Containment Miscellaneous Units and Container Storage Inspections

Item	Inspection	Frequency	Method
LAW Containment Miscellaneous Units			
LAW Locally Shielded Melter (LSM) Gallery: L-0112			
LAW Consumable Import/Export Containment Area: L-0119B			
LAW C3 Workshop: L-0226A			
LAW Melter Gallery: L-0130			
LAW-LSM Maintenance Shop: L-0226B			
LAW Process Cell Charge Floor: L-0202			
LAW Secondary Offgas Equipment Room: L-0304F			

Table 6A-3a Low-Activity Waste Containment Miscellaneous Units and Container Storage Inspections

Item	Inspection	Frequency	Method
Building exterior	Inspect the area surrounding the containment room to detect signs of releases of dangerous and/or mixed waste.	Weekly	Physical, Control panels/ Process Control System
Interior rooms	Inspect floor and walls for cracks, gaps, signs of corrosion, or other signs of deterioration; look for liquids on floor; when secondary wastes are being managed in the room.		
	Check differential pressure monitoring records to ensure negative pressure has been maintained in the containment room.		
Container storage areas storing ignitable or reactive waste	Inspection must be performed in the presence of a professional person who is familiar with the International Fire Code, or in the presence of the local, state, or federal fire marshal. ²	Annual	Physical
LAW Containment Miscellaneous Units			
LAW Container Finishing Line: ³ L-0109B, L-0109C, L-0109D, L-0115B, L-0115C, L-0115D			
Interior rooms	Inspect floor and walls for cracks, gaps, signs of corrosion, or other signs of deterioration; look for liquids on floor, when secondary wastes are being managed in the room.	Weekly	CCTV, Observation windows
	Check differential pressure monitoring records to ensure negative pressure has been maintained in the containment room.	Weekly	Control panels/ Process Control System
LAW Containment Miscellaneous Units			
LAW Pour Cave: ³ L-B011C, L-B013B, L-B013C, L-B015A			
Interior rooms	Inspect floor and walls for cracks, gaps, signs of corrosion, or other signs of deterioration; look for liquids on floor when secondary wastes are being managed in the room.	Weekly	CCTV, Observation windows
	Check differential pressure monitoring records to ensure negative pressure has been maintained in the containment room.	Weekly	Control panels/ Process Control System

Table 6A-3a Low-Activity Waste Containment Miscellaneous Units and Container Storage Inspections

Item	Inspection	Frequency	Method
LAW Containment Miscellaneous Units			
ILAW Container Buffer Storage and Rework Areas:³ L-B025B, L-B025C, L-B025D			
Interior rooms	Inspect floor and walls for cracks, gaps, signs of corrosion, or other signs of deterioration; look for liquids on the floor when secondary wastes are being managed in the room.	Weekly	CCTV, Observation windows
	Check differential pressure monitoring records to ensure negative pressure has been maintained in the containment room.	Weekly	Control panels/ Process Control System
ILAW Container Storage in Containment Miscellaneous Units			
ILAW containers	Inspect that unique alphanumeric identifier is welded to ILAW container and is legible.	Prior to placing in service	Physical
Filled ILAW containers ¹	Inspect each container for cracks, leaks, bulges, or other abnormalities.	After sealing container	CCTV, Observation windows
	Record in tracking system each container's location when placed in storage; Record in tracking system all container location changes if container(s) are moved while in storage; Verify container in recorded location when transporting container out of WTP storage.	Within 48 hours of placing or moving each container	Process Control System
Dangerous and Mixed Waste Container Storage Areas			
LAW Export Bay: L-0127			
Interior Room	Inspect floor and walls for cracks, gaps, signs of corrosion, or other signs of deterioration;	Weekly when in use	Physical

Table 6A-3a Low-Activity Waste Containment Miscellaneous Units and Container Storage Inspections

Item	Inspection	Frequency	Method
Stored ILAW containers ¹	Record in tracking system each container's location when placed in storage; Record in tracking system all container location changes if container(s) are moved while in storage; Verify container in recorded location when transporting container(s) out of WTP storage.	Within 48 hours of placing containers in storage	Process Control System

¹Direct access to containers of ILAW for the purposes of inspection is precluded due to radioactivity levels; therefore, ILAW containers are exempt from the 30-inch aisle requirements (Unit-Specific Permit Condition III.10.D.4.b.ii).

²WAC 173-303-395(1)(d).

³Due to ALARA considerations for these areas, physical inspections will only be conducted at intervals coinciding with maintenance activities to mitigate risk to workers.

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Table 6A-3b Low-Activity Waste Tank System and Ancillary Equipment Inspections

Item	Types of Problems/Inspections	Frequency	Method
Component Name LVP: LVP-TK-00001			
Tank level switches and transmitters for spill control equipment/overflow controls	Check for proper operation and review of alarm status	Daily	Control panels/ Process Control System
Tank exterior	Check visible equipment for signs of corrosion, physical damage, and leaks/releases	Daily	Physical
Tank ancillary equipment (e.g., pumps, piping)	Check visible equipment for signs of corrosion, physical damage, and leaks/releases	Daily ¹	Physical
Secondary containment special protective coating	Check for signs of physical damage	Daily ⁵	Physical
Tank integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ²	7 or 10 years	Physical
Component Name Radioactive Liquid Waste Disposal System (RLD): ³ RLD-VSL-00003, -00004, -00005			

