HANFORD SITE AIR OPERATING PERMIT NO. 00-05-006
ATTACHMENT 1:
NON-RADIOACTIVE AIR APPROVAL ORDERS, PERMITS, AND REGULATIONS PRIMARILY ENFORCED BY ECOLOGY

CHANGE CONTROL LOG

Change Control Logs ensure that changes to this permit are performed in a methodical, controlled, coordinated, and transparent manner. Each permit file 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 permit.

Modification History Table

Modification Date	Modification Number

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ATTENTION: The Hanford Site Air Operating Permit is broken into multiple documents and attachments/sections. Attachment 1 is enforceable.

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LIST OF ABBREVIATIONS FOR ATTACHMENT 1

Ecology is establishing the following abbreviations for common terms used within Attachment 1. They will not be further defined within this document.

Whenever possible, the same abbreviations will be used in the other documents which make up this AOP. Consistency will not always be possible, due to wide range of sources which establish applicable requirements for the Hanford Site. Please consult the appropriate List of Abbreviations for each document when reviewing.

AEI	Air Emissions Inventory
AOP	Air Operating Permit
ASIL	Acceptable Source Impact Level
BACT	Best Available Control Technology
BHP	Boiler Horsepower
bhp	Brake Horsepower
BOF	Balance of Facilities section of the Waste Treatment and Immobilization Plant, covering engines, boilers, turbines, and other equipment which supports vitrification but does not directly interact with tank waste
Btu	British thermal unit
CAA	Clean Air Act, either federal or Washington State
CAS	Chemical Abstracts Service
cc	Cubic Centimeters
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CI	Compression Ignition (As Defined for 40 CFR Part 60, Subpart IIII)
CPWTF	Central Plateau Water Treatment Facility
CO	Carbon Monoxide
CWC	Central Waste Complex
DEEP	Diesel Engine Exhaust, Particulate
DOE	United States Department of Energy
DP	Air Operating Permit Discharge Point
DPF	Diesel Particulate Filter
DST	Double-Shell Tank
DWP	Hanford Dangerous Waste Permit
Ecology	Washington State Department of Ecology
Ecology Method 9A	Source Test Method 9A in *Source Test Manual - Procedures for Compliance Testing*, Ecology Publication #25-02-001
EMF	Effluent Management Facility
EPA	U.S. Environmental Protection Agency
EPA Method 5	Test Method 5 of 30 CFR Part 60, Appendix A-3
EPA Method 6	Test Method 6 of 40 CFR Part 60, Appendix A-4

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EPA Method 6C	Test Method 6C of 40 CFR Part 60, Appendix A-4
EPA Method 7E	Test Methos 7E of 40 CFR Part 60, Appendix A-4
EPA Method 9	Test Method 9 of 40 CFR Part 60, Appendix A-4
EPA Method 10	Test Method 10 of 40 CFR Part 60, Appendix A-4
EPA Method 18	Test Method 18 of 40 CFR Part 60, Appendix A-6
EPA Method 22	Test Method 22 of 40 CFR Part 60, Appendix A-7
EPA Method 25	Test Method 25 of 40 CFR Part 60, Appendix A-7
EPA Method 25A	Test Method 25A of 40 CFR Part 60, Appendix A-7
EPA Method 26A	Test Method 26A of 40 CFR Part 60, Appendix A-8
EPA Method 29	Test Method 29 of 40 CFR Part 60, Appendix A-8
EPA Method 30B	Test Method 30B of 40 CFR Part 60, Appendix A-8
EPA Method 201	Test Method 201 of 40 CFR Part 51, Appendix M
EPA Method 201A	Test Method 201A of 40 CFR Part 51, Appendix M
EPA Method 202	Test Method 202 of 40 CFR Part 51, Appendix M
ETF	Effluent Treatment Facility
EU	Emissions Unit, as Defined in Washington Administrative Code 173-400-030(31)
FDCP	Fugitive Dust Control Plan
FFTF	Fast Flux Test Facility
gpm	Gallons Per Minute
HAP	Hazardous Air Pollutant
HAMMER	Hazardous Materials Management and Emergency Response
Health	Washington State Department of Health
HEME	High Efficiency Mist Eliminator
HEPA	High Efficiency Particulate Air (Filter)
HLW	High-Level Waste Vitrification Section of The Waste Treatment and Immobilization Plant
HVAC	Heating, Ventilation, and Air Conditioning
IDF	Integrated Disposal Facility
IEU	Insignificant Emission Unit
IH	Industrial Hygiene
JCI	Johnson Controls International
LAB	Analytical Laboratory section of the Waste Treatment and Immobilization Plant which processes samples to ensure incoming tank waste meets acceptance criteria and remains within expected parameters through vitrification
LAW	Low Activity Waste Vitrification Section of the Waste Treatment and Immobilization Plant
lb/24-hr	Pounds per 24 hours
lb/hr	Pounds per hour
lb/yr	Pounds per year

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LEL	Lower Explosive Limit
LERF	Liquid Effluent Retention Facility
MACT	Maximum Achievable Control Technology
MASF	Maintenance and Storage Facility
MHF	Material Handling Facility, laydown yard for Waste Treatment and Immobilization Plant construction materials
MMBtu/hr	Million Btu per hour
N/A	Not Applicable
NDE/NDA	Nondestructive Examination/Nondestructive Assay
NDMA	N-Nitrosodimethylamine
NIOSH	National Institute for Occupational Safety and Health
NO_2	Nitrogen dioxide
NO_x	Nitrogen oxides
NESHAP	40 CFR Part 61 or 63, National Emission Standards for Hazardous Air Pollutants
NMHC	Non-methane hydrocarbons
NOC	Notice of Construction
NSPS	40 CFR Part 60, Standards of Performance for New Stationary Sources
NSR	New Source Review
OE	Operational Engineer
O&M	Operation and maintenance
OSHA	Occupational Safety and Health Administration
OUG	Operating Unit Group
PAH	Polycyclic Aromatic Hydrocarbons
PID	Photoionization detector
PM	Particulate matter
PM_{10}	PM with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$	PM with an aerodynamic diameter of 2.5 microns or less
ppm	parts per million
ppmvd	parts per million on a volumetric, dry basis
PSD	Prevention of Significant Deterioration
PTF	Pretreatment Facility section of the Waste Treatment and Immobilization Plant, originally planned to separate and prepare feeds for LAW and HLW but not used in current Direct Feed LAW operation
RCW	Revised Code of Washington
SAP	Sampling and analysis plan
SBS	Submerged Bed Scrubber
SI	Spark ignition (as defined for 40 CFR Part 60, Subpart JJJJ)
SIP	State Implementation Plan, as approved by EPA in 40 CFR Part 52
SOP	Standard Operating Procedure
scfm	Standard cubic feet per minute, 1 atmosphere pressure at 20°C

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SO_2	Sulfur dioxide
SO_X	Sulfur oxides
SST	Single-shell Tank
SQER	Small Quantity Emission Rate
SWOC	Solid Waste Operations Complex
SWIHD	Site-Wide Industrial Hygiene Database
SWITS	Solid Waste Information and Tracking System
TAP	Toxic Air Pollutant
tBACT	Best Available Control Technology for Toxics
TCO	Thermal Catalytic Oxidizer
TCO/SCR	TCO with Selective Catalytic Reduction
TEDF	Treated Effluent Disposal Facility
TIC	Tentatively Identified Compound
tpy	Tons Per Year
TSCR	Tank-Side Cesium Removal
TSCR-MISC	TSCR System Enclosure and Columns (when holding tank waste only)
TSD	Technical Support Document
TWINS	Tank Waste Inventory Network System
ULSD	Ultra-Low Sulfur Diesel, maximum sulfur content of 15 ppm by weight
ULSF	Ultra-Low Sulfur Fuel, including ULSD, maximum sulfur content of 15 ppm by weight
VOC	Volatile Organic Compounds
VOG	Vessel Off-Gas
WAC	Washington Administrative Code
WESF	Waste Encapsulation and Storage Facility
WESP	Wet Electrostatic Precipitator
WRAP	Waste Receiving and Processing
WSCF	Waste Sampling and Characterization Facility
WTP	Waste Treatment and Immobilization Plant

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ATTACHMENT 1:
NON-RADIOACTIVE AIR APPROVAL ORDERS, PERMITS, AND REGULATIONS PRIMARILY ENFORCED BY ECOLOGY

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1.0 EMISSION STANDARDS AND LIMITATIONS

Emission standards and limitations for non-radioactive air pollutants are included in the following sections.

1.1 General Requirements

All emission units on the Hanford Site are covered by the general regulatory requirements, emission limits [refer to definition of emission units in WAC 173-401-200(12)], or work practice standards in Table 1.1. The general standards in Table 1.1 are the applicable requirements, emission limits, or work practice standards but may have DP-specific monitoring frequencies or other modifications identified in Section 1.4.

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Table 1.1 General Standards for Maximum Emissions

WAC Requirement Citation	Regulatory Requirement, Emission Limit, or Work Practice Standard	State-Only Enforceable	Periodic Monitoring	Periodic Monitoring Provisions	Test Method[1]
173-400-040(2)	20% Opacity. Prohibits visible emissions exceeding 20% opacity for more than 3 minutes in any 1 hour of an air contaminant from any emissions unit or within a reasonable distance of the emission unit except for scheduled soot blowing/grate cleaning or due to documented water.	N (Section 2.8)	Visible emission surveys Visible opacity determination	Section 2.1 - Tier 3, unless otherwise specified in Section 1.4	EPA Method 22, EPA Method 9, or Ecology Method 9A – See Section 2.1
173-400-040(3)	Fallout. Prohibits emissions of PM from any source to be deposited beyond the facility boundaries in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material was deposited.	Y	Record-keeping of complaint investigation.	Section 2.2	
173-400-040(4)(a)	Fugitive emissions. The Permittee must take reasonable precautions to prevent the release of air contaminants from any emissions unit engaging in materials handling, construction, demolition, or any other operation that is a source of fugitive emissions.	N	Pre-job planning to determine reasonable control measures.[2]	Section 2.3	

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Table 1.1 General Standards for Maximum Emissions

WAC Requirement Citation	Regulatory Requirement, Emission Limit, or Work Practice Standard	State-Only Enforceable	Periodic Monitoring	Periodic Monitoring Provisions	Test Method[1]
173-400-040(5)	Odor. Requires any facility causing an odor that unreasonably interferes with another person's use and enjoyment of their property to use recognized good practices and procedures to reduce odors to a reasonable minimum.	Y	Record-keeping of complaint investigations.	Section 2.2	
173-400-040(6)	Emissions detrimental to persons or property. Prohibits emissions of any air contaminant from any source that is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.	N	Record-keeping of complaint investigation.	Section 2.2	
173-400-040(7)	1,000 ppm SO_2 at 7% O_2 on a dry basis. Prohibits emission of a gas containing SO_2 from any emissions unit in excess of 1,000 ppm of a dry basis, corrected to 7% oxygen for combustion sources, and based on the average of any period of 60 consecutive minutes.	N (Section 2.9)	For fuel oil-fired combustion units: Record-keeping. For other units: Process knowledge that, when properly operated and maintained, these units would not exceed WAC 173-400-040 (7), evaluation of modifications, and Ecology inspections.	Section 2.7	EPA Method 6 or 6C

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Table 1.1 General Standards for Maximum Emissions