Table 6A-3b Low-Activity Waste Tank System and Ancillary Equipment Inspections

Item	Types of Problems/Inspections	Frequency	Method
Tank level switches and transmitters for spill control equipment/overflow controls	Check for proper operation and review of alarm status	Daily	Control panels/ Process Control System
Tank ancillary equipment (e.g., pumps, piping)	Check for indications of corrosion, physical damage, and leaks/releases	Daily ¹	Control panels/ Process Control System
Tank integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ²	7 or 10 years	Physical
Component Name LAW Concentrate Receipt Process System (LCP):³ LCP-VSL-00001, -00002 LAW Canister Finishing Handling System (LFP):³ LFP-VSL-00001, -00002, -00003, -00004 LAW Primary Offgas Process System (LOP):³ LOP-VSL-00001, -00002			
Tank level switches and transmitters for Spill control equipment/overflow controls	Check for proper operation and review of alarm status	Daily	Control panels/ Process Control System
Tank ancillary equipment (e.g., pumps, piping)	Check for indications of corrosion, physical damage, and leaks/releases	Daily ¹	CCTV, Control panels/ Process Control System
Tank integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ²	7 or 10 years	Physical
Secondary Containment Sump Systems Sumps associated with the LAW Facility: RLD-SUMP-00028, -00029, -00030, 00031, 00032, 00035, 00036			
Level switches and transmitters	Check for proper operation and review of alarm status	Daily	Control panels/ Process Control System
Sump integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ^{2,4}	7 years	Physical
Bulges LCP: LCP-BULGE-00001, -00002, -00003 LFP: LFP-BULGE-00001, -00002 LOP: LOP-BULGE-00001, -00002 RLD: RLD-BULGE-00001, -00004			
Bulge exterior	Check for signs of corrosion, physical damage, and leaks/releases	Daily	Physical
	Review Operating History	2 years	Physical

Table 6A-3b Low-Activity Waste Tank System and Ancillary Equipment Inspections

Item	Types of Problems/Inspections	Frequency	Method
Bulge Integrity Assessment	Nondestructive Examination ²	7 or 10 years	Physical
Autosampler Secondary Containment Cabinets			
Autosamplers associated with the LAW Facility: ASX-SMPLR-00012 and ASX-SMPLR-00013			
Autosampler Cabinet Exterior	Check for signs of corrosion, physical damage, and leaks/releases	Daily	Physical
Level switches and transmitters	Check for proper operation and review of alarm status	Daily	Control panels/ Process Control System

¹Per WAC 173-303-640(6)(b).

²For integrity assessment details, reference Appendix 7.15, 24590-WTP-PER-M-08-001, *Integrity Assessment Program and Schedule for DWP Regulated Equipment in the Analytical Laboratory, Low-Activity Waste Vitrification Facility, Balance of Facilities, and Effluent Management Facility*. Lower potential – 10 years and Higher potential – 7 years.

³Due to ALARA considerations for these areas, physical inspections will only be conducted at intervals coinciding with maintenance activities to mitigate risk to workers.

⁴Nondestructive examinations will only be conducted for sumps that were found to have managed dangerous waste during the operating history review.

⁵Per Table III.10.C.B, Secondary Containment Locations Approved for Equivalent Device Use.

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Table 6A-3c Low-Activity Waste Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/Inspections	Frequency	Method
LAW Melter Process (LMP) System				
LAW Melter 1 LAW Melter 2	LMP-MLTR-00001 LMP-MLTR-00002	Check visible equipment and/or instrument indications for signs of corrosion or physical damage Inspect melter level monitoring data to prevent overflow	Daily	Physical, Control panels/ Process Control System
LAW Primary Offgas Process (LOP) System				
Melter 1 and Melter 2 submerged bed scrubber (SBS)	LOP-SCB-00001 LOP-SCB-00002	Check for instrument indications and/or visible equipment for signs of corrosion or physical damage	Daily ¹	CCTV, Control panels/Process Control System
Melter 1 and Melter 2 wet electrostatic precipitators (WESP)	LOP-WESP-00001 LOP-WESP-00002	Check for instrument indications and/or visible equipment for signs of corrosion or physical damage	Daily ¹	CCTV, Control panels/Process Control System

Table 6A-3c Low-Activity Waste Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/Inspections	Frequency	Method
Primary/standby film coolers	LOP-FCLR-00001 LOP-FCLR-00002 LOP-FCLR-00003 LOP-FCLR-00004	Check for instrument indications and/or visible equipment for signs of corrosion or physical damage	Daily	Control panels/ Process Control System, Physical ²
LAW Secondary Offgas/Vessel Vent Process (LVP) System				
Melter offgas caustic scrubber	LVP-SCB-00001	Check visible equipment for signs of corrosion or physical damage	Daily	Physical
	Secondary containment special protective coating	Check coated berm containment area for signs of physical damage to protective coating	Daily ³	Physical
Melter offgas high-efficiency particulate air (HEPA) filters	LVP-HEPA-00001A/B LVP-HEPA-00002A/2B LVP-HEPA-00003A	Check visible equipment and/or instrument indications for signs of corrosion or physical damage	Daily	Physical, Control panels/ Process Control System
Thermal catalytic oxidizer	LVP-SCO-00001	Check visible equipment for signs of corrosion or physical damage	Daily	Physical
NOx selective catalytic reduction unit	LVP-SCR-00001	Check visible equipment for signs of corrosion or physical damage	Daily	Physical
Melter offgas HEPA preheaters	LVP-HTR-00001A/3A	Check visible equipment and/or instrument indication for signs of corrosion or physical damage	Daily	Physical, Control panels/ Process Control System
Catalytic oxidizer electric heater	LVP-HTR-00002	Check visible equipment for signs of corrosion or physical damage	Daily	Physical
Catalytic oxidizer heat recovery unit	LVP-HX-00001	Check visible equipment for signs of corrosion or physical damage	Daily	Physical
Offgas mercury adsorbers	LVP-ADBR-00001A/1B	Check visible equipment for signs of corrosion or physical damage	Daily	Physical
Melter offgas exhausters	LVP-EXHR-00001A/1B/1C	Check visible equipment for signs of corrosion or physical damage	Daily	Physical

¹Due to ALARA considerations for these areas, physical inspections will only be conducted at intervals coinciding with maintenance activities to mitigate risk to workers.