WAC Requirement Citation	Regulatory Requirement, Emission Limit, or Work Practice Standard	State-Only Enforceable	Periodic Monitoring	Periodic Monitoring Provisions	Test Method[1]
173-400-040(8)	Concealment and masking. Prohibits the installation or use of any device or use of any means that conceals or masks an emission of an air contaminant that would otherwise violate any provision of WAC 173-400.	N	Record-keeping of complaint investigation.	Section 2.2	
173-400-040(9)(a)	Fugitive dust. Requires reasonable precautions be taken to prevent fugitive dust from becoming airborne and to minimize dust generation.	N	Pre-job planning to determine reasonable control measures.[2]	Section 2.2	
WAC 173-400-050(1)	Limits emissions of PM from combustion and incineration to no more than 0.23 grams per dry cubic meter at standard conditions, except for combustion of waste wood for production of steam. Limits emissions to 0.46 grams per dry cubic meter for any purpose.	N	Compliance demonstrations for PM from combustion and incineration units will be met through proper O&M as well as investigating dust or smoke-related complaints.	Section 2.4	EPA Method 5
WAC 173-400-050(2)-(6)	Limits for operating hours, work practices, emissions, emission calculations, and other aspects of operating an incinerator or small municipal waste combustion unit.	N	Specific monitoring not established while there are no subject units identified or expected on site.	N/A	

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Table 1.1 General Standards for Maximum Emissions

WAC Requirement Citation	Regulatory Requirement, Emission Limit, or Work Practice Standard	State-Only Enforceable	Periodic Monitoring	Periodic Monitoring Provisions	Test Method[1]
173-400-060	Emission standards for general process units. Limits emissions of PM from any general process operation to no more than 0.23 grams per dry cubic meter at standard conditions.	N	Compliance demonstrations for PM from general process units will be met through proper O&M as well as investigating dust or smoke-related complaints.	Section 2.4	Methods specified in 40 CFR 51, 60, 61, 63, and Ecology's *Source Test Manual - Procedures for Compliance Testing*.

[1]The test methods identified in this table are used as compliance verification tools. A frequency is N/A unless specified in the table.

[2]These requirements do not apply to emissions that pass through a stack, chimney, vent, or other functionally equivalent opening.

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1.2 Insignificant Emission Units

IEU category types are listed in the Statement of Basis for this Attachment 1. All IEUs must maintain compliance with the general standards in Table 1.1.

All emission units not identified in Section 1.4 DPs that are subject to 40 CFR 61, Subpart H in Attachment 2, Health License, have been determined to represent insignificant sources of non-radioactive regulated air pollutants. For these emission units no additional monitoring, reporting, or recordkeeping is necessary. All requirements identified in Attachment 2, Health License, for this category of emission unit continue to apply, as well as the requirement to annually certify compliance to any applicable requirements identified in Attachment 2, Health License.

These IEUs need not be listed individually in the annual compliance certification unless there were observed, documented, or known instances of non-compliance during the certification period. Ecology has authority to establish case-by-case monitoring requirements as set forth in WAC 173-400-105 or other provisions of law. [WAC 173-401-530(2)(b) and (2)(c)]

1.3 Emission Units and Activities Subject to Monitoring, Reporting, Recordkeeping, and Compliance Certification

Those emission units on the Hanford Site listed in Section 1.4 DPs are subject to the requirement to annually certify compliance with the terms and conditions of this Permit.

1.4 Air Operating Permit Discharge Points

All emission units identified in this Section are subject to the general requirements listed in Table 1.1. While the emission units identified in this Section are subject to the general requirements listed in Table 1.1, the general requirements are not considered an emission unit-specific term or condition and would not require certification per Standard Term and Condition 5.10. More stringent conditions listed for specific DPs in this Section are used in lieu of the general requirements.

Table 1.4.1 identifies Discharge Points that have been reserved and do not have conditions in Section 1.4, due to retirement of equipment. To prevent confusion and conflicting records, new equipment will not be covered under these DP unless it is substantially similar in design and requirements to the equipment which was previously included in the AOP.

Table 1.4.1 Reserved Discharge Points

Discharge Point	Name of Discharge Point/Emission Unit	Last AOP Version Before Removal
1.4.1	234-5Z Boiler 1, 2, and 3	Renewal 3
1.4.4	323, Boiler 1	Renewal 2, Revision A
1.4.5	3709A Boiler	Renewal 3
1.4.6	324 Boiler 1 and Boiler 2	Renewal 3
1.4.9	Portable Boiler	Renewal 3
1.4.12	400 E-4250 001, G-3	Renewal 2, Revision A
1.4.13	600 E WSCF 001	Renewal 2, Revision A
1.4.15	Concrete Batch Plant	Renewal 3
1.4.21	200E P-296A042 001 (Tank Exhauster)	Renewal 2, Revision A
1.4.31	300 Area/339A	Renewal 3
1.4.34	SST Retrieval Direct Fired Water Heaters	Renewal 3

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Table 1.4.1 Reserved Discharge Points

Discharge Point	Name of Discharge Point/Emission Unit	Last AOP Version Before Removal
1.4.37	6120 tent (200 East) (Table 1.5 Engine)	Renewal 2, Revision A
1.4.38	100K Water Treatment Plant	Renewal 3
1.4.40	219H tent and MO-414 (200 east)	Renewal 2, Revision A
1.4.41	North of MO-414 (200 East) 1 of 2 (Table 1.5 Engine)	Renewal 2, Revision A
1.4.42	North of MO-414 (200 East) 2 of 2 (Table 1.5 Engine)	Renewal 2, Revision A
1.4.43	WTP MHF South-40 Laydown Critical Equipment Storage	Renewal 3
1.4.46	222-SE (Table 1.5 Engine)	Renewal 2, Revision A
1.4.47	242-A	Renewal 3
1.4.48	234-5Z	Renewal 3
1.4.54	282-BA (Table 1.5 Engine)	Renewal 2, Revision A
1.4.55	225BC (Table 1.5 Engine)	Renewal 2, Revision A
1.4.56	TEDF Pump Station 2 (225E)	Renewal 3
1.4.57	WTP MHF South-40 Laydown Entry Gate (Light Tower)	Renewal 3
1.4.58	WTP MHF North-10 Laydown Area (Light Tower) 1 of 2 (Table 1.5 Engine)	Renewal 2, Revision A
1.4.59	WTP MHF North-10 Laydown Area (Light Tower) 2 of 2 (Table 1.5 Engine)	Renewal 2, Revision A
1.4.60	WTP MHF South-40 Laydown Yard East X-Ray Tent	Renewal 3
1.4.63	WTP Construction Site Building T-14 – Engine at new location, see DP 1.4.119	Renewal 3
1.4.69	C and AN Farm Compressors	Never in Issued Version (Renewal 3 Drafts Only)
1.4.71	200E Effluent Treatment Facility Engine	Renewal 3
1.4.73	WTP MHF South-40 Laydown Yard Laborers Tent	Renewal 3
1.4.74	WTP MHF South-40 Laydown Yard Warm-up/Cool-down Tent	Renewal 3
1.4.76	CWC Facility Existing Light Plant Engines	Renewal 3
1.4.77	CWC Facility New Light Plant Engines	Renewal 3
1.4.78	200 W SWOC Administrative Offices Engines	Renewal 3
1.4.103	Gable Mountain Engines – Solar Array	Never in Issued Version (Renewal 4 Drafts Only)

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1.4.2 DP: 242-A, Boiler 1, 2, and 3 (>5 MMBtu/hr – Fuel Oil)

Permittee AEI ID(s): F-242A-001, F-242A-002, and F-242A-003

Location and Description:	200E Area, 242-A Boiler Annex, 242-A Boiler 1 (200 BHP, 7.78 MMBtu/hr), 242-A Boiler 2 (700 BHP, 26.3 MMBtu/hr), and 242-A Boiler 3 (700 BHP, 26.3 MMBtu/hr).
NSR Authorization/AOP Inclusion:	Approval Order 97NM-138 (6/6/1997) and 97NM-138, Amendment 1 (11/19/2009).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart DDDDD; 40 CFR 60, NSPS Subpart Dc (WAC 173-400-115) for Boilers 2 and 3 only.

(1) Requirement Source: 97NM-138, as amended

Condition:	Use of fuel per 97NM-138.
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.05% by weight sulfur (500 ppm by weight).
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.

(2) Requirement Source: 97NM-138, as amended

Condition:	NO_x must not exceed 0.150 lb/MMBtu and 115 ppm at 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 7E.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

(3) Requirement Source: 97NM-138, as amended

Condition:	SO_2 must not exceed 0.051 lb/MMBtu.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 6 or 6C.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

(4) Requirement Source: 97NM-138, as amended

Condition:	CO must not exceed 0.071 lb/MMBtu and 90 ppm at 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

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(5) Requirement Source: **97NM-138, as amended**

Condition: PM_{10} must not exceed 0.011 lb/MMBtu.
Periodic Monitoring: Section 2.6.
Frequency: Monthly.
Test Method: EPA Methods 5 and 202.
Test Frequency: See Sections 2.6 and 2.13.
Required Records: Monthly records of fuel use on each boiler (See Section 2.5).
State-Only: No.

(6) Requirement Source: **97NM-138, as amended**

Condition: VOC must not exceed 0.013 lb/MMBtu and 30 ppm at 3% O_2.
Periodic Monitoring: Section 2.6.
Frequency: Monthly.
Test Method: EPA Method 25 or 25A.
Test Frequency: See Sections 2.6 and 2.13.
Required Records: Monthly records of fuel use on each boiler (See Section 2.5).
State-Only: No.

(7) Requirement Source: **97NM-138, as amended**

Condition:

(A) Inspect burner.
(B) Inspect boiler exteriors.
(C) Check combustion controls.
(D) Check for leaks.
(E) Check for unusual noise, vibrations, etc.

Periodic Monitoring: Physical observation.
Frequency: Monthly.
Required Records: Records of inspections.
State-Only: Yes.

(8) Requirement Source: **97NM-138, as amended**

Condition: Visual check of combustion.
Periodic Monitoring: Physical observation.
Frequency: Daily.
Required Records: Record available operating data.
State-Only: Yes.

(9) Requirement Source: **97NM-138, as amended**

Condition:

(A) Inspect air supply system and clean and repair if necessary.
(B) Clean and check fuel supply system, replace filters if necessary.

Periodic Monitoring: Physical observation.
Frequency: Semi-annually.

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Required Records:	Records of inspections and work performed.
State-Only:	Yes.

(10) Requirement Source: 97NM-138, as amended, and NESHAP Subpart DDDDD

Condition:	
	(A) Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
	(B) Clean fireside surfaces and breeching.
	(C) Inspect refractory.
Periodic Monitoring:	Physical observation.
Frequency:	Tune-ups annually. Refractory inspection and cleaning of fireside surfaces and breeching annually for power boiler (Boiler 1, 200 BHP) and every two years for low-pressure boilers (Boilers 2 and 3, 700 BHP each). Tune-ups must meet the requirements of NESHAP Subpart DDDDD, Table 3, and reporting for 40 CFR 63.7550.
Required Records:	See Section 2.5.
State-Only:	No.