²The melter lid vicinity around the film cooler location will be inspected daily during melter inspections. For worker safety, visual inspection of the individual film coolers inside the melter lid will be performed only when conditions allow safe physical access to remove the film cooler cover panels.

³Per Table III.10.C.B, Secondary Containment Locations Approved for Equivalent Device Use.

Table 6A-3d Facility Routinely Non-Accessible System Inspections

Room Number	System Description	Elevation	Frequency	Method
LAW Facility				
L-B001B	Tank Systems: C3/C5 Drains/Sump Collection Vessel: RLD-VSL-00004	(-) 21' -0"	Daily	Control panels/ Process Control System
L-0123	Tank Systems: Melter 1 Concentrate Receipt Vessel: LCP-VSL-00001 Melter 1 Feed Preparation Vessel: LFP-VSL-00001 Melter 1 Feed Vessel: LFP-VSL-00002 Melter 1 SBS Condensate Vessel: LOP-VSL-00001	(+) 3' -0"	Daily	CCTV, Control panels/Process Control System
	Miscellaneous Units: Melter 1 SBS: LOP-SCB-00001 Melter 1 WESP: LOP-WESP-00001			
L-0124	Tank Systems: Melter 2 Concentrate Receipt Vessel: LCP-VSL-00002 Melter 2 Feed Preparation Vessel: LFP-VSL-00003 Melter 2 Feed Vessel: LFP-VSL-00004 Melter 2 SBS Condensate Vessel: LOP-VSL-00002	(+) 3' -0"	Daily	Control panels/ Process Control System
	Miscellaneous Units: Melter 2 SBS: LOP-SCB-00002 Melter 2 WESP: LOP-WESP-00002			
L-0126	Tank Systems: Plant Wash Vessel: RLD-VSL-00003 SBS Condensate Collection Vessel: RLD-VSL-00005	(+) 3' -0"	Daily	Control panels/ Process Control System
L-0109B	Containment Miscellaneous Unit: Swabbing Cell – North Line	(+) 3' -0"	Daily	CCTV, Observation windows
L-0109C	Containment Miscellaneous Unit: Decon Area – North Line			
L-0109D	Containment Miscellaneous Unit: Inert Fill Line/Lidding Area – North Line			

Table 6A-3d Facility Routinely Non-Accessible System Inspections

Room Number	System Description	Elevation	Frequency	Method
L-0115B L-0115C	Containment Miscellaneous Unit: Swabbing Cell – South Line			
L-0115D	Containment Miscellaneous Unit: Inert Fill Line/Lidding Area – South Line			
L-B011C	Containment Miscellaneous Unit: Pour Cave	(-) 21' -0"	Weekly	CCTV, Observation windows, Control panels/ Process Control System
L-B013B	Containment Miscellaneous Unit: Pour Cave			
L-B013C	Containment Miscellaneous Unit: Pour Cave			
L-B015A	Containment Miscellaneous Unit: Pour Cave			
L-B025B	Containment Miscellaneous Unit: Container Buffer Storage and Rework Area	(-) 21' -0"	Weekly	CCTV, Observation windows, Control panels/ Process Control System
L-B025C	Containment Miscellaneous Unit: Container Buffer Storage and Rework Area			
L-B025D	Containment Miscellaneous Unit: Container Buffer Storage and Rework Area			
Effluent Management Facility				
ED-B001	Tank System: Low-Point Drain Vessel: DEP-VSL-00001	(-) 39' -0"	Daily	Control panels/ Process Control System
E-0105	Tank Systems: Evaporator Feed Vessel: DEP-VSL-00002 Evaporator Concentrate Vessel: DEP-VSL-00003A Evaporator Concentrate Vessel: DEP-VSL-00003B Evaporator Concentrate Vessel: DEP-VSL-00003C	(+) 0' -0"	Daily	Control panels/ Process Control System
Analytical Laboratory Facility Tank Systems				
A-B002	C3 Pump Pit	(+) 0' -0"	Daily	
A-B005	C5 Pump Pit ¹			

Table 6A-3d Facility Routinely Non-Accessible System Inspections

Room Number	System Description	Elevation	Frequency	Method
A-B006	C3 Piping Pit			Control panels/ Process Control System
A-B007	C5 Piping Pit ¹			
A-B003	Laboratory Area Sink Drain Collection Vessel: RLD-VSL-00164	(-) 19' -2"	Daily	Control panels/ Process Control System
A-B004	Hot Cell Drain Collection: RLD-VSL-00165 ¹ (isolated during DFLAW operations)			

¹RLD-VSL-00165 will not be active under the DFLAW Configuration.

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Table 6A-3e Remote Inspection Closed Circuit Television Camera Capabilities and Locations¹

Camera Location	View Angle	Pan	Tilt	Zoom	View
Room L-0123 (Process Cell 1)					
Camera ID: PTJ-XT-2104 SBS Pump Viewing Camera Camera Elevation: 23'-8" Drawing: 24590-LAW-J2-20-00004	180°	Y	Y	Y	LOP-VSL-00001 (top and upper ancillary equipment) LCP-VSL-00001 (top and upper ancillary equipment) LOP-SCB-00001 (top and upper ancillary equipment)
Camera ID: PTJ-XT-2106 Sump Viewing Camera Camera Elevation: 10'-7" Drawing: 24590-LAW-J2-20-00004	180°	Y	Y	Y	RLD-SUMP-00029 & RLD-PMP-00025 LOP-VSL-00001 (Mid-level of tank to the floor and immediate containment area) LCP-VSL-00001 (Mid-level of tank to the floor and immediate containment area) LOP-WESP-00001, LOP-SCB-00001, LFP-VSL-00001, LFP-VSL-00002 – Inward facing base of vessels/miscellaneous units and immediate containment area below