(11) Requirement Source: NESHAP Subpart DDDDD

Condition:	BOILERS 2 AND 3 ONLY, NESHAP SUBPART DDDDD EMISSION LIMITS.
	For diesel fuel-fired boilers greater than 10 MMBtu/hr, demonstrate compliance with limits in 40 CFR Part 63, Subpart DDDDD, Table 2, Subcategories 14 (liquid fuel) and 16 (light liquid fuel). Submit compliance reports in accordance with 40 CFR 63.7550.
Periodic Monitoring:	For each applicable limit in NESHAP Subpart DDDDD, Table 2, conduct periodic monitoring satisfying one of the following compliance demonstration options:
	(A) Annual stack testing, in accordance with 40 CFR 63.7515(a);
	(B) An initial stack test and monthly recording of type of fuel combusted, if ultra-low sulfur liquid fuel is used, in accordance with 40 CFR 63.7515(h); or,
	(C) Fuel analysis at a schedule established in 40 CFR 63.7515(e) (allowable for mercury, hydrogen chloride, and total selected metals limits only).
Test Method:	Multiple, with sample collection or test run duration as specified in NESHAP Subpart DDDDD, Table 2.
Test Frequency:	
	(A) Annual stack testing, unless fuel analysis or an initial test and records demonstrating continuing use of ultra-low sulfur liquid fuel are used to demonstrate compliance.
	(B) See Sections 2.6 and 2.13

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Required Records:		
		(A) Results of stack testing.
		(B) Monthly fuel analysis or records of fuel type, if used to demonstrate compliance with a limit in NESHAP Subpart DDDDD, Table 2.
State-Only:		No.

(12) Requirement Source: 97NM-138, as amended

Condition:	Source testing for 97NM-138.
Periodic Monitoring:	Source testing.
Frequency:	Every 5 years for a selected subset of boilers.
Test Method:	See Sections 2.6 and 2.13.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Source test plans and reports.
State-Only:	No.

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1.4.3 DP: 318 Boiler (<5 MMBtu/hr – Natural Gas)

Permittee AEI ID(s): F-318-001

Location and Description: 300 Area, 318 Building Boiler Annex, low pressure steam boiler (30 BHP, 1.28 MMBtu/hr).

NSR Authorization/AOP Inclusion: Approval Order 97NM-138 (6/6/1997) and 97NM-138, Amendment 1 (11/19/2009).

Additional Requirement Citation(s): 40 CFR 63, NESHAP Subpart DDDDD.

(1) Requirement Source: 97NM-138, as amended

Condition: Visual check of combustion.
Periodic Monitoring: Physical observation.
Frequency: Daily.
Required Records: Record available operating data.
State-Only: Yes.

(2) Requirement Source: 97NM-138, as amended

Condition:

(A) Inspect air supply system and clean and repair if necessary.
(B) Clean and check fuel supply system, replace filters if necessary.

Periodic Monitoring: Physical observation.
Frequency: Semi-annually.
Required Records: Records of inspections and work performed.
State-Only: Yes.

(3) Requirement Source: 97NM-138, as amended

Condition:

(A) Inspect burner.
(B) Inspect boiler exteriors.
(C) Check combustion controls.
(D) Check for leaks.
(E) Check for unusual noise, vibrations, etc.

Periodic Monitoring: Physical observation.
Frequency: Monthly.
Required Records: Records of inspections.
State-Only: Yes.

(4) Requirement Source: 97NM-138, as amended, and NESHAP Subpart DDDDD

Condition:

(A) Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
(B) Inspect refractory.
(C) Clean fireside surfaces and breeching.

Periodic Monitoring: Physical observation.

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	Frequency:	Every two years. Tune-ups must meet the requirements of NESHAP Subpart DDDDD, Table 3, and reporting for 40 CFR 63.7550.
	Required Records:	Records of inspections.
	State-Only:	No.
(5)	**Requirement Source:**	**97NM-138, as amended**
	Condition:	Source testing for 97NM-138.
	Periodic Monitoring:	Source testing.
	Frequency:	Every 5 years for a selected subset of boilers.
	Test Method:	See Sections 2.6 and 2.13.
	Test Frequency:	See Sections 2.6 and 2.13.
	Required Records:	Source test plans and reports.
	State-Only:	No.

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1.4.7 DP: 325 Boiler 1 and Boiler 2 (>5 MMBtu/hr – Natural Gas)

Permittee AEI ID(s): F-325-001 and F-325-002

Location and Description: 300 Area, 325 Building Boiler Annex, high pressure steam boilers #1 and #2 (each 125 BHP, 5.03 MMBtu/hr).

NSR Authorization/AOP Inclusion: Approval Order 97NM-138 (6/6/1997) and 97NM-138, Amendment 1 (11/19/2009).

Additional Requirement Citation(s): 40 CFR 63, NESHAP Subpart DDDDD.

(1) Requirement Source: 97NM-138, as amended

Condition:	SO_2 must not exceed 0.0006 lb/MMBtu.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 6 or 6C.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

(2) Requirement Source: 97NM-138, as amended

Condition:	NO_x must not exceed 0.037 lb/MMBtu and 30 ppm at 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 7E.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

(3) Requirement Source: 97NM-138, as amended

Condition:	CO must not exceed 0.225 lb/MMBtu and 300 ppm at 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

(4) Requirement Source: 97NM-138, as amended

Condition:	PM_{10} must not exceed 0.012 lb/MMBtu.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Methods 5 and 202.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

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(5) Requirement Source: **97NM-138, as amended**

Condition: VOC must not exceed 0.013 lb/MMBtu and 30 ppm at 3% O_2.
Periodic Monitoring: Section 2.6.
Frequency: Monthly.
Test Method: EPA Method 25 or 25A.
Test Frequency: See Sections 2.6 and 2.13.
Required Records: Monthly records of fuel use on each boiler (See Section 2.5).
State-Only: No.

(6) Requirement Source: **97NM-138, as amended**

Condition: Visual check of combustion.
Periodic Monitoring: Physical observation.
Frequency: Daily.
Required Records: Record available operating data.
State-Only: Yes.

(7) Requirement Source: **97NM-138, as amended**

Condition:

(A) Inspect burner.
(B) Inspect boiler exteriors.
(C) Check combustion controls.
(D) Check for leaks.
(E) Check for unusual noise, vibrations, etc.

Periodic Monitoring: Physical observation.
Frequency: Monthly.
Required Records: Records of inspections.
State-Only: Yes.