Table 6A-3e Remote Inspection Closed Circuit Television Camera Capabilities and Locations¹

Camera Location	View Angle	Pan	Tilt	Zoom	View
Camera ID: PTJ-XT-2103 Air Displacement Slurry (ADS) Pump Viewing Camera Camera Elevation: 25'-8" Drawing: 24590-LAW-J2-20-00005	180°	Y	Y	Y	LFP-VSL-00001 (top and upper ancillary equipment) LFP-VSL-00002 (top and upper ancillary equipment)
Camera ID: PTJ-XT-2105 Sump Viewing Camera Camera Elevation: 10'-7" Drawing: 24590-LAW-J2-20-00005	180°	Y	Y	Y	RLD-SUMP-00030 & RLD-PMP-000026 LFP-VSL-00001 (Mid-level of tank to the floor and immediate containment area) LFP-VSL-00002 (Mid-level of tank to the floor and immediate containment area)
Room L-0124 (Process Cell 2)					
Camera ID: PTJ-XT-2121 ADS Pump Viewing Camera Camera Elevation: 25'-8" Drawing: 24590-LAW-J2-20-00005	180°	Y	Y	Y	LOP-SCB-00002 (top and upper ancillary equipment) LFP-VSL-00003 (top and upper ancillary equipment) LFP-VSL-00004 (top and upper ancillary equipment)
Camera ID: PTJ-XT-2122 SBS Pump Viewing Camera Camera Elevation: 21'-4" Drawing: 24590-LAW-J2-20-00005	180°	Y	Y	Y	LCP-VSL-00002 (top and upper ancillary equipment) LOP-VSL-00002 (top and upper ancillary equipment)
Camera ID: PTJ-XT-2123 Sump Viewing Camera Camera Elevation: 10'-7" Drawing: 24590-LAW-J2-20-00005	180°	Y	Y	Y	RLD-SUMP-00032 & RLD-PMP-00028 LFP-VSL-00003 (Mid-level of tank to the floor and immediate containment area) LFP-VSL-00004 (Mid-level of tank to the floor and immediate containment area) LOP-WESP-00002, LOP-SCB-00002, LOP-VSL-00002, LCP-VSL-00002 – Inward facing base of vessels/miscellaneous units and immediate containment area below

Table 6A-3e Remote Inspection Closed Circuit Television Camera Capabilities and Locations¹

Camera Location	View Angle	Pan	Tilt	Zoom	View
Camera ID: PTJ-XT-2124 Sump Viewing Camera Camera Elevation: 10'-3" Drawing: 24590-LAW-J2-20-00005	180°	Y	Y	Y	RLD-SUMP-00031 & RLD-PMP-00027 LCP-VSL-00002 (Mid-level of tank to the floor and immediate containment area) LOP-VSL-00002 (Mid-level of tank to the floor and immediate containment area)
Room L-0109B (Swabbing Cell North Line)					
Camera ID: PTJ-XT-2070 Swabbing Room North Camera Camera Elevation: 23'-3" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	Bogey, rails, and general room view of interior, and floor
Camera ID: PTJ-XT-2073 Swabbing Station North Camera Camera Elevation: 15'-8" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	General room view, swabbing robot, and floor
Room L-0109C (Decontamination Area - North Line)					
Camera ID: PTJ-XT-2064 Decontamination Room North Camera Camera Elevation: 23'-3" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	Majority of the room view, bogey rails, and floor
Camera ID: PTJ-XT-2067 Decontamination Station North Camera Camera Elevation: 17'-6" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	General room view and decontamination station
Room L-0109D (Inert Fill/Lidding Area - North Line)					
Camera ID: PTJ-XT-2056 Import Hatch North Camera Camera Elevation: 23'-3" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	Import hatch, crane, partial room, bogey line, and floor
Camera ID: PTJ-XT-2059 Lid Inspection North Camera Camera Elevation: 17'-3" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	Partial room view and ILAW container (if present)

Table 6A-3e Remote Inspection Closed Circuit Television Camera Capabilities and Locations¹

Camera Location	View Angle	Pan	Tilt	Zoom	View
Camera ID: PTJ-XT-2061 Lid Station North Camera Camera Elevation: 16'-0" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	Bogey, rails, lidding station, general room view, and floor
Camera ID: PTJ-XT-2063 Lidding Room North Camera Camera Elevation: 16'-0" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	General room view, lidding equipment, floor, and ILAW container (if present)
Room L-0115B (Swabbing Cell - South Line)					
Camera ID: PTJ-XT-2047 Swabbing Room South Camera Camera Elevation: 19'-0" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	General room view, floor, ILAW container (if present)
Camera ID: PTJ-XT-2050 Swabbing Station South Camera Camera Elevation: 15'-8" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	Swabbing robot and bogey rail
Room L-0115C (Swabbing Cell - South Line)					
Camera ID: PTJ-XT-2041 Decontamination Room South Camera Camera Elevation: 23'-3" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	Partial room view, view of decontamination station, and floor
Camera ID: PTJ-XT-2044 Decontamination Room South Camera Camera Elevation: 17'-6" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	General room view, bogey, transfer line, and floor
Room L-0115D (Inert Fill Line/Lidding Area - South Line)					
Camera ID: PTJ-XT-2031 Import Hatch South Camera Camera Elevation: 19'-0" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	Import hatch, crane, and partial room view

Table 6A-3e Remote Inspection Closed Circuit Television Camera Capabilities and Locations¹

Camera Location	View Angle	Pan	Tilt	Zoom	View
Camera ID: PTJ-XT-2036 Lid Inspection South Camera Camera Elevation: 16'-8" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	Transfer line, bogey, floor, and ILAW container (if present)
Camera ID: PTJ-XT-2038 Lid Station South Camera Camera Elevation: 16'-4" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	General room, transfer line, and floor
Camera ID: PTJ-XT-2040 Lidding Room South Camera Camera Elevation: 16'-0" Drawing: 24590-LAW-J2-20-00010	180°	Y	Y	Y	General Room, transfer line, bogey, and floor
Room L-B011C (Pour Cave)					
Camera ID: PTJ-XT-2008 Pour Cave L-B011C Camera Upper Camera Elevation: -5'-5" Drawing: 24590-LAW-J2-20-00105	63° - Fixed	N	N	N	Melter 2 East Pour Cave – pour turntable and surrounding floor
Room L-B013B (Pour Cave)					
Camera ID: PTJ-XT-2006 Pour Cave L-B013B Camera Upper Camera Elevation: -5'-5" Drawing: 24590-LAW-J2-20-00105	63° - Fixed	N	N	N	Melter 2 West Pour Cave – pour turntable and surrounding floor
Room L-B013C (Pour Cave)					
Camera ID: PTJ-XT-2004 Pour Cave L-B013C Camera Upper Camera Elevation: -5'-5" Drawing: 24590-LAW-J2-20-00105	63° - Fixed	N	N	N	Melter 1 East Pour Cave – pour turntable and surrounding floor
Room L-B015A (Pour Cave)					
Camera ID: PTJ-XT-2002 Pour Cave L-B015A Camera Upper Camera Elevation: -5'-6" Drawing: 24590-LAW-J2-20-00104	63° - Fixed	N	N	N	Melter 1 West Pour Cave – pour turntable and surrounding floor

Table 6A-3e Remote Inspection Closed Circuit Television Camera Capabilities and Locations¹

Camera Location	View Angle	Pan	Tilt	Zoom	View
Room L-B025B (Container Buffer Storage and Rework Area)					
Camera ID: PTJ-XT-2020 Pour Cave L-B015A and L-B-013C Transfer Camera Elevation: -7'-0" Drawing: 24590-LAW-J2-20-00104	180°	Y	Y	Y	General room view, transfer line, and floor
Camera ID: PTJ-XT-2022 Pour Cave L-B013B and L-B-011C Transfer Camera Elevation: -7'-0" Drawing: 24590-LAW-J2-20-00105	180°	Y	Y	Y	General room view, transfer line, and floor
Room L-B025C (Container Buffer Storage and Rework Area)					
Camera ID: PTJ-XT-2028 North Buffer Storage Area Viewing Camera Camera Elevation: -7'-0" Drawing: 24590-LAW-J2-20-00106	63° - Fixed	N	N	N	General room view, ILAW Containers (when present)
Room L-B025D (Container Buffer Storage and Rework Area)					
Camera ID: PTJ-XT-2030 South Buffer Storage Area Viewing Camera Camera Elevation: -8'-0" Drawing: 24590-LAW-J2-20-00106	63° - Fixed	N	N	N	General room view, ILAW Containers (when present)

¹Drawings depicting closed circuit television camera locations are included in WTP OUG 10 Part III Appendix 9.18.

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Table 6A-4 Effluent Management Facility Inspection Plan

Table 6A-4a Effluent Management Facility Tank System and Ancillary Equipment Inspections

Component Name	Types of Problems/Inspections	Frequency	Method
Direct Feed LAW EMF Process System (DEP): DEP-VSL-00001, ⁴ -00002, ⁴ -00003A, ⁴ -00003B, ⁴ -00003C ⁴			
Tank level switches and transmitters for spill control equipment/overflow controls	Check for proper operation and review of alarm status	Daily	Control panels/Process Control System

Table 6A-4a Effluent Management Facility Tank System and Ancillary Equipment Inspections

Component Name	Types of Problems/Inspections	Frequency	Method
Tank ancillary equipment (e.g., pumps, piping)	Check for indications of corrosion, physical damage, and leaks/releases	Daily ¹	Control panels/Process Control System and/or Physical
Tank integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ²	7 or 10 years	Physical
DEP: DEP-VSL-00004A, -00004B, -00005A, -00005B			
Tank level switches and transmitters for spill control equipment/overflow controls	Check for proper operation and review of alarm status	Daily	Control panels/Process Control System
Tank Exterior	Check visible equipment for signs of corrosion, physical damage, and leaks/releases	Daily	Physical
Tank ancillary equipment (e.g., pumps, piping)	Check visible equipment for signs of corrosion, physical damage, and leaks/releases	Daily	Physical
Tank Integrity Assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ²	7 or 10 years	Physical
Secondary Containment Sump System			
Sumps associated with the EMF: DEP-SUMP-00001,⁴ DEP-SUMP-00002A/B,⁴ DEP-SUMP-00003A/B,⁴ DEP-SUMP-00004A/B⁴			
Level switches and transmitters	Check for proper operation and review of alarm status	Daily	Control panels/Process Control System
Sump integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ^{2,3}	10 years	Physical
Secondary Containment Sump System			
Sumps associated with the EMF: DEP-SUMP-00005A/B			
Sump	Check visible areas for signs of corrosion, physical damage, and leaks/releases	Daily	Physical
Level switches and transmitters	Check for proper operation and review of alarm status	Daily	Control panels/Process Control System
Sump Integrity Assessment	Review Operating History	2 years	Physical
	Nondestructive Examination ^{2,3}	10 years	Physical
Leak Detection Boxes			
Leak Detection Boxes associated with the Effluent Management Facility⁴: DEP-LDB-00001, -00002, -00003, -00004, -00005, -0006			
Level switches and transmitters	Check for proper operation and review of alarm status	Daily	Control panels/Process Control System

Table 6A-4a Effluent Management Facility Tank System and Ancillary Equipment Inspections

Component Name	Types of Problems/Inspections	Frequency	Method
Integrity assessment	Review Operating History	2 years	Physical

¹Per WAC 173-303-640(6)(b).