(8) Requirement Source: **97NM-138, as amended**

Condition:

(A) Inspect air supply system and clean and repair if necessary.
(B) Clean and check fuel supply system, replace filters if necessary.

Periodic Monitoring: Physical observation.
Frequency: Semi-annually.
Required Records: Records of inspections and work performed.
State-Only: Yes.

(9) Requirement Source: **97NM-138, as amended, and NESHAP Subpart DDDDD**

Condition:

(A) Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
(B) Inspect refractory.
(C) Clean fireside surfaces and breeching.

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Periodic Monitoring:	Physical observation.
Frequency:	Tune-ups annually. Refractory inspection and cleaning of fireside surfaces and breeching every two years. Tune-ups must meet the requirements of NESHAP Subpart DDDDD, Table 3, and reporting for 40 CFR 63.7550.
Required Records:	See Section 2.5.
State-Only:	No.

(10) Requirement Source: 97NM-138, as amended

Condition:	Source testing for 97NM-138.
Periodic Monitoring:	Source testing.
Frequency:	Every 5 years for a selected subset of boilers.
Test Method:	See Sections 2.6 and 2.13.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Source test plans and reports.
State-Only:	No.

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1.4.8 DP: 331 Boiler 1 and Boiler 2 (>5 MMBtu/hr – Natural Gas)

Permittee AEI ID(s): F-331-001 and F-331-002

Location and Description:	300 Area, 331 Building Boiler Annex, medium pressure steam boilers #1 and #2 (each 300 BHP, 12.25 MMBtu/hr).
NSR Authorization/AOP Inclusion:	Approval Order 97NM-138 (6/6/1997) and 97NM-138, Amendment 1 (11/19/2009).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart DDDDD; 40 CFR 60, NSPS Subpart Dc (WAC 173-400-115).

(1) Requirement Source: 97NM-138, as amended

Condition:	SO_2 must not exceed 0.0006 lb/MMBtu.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 6 or 6C.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

(2) Requirement Source: 97NM-138, as amended

Condition:	NO_x must not exceed 0.037 lb/MMBtu and 30 ppm at 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 7E.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

(3) Requirement Source: 97NM-138, as amended

Condition:	CO must not exceed 0.225 lb/MMBtu and 300 ppm at 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10.
Test Frequency:	See Sections 2.6 and 2.13.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.

(4) Requirement Source: 97NM-138, as amended

Condition:	PM_{10} must not exceed 0.012 lb/MMBtu.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Methods 5 and 202.
Test Frequency:	See Sections 2.6 and 2.13.

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	Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
	State-Only:	No.
(5)	**Requirement Source:**	**97NM-138, as amended**
	Condition:	VOC must not exceed 0.013 lb/MMBtu and 30 ppm at 3% O_2.
	Periodic Monitoring:	Section 2.6.
	Frequency:	Monthly.
	Test Method:	EPA Method 25 or 25A.
	Test Frequency:	See Sections 2.6 and 2.13.
	Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
	State-Only:	No.
(6)	**Requirement Source:**	**97NM-138, as amended**
	Condition:	Visual check of combustion.
	Periodic Monitoring:	Physical observation.
	Frequency:	Daily.
	Required Records:	Record available operating data.
	State-Only:	Yes.
(7)	**Requirement Source:**	**97NM-138, as amended**
	Condition:	
		(A) Inspect burner.
		(B) Inspect boiler exteriors.
		(C) Check combustion controls.
		(D) Check for leaks.
		(E) Check for unusual noise, vibrations, etc.
	Periodic Monitoring:	Physical observation.
	Frequency:	Monthly.
	Required Records:	Records of inspections.
	State-Only:	Yes.
(8)	**Requirement Source:**	**97NM-138, as amended**
	Condition:	
		(A) Inspect air supply system and clean and repair if necessary.
		(B) Clean and check fuel supply system, replace filters if necessary.
	Periodic Monitoring:	Physical observation.
	Frequency:	Semi-annually.
	Required Records:	Records of inspections and work performed.
	State-Only:	Yes.

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(9)	**Requirement Source:**	**97NM-138, as amended, and NESHAP Subpart DDDDD**
	Condition:	
		(A) Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
		(B) Inspect refractory.
		(C) Clean fireside surfaces and breeching.
	Periodic Monitoring:	Physical observation.
	Frequency:	Annually. Tune-ups must meet the requirements of NESHAP Subpart DDDDD, Table 3, and reporting for 40 CFR 63.7550.
	Required Records:	See Section 2.5.
	State-Only:	No.
(10)	**Requirement Source:**	**97NM-138, as amended**
	Condition:	Source testing for 97NM-138.
	Periodic Monitoring:	Source testing.
	Frequency:	Every 5 years for a selected subset of boilers.
	Test Method:	See Sections 2.6 and 2.13.
	Test Frequency:	See Sections 2.6 and 2.13.
	Required Records:	Source test plans and reports.
	State-Only:	No.

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1.4.10 DP: 225B-DG-1 Emergency Generator Compression Ignition Engine

Permittee AEI ID(s): E-225BDG-001

Location and Description:	200E Area, WESF, standby generator 225B-DG-1.
	Internal Combustion Emergency CI Engine 500 Horsepower and Greater, Engine Manufactured Prior to December 19, 2002, Engine Power 1,725 bhp.
NSR Authorization/AOP Inclusion:	No NSR authorization identified (historical equipment), initial AOP application (DOE/RL-95-07, as supplemented).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ; 40 CFR 63.6590(b)(3)(iii) and 63.6640(f), Existing Emergency Engine Greater than 500 bhp at Major Source of HAP.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.11 DP: 225BG-GEN-1 Emergency Generator Compression Ignition Engine