²For integrity assessment details, reference Appendix 7.15, 24590-WTP-PER-M-08-001, *Integrity Assessment Program and Schedule for DWP Regulated Equipment in the Analytical Laboratory, Low-Activity Waste Vitrification Facility, Balance of Facilities, and Effluent Management Facility*. Lower potential – 10 years and Higher potential – 7 years.

³Nondestructive examination will only be conducted for sumps that were found to have managed dangerous waste during the operating history review.

⁴Due to ALARA considerations for these areas, physical inspections will only be conducted at intervals coinciding with maintenance activities to mitigate risk to workers.

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Table 6A-4b Effluent Management Facility Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/ Inspections	Frequency	Method
DEP evaporator separator	DEP-EVAP-00001	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
DEP evaporator reboiler	DEP-RBLR-00001	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Evaporator primary condenser	DEP-COND-00001	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Evaporator intercondenser	DEP-COND-00002	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Evaporator after condenser	DEP-COND-00003	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Process condensate lag storage transfer line filter	DEP-FILT-00002	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Evaporator feed prefilter	DEP-FILT-00003	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System

Table 6A-4b Effluent Management Facility Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/ Inspections	Frequency	Method
Condensate duplex cartridge filter	DEP-FILT-00004A DEP-FILT-00004B	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Concentrate effluent cooler	DEP-HX-00001	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Process ventilation primary HEPA	DVP-HEPA-00003A DVP-HEPA-00003B	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Process ventilation secondary HEPA	DVP-HEPA-00004A DVP-HEPA-00004B	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Process ventilation heater	DVP-HTR-00001A/B	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System
Process ventilation exhauster	DVP-EXHR-00001A/B	Check visible equipment for signs of corrosion or physical damage	Daily	Physical, Control panels/Process Control System

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Table 6A-5 Example – High-Level Waste Inspection Plan

Table 6A-5a Example – High-Level Waste Containment Building and Container Storage Inspections

Item	Inspection	Frequency	Method
Containment Building Inspections			
Building exterior	Inspect the area immediately surrounding the containment building to detect signs of releases of dangerous and/ mixed waste.	Weekly	Physical
Interior rooms	Inspect floor and walls for significant cracks, gaps, corrosion, or other signs of deterioration; look for liquids on floor.		
	Check differential pressure monitoring records to ensure negative pressure has been maintained in containment building.		

Table 6A-5a Example – High-Level Waste Containment Building and Container Storage Inspections

Item	Inspection	Frequency	Method
Dangerous and/or Mixed Waste Container Storage Inspections			
HLW east corridor (HC-0108/0109/0110) HLW loading area (H-0130)	Verify major risk labels present and legible, ensure all containers are closed; Check that container storage areas are free of liquid and debris; Check for significant cracks, gaps, and other signs of deterioration of storage area floors; Verify minimum 30 inches of aisle space between containers; Verify that any dangerous and or mixed waste container holding free liquids have portable secondary containment and no liquids accumulated in portable secondary containment.	Weekly	Physical
Container storage areas storing ignitable or reactive waste	Inspection must be performed in the presence of a professional person who is familiar with the International Fire Code, or in the presence of the local, state, or federal fire marshal. ²	Annual	Physical
High-Level Waste Vitrification Plant Canister Storage Area			
IHLW canisters	Inspect that unique alphanumeric identifier is welded to IHLW canister and is legible.	Prior to placing in storage	Remote
Filled IHLW canisters ¹	Inspect each container for cracks, leaks, bulges, or other abnormalities.	After sealing container	Remote
	Record in tracking system each container's location when placed in storage; Record in tracking system all container location changes if container(s) are moved while in storage; Verify container in recorded location when transporting container out of WTP storage.	Within 48 hours of placing or moving each container	Remote
IHLW canister storage cave (H-0132)	Inspect for deformities in storage area floors or debris in storage area.	Weekly	Remote

¹Direct access to IHLW for the purposes of inspection is precluded due to high radioactivity levels; therefore, IHLW canisters are exempt from the 30-inch aisle space requirements (Unit-specific Permit Conditions III.10.D.4.b.ii).

²WAC 173-303-395(1)(d).

Table 6A-5b Example – High-Level Waste Tank System and Ancillary Equipment Inspections

High-Level Waste Tank System			
HOP: HOP-VSL-00903, -00904			
HLW Canister Decontamination Handling System (HDH): HDH-VSL-00001, -000002, -000003, -00004			
RLD: RLD-VSL-00002, -00007, -00008			
HLW Melter Feed Process System (HFP): HFP-VSL-00001, -00002, -00005, -00006			
HLW Melter Cave Support Handling System (HSH): HSH-TK-00001, -00002			
Item	Types of Problems/Inspections	Frequency	Method
Tank level switches and transmitters	Check for proper operation and review of alarm status	Daily	Remote
Spill control equipment/overflow controls	Check for proper operation	Daily	Remote
Tank integrity assessment	Review Operating History	TBD	TBD
	Visual Inspections	TBD	TBD
	Nondestructive Examination	TBD	TBD
Secondary Containment Sump System			
Level switches and transmitters	Check for proper operation and review of alarm status	Daily	Remote
Sump integrity assessment	Review Operating History	TBD	TBD
	Visual Inspections	TBD	TBD
	Nondestructive Examination	TBD	TBD

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Table 6A-5c Example – High-Level Waste Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/ Inspections	Frequency	Method
High-Level Waste Melter Process System (HMP)				
HLW Melter 1 HLW Melter 2	HMP-MLTR-00001 HMP-MLTR-00002	Check for damage, leaks, or abnormalities Inspect melter level monitoring data to prevent overflow	Daily	Remote
HLW Melter Offgas Treatment Process System (HOP)				
SBS	HOP-SCB-00001 HOP-SCB-00002	TBD	TBD	TBD
WESP	HOP-WESP-00001 HOP-WESP-00002	TBD	TBD	TBD

Table 6A-5c Example – High-Level Waste Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/ Inspections	Frequency	Method
Thermal catalytic oxidizer	HOP-SCO-00001 HOP-SCO-00004	TBD	TBD	TBD
NOx selective catalytic reduction units	HOP-SCR-00001 HOP-SCR-00002	TBD	TBD	TBD
Silver mordenite columns	HOP-ABS-00002 HOP-ABS-00003	TBD	TBD	TBD
HEPA filters	HOP-HEPA-00001A/B HOP-HEPA-00002A/B HOP-HEPA-00007A/B HOP-HEPA-00008A/B	TBD	TBD	TBD
Melter offgas film coolers	HOP-FCLR-00001/3 HOP-FCLR-00002/4	TBD	TBD	TBD
Catalyst skid preheaters	HOP-HX-00001 HOP-HX-00003	TBD	TBD	TBD
HEPA preheaters	HOP-HTR-00001B HOP-HTR-00002A HOP-HTR-00005A HOP-HTR-00005B	TBD	TBD	TBD
Catalyst skid electric heaters	HOP-HTR-00007 HOP-HTR-00001	TBD	TBD	TBD
Silver mordenite preheaters	HOP-HX-00002 HOP-HX-00004	TBD	TBD	TBD
Stack extraction fans	HOP-FAN-00008A HOP-FAN-00008B HOP-FAN-00008C HOP-FAN-00010A HOP-FAN-00010B HOP-FAN-00010C	TBD	TBD	TBD
Booster extraction fans	HOP-FAN-00001A/B/C HOP-FAN-00009A/B/C	TBD	TBD	TBD
Activated carbon adsorber	HOP-ADBR-00001A/B HOP-ADBR-00002A/B	TBD	TBD	TBD
High efficiency mist eliminators (HEME)	HOP-HEME-00001A/B HOP-HEME-00002A/B	TBD	TBD	TBD

Table 6A-5c Example – High-Level Waste Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/ Inspections	Frequency	Method
High-Level Waste Pulse Jet Ventilation System (PJV)				
PJV HEPA filters	PJV-HEPA-00004A/B PJV-HEPA-00005A/B	TBD	TBD	TBD
Pulse ventilation HEPA electric preheater	PJV-HTR-00002	TBD	TBD	TBD
Pulse vent extraction Fans	PJV-FAN-00002A/B	TBD	TBD	TBD

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Table 6A-6 Example – Pretreatment Facility Inspection Plan

Table 6A-6a Example – Pretreatment Facility Containment Building Inspections

Pretreatment Hot Cell Containment Building: P-0123 Pretreatment Maintenance Containment Rooms: PM0124, P-0121A, P-0421A, P-0122A, P-0122A, P-0123A, P-0124, P-124A, P-0125, P-0125A, P-0128A, P-0128 Pretreatment Filter Package Maintenance Containment Room: P-0223 Pretreatment Filter Cave Room: P-0335 Decon Chamber: P-0335A General Filter Room: P-0431A			
Item	Inspection	Frequency	Method
Building exterior	Inspect the area immediately surrounding the containment building to detect signs of releases of dangerous and/or mixed waste.	Weekly	Physical
Interior rooms	Inspect floor and walls for significant cracks, gaps, corrosion, or other signs of deterioration; look for liquids on floor.		
	Check differential pressure monitoring records to ensure negative pressure has been maintained in containment building.		

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Table 6A-6b Example – Pretreatment Tank System and Ancillary Equipment Inspections

Pretreatment Facility Tank System			
Waste Feed Receipt Process System (FRP): FRP-VSL-00002A, -00002B, -00002C, -00002D			
Waste Feed Evaporator Feed Process System (FEP): FEP-VSL-00017A, -00017B, -00005			
HLW Lag Storage and Feed Blending Process System (HLP): HLP-VSL-00027A, -00027B, -00022, -00028			
Ultrafiltration Process System (UFP): UFP-VSL-00001A, -00001B, -00002A, -00002B, -00062A, -00062B, -00062C, UFP-FILT-00001A UFP-FILT-00001B UFP-FILT-00002A UFP-FILT-00002B UFP-FILT-00003A UFP-FILT-00003B, UFP-FILT-00004A, UFP-FILT-00004B, UFP-FILT-00005A, UFP-FILT-00005B			
Cesium Ion Exchange Process System (CXP): CXP-VSL-00001, CXP-IXC-00001 CXP-IXC-00002 CXP-IXC-00003 CXP-IXC-00004, CXP-VSL-00005, CXP-VSL-00004, CXP-VSL-00026A CXP-VSL-00026B CXP-VSL-00026C			
Cesium Nitric Acid Recovery Process System (CNP): CNP-VSL-00001, -00004, -00003			
Pretreatment Vessel Vent Process System (PVP): PVP-VSL-00001			
Plant Wash and Disposal System (PWD): PWD-VSL-00033, -00044, -00015, -00016, -00046, -00043			
Treated LAW Evaporation System (TLP): TLP-VSL-00002, -00009A, -00009B			
Treated LAW Evaporation Process System (TCP): TCP-VSL-00001			
Spent Resin and Dewatering Process System (RDP): RDP-VSL-00002A, -00002B, -00002C, -00004			
RLD: RDP-TK-00006A, -00006B, -00017A, -00017B			
Pretreatment in-cell Handling System (PIH): PIK-TK-00001			
Item	Types of Problems/Inspections	Frequency	Method
Tank level switches and transmitters	Check for proper operation and review of alarm status	Daily	Remote
Spill control equipment/ overflow controls	Check for proper operation	Daily	Remote
Tank integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination	10 years	Physical
Secondary Containment Sump System			
Level switches and transmitters	Check for proper operation and review of alarm status	Daily	Remote
Sump integrity assessment	Review Operating History	2 years	Physical
	Nondestructive Examination	TBD	TBD