Permittee AEI ID(s): E-225BGGEN1-001

Location and Description:	200E Area, WESF, Closed Loop Cooling System, standby generator 225BG-GEN-1. Internal Combustion Emergency CI Engine 500 Horsepower and Greater, Engine Manufactured Prior to December 19, 2002, Engine Power 519 bhp.
NSR Authorization/AOP Inclusion:	No NSR authorization identified (historical equipment), initial AOP application (DOE/RL-95-07, as supplemented).
Additional Requirement Citation(s):	40 CFR 60, NESHAP ZZZZ; 40 CFR 63.6590(b)(3)(iii) and 63.6640(f), Existing Emergency Engine Greater than 500 bhp at Major Source of HAP.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.14 DP: Central Waste Complex – Waste Storage Areas

Permittee AEI ID(s): X – CWCWSTSTORAREA-001

Location and Description:	200W Area, CWC, associated dangerous waste container storage areas. This DP covers multiple EUs/activities which are part of a distinct facility at the Hanford Site. For more information on which portions of the facility are covered, see the NSR authorization cited below.
NSR Authorization/AOP Inclusion:	Approval Order DE00NWP-002, Revision 1 (6/29/2006).
Additional Requirement Citation(s):	N/A.

(1) Requirement Source: DE00NWP-002, Revision 1, and WAC 173-401-615(1)(b)

Condition:	Visible emissions must not exceed limits specified in WAC 173-400-040(2).
Periodic Monitoring:	Section 2.1, Tier 3, for both WAC 173-400-040(2) and DE00NWP-002, Revision 1, Approval Condition 1.3.2.
Frequency:	No specified frequency.
Test Method:	(A) EPA Method 22 visual emission surveys. (B) Both EPA Method 9 and Ecology Method 9A.
Test Frequency:	When visible emissions are observed.
Required Records:	(A) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology. (B) Visible emission records
State-Only:	No.

(2) Requirement Source: DE00NWP-002, Revision 1

Condition:	VOC emissions must not exceed 3.5 tpy.
Periodic Monitoring:	Emission estimation using material assessment, inventory, and calculation as identified in the NOC Approval Condition 3.
Frequency:	Annually.
Required Records:	Results of analyses.
State-Only:	No.

(3) Requirement Source: DE00NWP-002, Revision 1

Condition:	All TAPs, as submitted in the Permittee's NOC Application, must be below their respective ASIL.
Periodic Monitoring:	Emission estimation using material assessment, inventory, and calculation as identified in the NOC Approval Condition 3.0.
Frequency:	Annually.
Required Records:	Results of analyses.
State-Only:	Yes.

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1.4.16 DP: E-282ED-001 Emergency Generator Compression Ignition Engine

Permittee AEI ID(s): E-282ED-001

Location and Description:	200E Area, 282ED Building water utilities.
	Internal Combustion Emergency CI Engine, Model Year 1996, Engine Power 2,168 bhp.
NSR Authorization/AOP Inclusion:	Approval Order NWP-96-1 (4/30/1996).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ; 40 CFR 63.6590(b)(3)(iii) and 63.6640(f), Existing Emergency Engine Greater than 500 bhp at Major Source of HAP.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

(1) Requirement Source: NWP-96-1

Condition:	Engine E must operate no more than 350 hours per year.
Periodic Monitoring:	Recordkeeping.
Required Records:	Maintain records showing all hours of operation.
State-Only:	No.

(2) Requirement Source: NWP-96-1 and WAC 173-401-615(1)(b)

Condition:	NO_x 75.5 lb/hr NOx.
Periodic Monitoring:	Recordkeeping & average fuel consumption rate determination must be performed at least once per 12 months.
Test Method:	No testing is required while Attachment 1 Statement of Basis, Section 3.1.2, Calculation Model 2B, remains conservative. If Ecology determines testing is required, NWP-96-1 identifies EPA Method 7A as appropriate.
Test Frequency:	If Ecology requires under WAC 173-400-105(4).
Required Records:	(A) Monthly fuel burned (this calculation is based on fuel added to supply tank). (B) Hours of operation logged.
State-Only:	No.
Calculation Model:	Model 2B.

(3) Requirement Source: NWP-96-1

Condition:	Engine E must burn only No. 2 fuel oil with sulfur content no more than 0.05% by weight.
Periodic Monitoring:	Recordkeeping for compliance with condition.
Required Records:	Vendor documentation of fuel purchase from retail outlet (i.e., for use in motor vehicles, see 40 CFR 80), or fuel analysis once per year showing ≤0.05wt% sulfur.
State-Only:	No.

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(4) Requirement Source:	**NWP-96-1 and WAC 173-401-615(1)(b)**
Condition:	Opacity must not exceed 10%.
Periodic Monitoring:	Section 2.1, Tier 1.
Frequency:	At least once per quarter, if engine operates.
Test Method:	
	(A) EPA Method 22.
	(B) EPA Method 9.
Test Frequency:	Quarterly.
Required Records:	Results of visible emissions survey or records of visual determination of the opacity.
State-Only:	No.

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1.4.17 DP: E-282WD-001 Emergency Generator Compression Ignition Engine

Permittee AEI ID(s): E-282WD-001

Location and Description:	200W Area, 282WD Building water utilities. Internal Combustion Emergency CI Engine, Model Year Approximately 1996, Engine Power 1,818 bhp.
NSR Authorization/AOP Inclusion:	Approval Order NWP-96-1 (4/30/1996).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ; 40 CFR 63.6590(b)(3)(iii) and 63.6640(f), Existing Emergency Engine Greater than 500 bhp at Major Source of HAP.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

(1) Requirement Source: NWP-96-1 and WAC 173-401-615(1)(b)

Condition:	Opacity must not exceed 10%.
Periodic Monitoring:	Section 2.1, Tier 1
Frequency:	At least once per quarter, if engine operates.
Test Method:	(A) EPA Method 22. (B) EPA Method 9.
Test Frequency:	Quarterly.
Required Records:	Results of visible emissions survey or records of visual determination of the opacity.
State-Only:	No.