Table 6A-6c Example – Pretreatment Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/ Inspections	Frequency	Method
Treated LAW Evaporation System (TLP)				
Treated LAW evaporator separator vessel	TLP-SEP-00001	Inspect vessel level monitoring data to prevent overflow	Daily	TBD
Treated LAW reboiler	TLP-RBLR-00001	TBD	TBD	TBD
Treated LAW primary condenser	TLP-COND-00001	TBD	TBD	TBD
Treated LAW inter-condenser	TLP-COND-00003	TBD	TBD	TBD
Treated LAW after-condenser	TLP-COND-00002	TBD	TBD	TBD
Waste Feed Evaporator Feed Process System (FEP)				
Waste feed evaporator Separator vessels	FEP-SEP-00001A FEP-SEP-00001B	TBD	TBD	TBD
Waste feed evaporator reboilers	FEP-RBLR-00001A FEP-RBLR-00001B	TBD	TBD	TBD
Waste feed evaporator primary condensers	FEP-COND-00001A FEP-COND-00001B	TBD	TBD	TBD
Waste feed evaporator inter-condensers	FEP-COND-00002A FEP-COND-00002B	TBD	TBD	TBD
Waste feed evaporator after-condensers	FEP-COND-00003A FEP-COND-00003B	TBD	TBD	TBD
Pulse Jet Ventilation (PJV)				
PJV primary HEPA filters	PJV-HEPA-00001A PJV-HEPA-00001B PJV-HEPA-00001C PJV-HEPA-00001D PJV-HEPA-00001E PJV-HEPA-00001F PJV-HEPA-00001G	TBD	TBD	TBD
PJV secondary exhaust HEPA filters	PJV-HEPA-00002A PJV-HEPA-00002B PJV-HEPA-00002C PJV-HEPA-00002D PJV-HEPA-00002E PJV-HEPA-00002F	TBD	TBD	TBD

Table 6A-6c Example – Pretreatment Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/ Inspections	Frequency	Method
PJV exhaust fans	PJV-FAN-00001A PJV-FAN-00001B PJV-FAN-00001C	TBD	TBD	TBD
PJV demisters	PJV-DMST-00002A PJV-DMST-00002B PJV-DMST-00002C	TBD	TBD	TBD
Pretreatment Vessel Vent Process System (PVP)				
Electric heaters	PVP-HTR-00001A PVP-HTR-00001B PVP-HTR-00001C	TBD	TBD	TBD
Vessel vent after-cooler	PVP-CLR-00001	TBD	TBD	TBD
Vessel vent carbon bed adsorbers	PVP-ADBR-00001A PVP-ADBR-00001B	TBD	TBD	TBD
Vessel vent Volatile Organic Compound (VOC) oxidizer unit	PVP-OXID-00001	TBD	TBD	TBD
Vessel vent adsorber outlet filters	PVP-FILT-00001	TBD	TBD	TBD
Vessel vent HEME (mist eliminator)	PVP-HEME-00001A PVP-HEME-00001B PVP-HEME-00001C	TBD	TBD	TBD
Vessel vent scrubbing liquid cooler	PVP-HX-00002	TBD	TBD	TBD
Vessel vent caustic scrubber	PVP-SCB-00002	TBD	TBD	TBD
Pretreatment Vessel Vent Process and Exhaust System (PVV)				
Vessel vent HEPA primary filters	PVV-HEPA-00001A PVV-HEPA-00001B	TBD	TBD	TBD
Vessel vent HEPA secondary filters	PVV-HEPA-00002A PVV-HEPA-00002B	TBD	TBD	TBD
Vessel vent exhaust fans	PVV-FAN-00001A PVV-FAN-00001B	TBD	TBD	TBD
Cesium Nitric Acid Recovery Process System (CNP)				
Cesium evaporator separator vessel	CNP-EVAP-00001	TBD	TBD	TBD
Cesium evaporator concentrate reboiler	CNP-HX-00001	TBD	TBD	TBD

Table 6A-6c Example – Pretreatment Miscellaneous Treatment Unit Inspections

Item	Plant Item Number	Types of Problems/ Inspections	Frequency	Method
Cesium evaporator nitric acid rectifier column	CNP-DISTC-00001	TBD	TBD	TBD
Cesium evaporator primary condenser	CNP-HX-00002	TBD	TBD	TBD

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Table 6A-7 Balance of Facilities Inspection Plan

Table 6A-7a Balance of Facilities Container Storage Inspections

Item	Inspection	Frequency	Method
Dangerous and Mixed Waste Container Storage Areas			
WTP waste storage area	Verify major risk labels (e.g., toxic) are present and legible, ensure all containers are closed; Check that container storage areas are free of liquid and debris; Check for cracks, gaps, and other signs of deterioration of storage area floors; Verify minimum 30 inches of aisle space are between containers (excluding ILAW containers); Verify that any dangerous and/or mixed waste container holding free liquids have portable secondary containment and no liquids have accumulated in portable secondary containment.	Weekly	Physical
Waste transportation staging area	Check that transportation staging area is free of debris.	Weekly	Physical
WTP waste storage area storing ignitable or reactive waste	Inspection must be performed in the presence of a professional person who is familiar with the International Fire Code, or in the presence of the local, state, or federal fire marshal ¹ .	Annual	Physical

¹WAC 173-303-395(1)(d).

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**Table 6A-7b Balance of Facilities Cathodic Protection Schedule-Dangerous
Waste Transfer Lines**

Item	Inspection	Frequency
Cathodic protection systems for dangerous and mixed waste transfer lines	Verify Proper Operation	Initial (less than 6 months after installation)
		Annual (from date of initial installation inspection)
All sources of impressed current supporting cathodically protected dangerous and/or mixed waste transfer lines	Test for proper function	Every other month

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