(2) Requirement Source: NWP-96-1 and WAC 173-401-615(1)(b)

Condition:	NO_x 42 lb/hr.
Periodic Monitoring:	Recordkeeping and average fuel consumption rate determination must be performed at least once per 12 months.
Test Method:	No testing is required while Attachment 1 Statement of Basis, Section 3.1.2, Calculation Model 2B, remains conservative. If Ecology determines testing is required, NWP-96-1 identifies EPA Method 7A as appropriate.
Test Frequency:	If Ecology requires under WAC 173-400-105(4).
Required Records:	(A) Monthly fuel burned (this calculation is based on fuel added to supply tank). (B) Hours of operation logged.
State-Only:	No.
Calculation Model:	Model 2B.

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(3) Requirement Source: **NWP-96-1**

Condition:	Engine W must burn only No. 2 fuel oil with sulfur content no more than 0.05% by weight.
Periodic Monitoring:	Recordkeeping for compliance with condition.
Required Records:	Vendor documentation of fuel purchase from retail outlet (i.e., for use in motor vehicles, see 40 CFR 80), or fuel analysis once per year showing ≤0.05 wt% sulfur.
State-Only:	No.

(4) Requirement Source: **NWP-96-1**

Condition:	Engine W must operate no more than 350 hours per year.
Periodic Monitoring:	Recordkeeping.
Required Records:	Maintain records showing all hours of operation.
State-Only:	No.

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1.4.18 DP: 300 Area Emergency Generator Compression Ignition Engines

Permittee AEI ID(s): E-325-001, E-331-001, and E-3709A-001

Location and Description:	300 Area, 325 Building, emergency diesel generator, 749 bhp engine. 300 Area, 331 Building, emergency diesel generator, 749 bhp engine. 300 Area, 3709A Building, Hanford Fire Department emergency diesel generator, 27 bhp engine.
NSR Authorization/AOP Inclusion:	Approval Order DE02NWP-001 (Actual Finalization Date 1/15/2002, Signature Page Date 1/9/2002), DE02NWP-001, Amendment 1 (10/18/2011), and DE02NWP-001, Amendment 2 (01/26/2012).
Additional Requirement Citation(s):	For 3709A Only, 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency CI Engine, Model Year Approximately 2002, Engine Power 27 bhp; For 325 and 331, 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(b)(3)(iii) and 63.6640(f), Existing Emergency Engine Greater than 500 bhp at Major Source of HAP.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

(1) Requirement Source: DE02NWP-001, as amended

Condition: Total Emission Limits

(A) Additional control technologies may be required if current emissions exceed an ASIL found in WAC 173-460 on January 15, 2002, or if NSR is required.

(B) NSR will be required if total emissions of a TAP exceeds the SQER found in WAC 173-460 on January 15, 2002, unless dispersion modeling demonstrates that emissions would continue to result in concentrations less than the ASILs on that date. Results of any such dispersion modeling demonstrations/calculations will be maintained on file and made available upon inspection.

(C) NSR may be required if the current stationary engines are replaced, or if new stationary engines are added.

Periodic Monitoring: Analyze each proposed change to determine if emissions would exceed an ASIL, SQER, or NSR threshold.

Required Records:

(A) Results of analyses.

(B) Annual hours of operation.

(C) Annual fuel consumption.

State-Only: NSR thresholds – No.

ASILs - Yes.

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(2) Requirement Source: **DE02NWP-001, as amended**

Condition:	Emissions Control
	SO_x emissions will be controlled through use of #2 Diesel Fuel with sulfur content less than 0.5%.
Periodic Monitoring:	Recordkeeping for each fuel shipment.
Required Records:	Vendor documentation or fuel analysis showing sulfur content < 0.5%.
State-Only:	No.

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1.4.19 DP: Liquid Effluent Retention Facility Basins 41-44 & P-2025 Effluent Treatment Facility

Permittee AEI ID(s): P-2025E-001

Location and Description:	200E Area, ETF Building and connected LERF Basins, wastewater storage and treatment for discharge. This DP covers multiple EUs/activities which are part of a distinct facility at the Hanford Site. For more information on which portions of the facility are covered, see the NSR authorization cited below.
NSR Authorization/AOP Inclusion:	Approval Order DE07NWP-003, Revision 3 (4/21/2026).
Additional Requirement Citation(s):	N/A.

(1) Requirement Source: DE07NWP-003, Revision 3

Condition:	Visible emissions from the ETF stack (Figure A-1 of the TSD for Approval Order DE07NWP-003, Rev. 3) must not exceed 5%. There must be no visible emission from LERF and ETF at the property boundary.
Periodic Monitoring:	Compliance with the condition must include: (A) Documentation and investigation, including visible emission surveys, of any complaints received. (B) Visible emission surveys if emissions are observed.
Test Methods:	EPA Methods 9 and 22.
Test Frequency:	When visible emissions are observed or complaints are received.
Required Records:	(A) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology. (B) Complaint and visible emission survey records, if triggered.
State-Only:	No.

(2) Requirement Source: DE07NWP-003, Revision 3

Condition:	OPERATIONAL LIMITS The ETF and VOG systems must be operated in compliance with tBACT controls identified in DE07NWP-003, Rev. 3.
Periodic Monitoring:	Compliance with the condition must be met by: (A) Operating the ETF exhauster systems in accordance with Approval Condition 2.c.i, including use of the VOG system identified in Figure A-1 of the TSD for DE07NWP-003, Revision 3. (B) Pressure and temperature monitoring of the Steam Stripper identified in Approval Condition 2.c.ii. (C) Lance-filling of acetonitrile totes in a Fume Booth under negative pressure, in accordance with Approval Condition 2.c.iii. (D) Monitoring required to implement an O&M program satisfying Approval Conditions 3.a and 3.c.

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Required Records: Records of:

(A) VOG system flow rates, temperature, and calibration of stack gas flow rate and temperature monitoring devices.

(B) Steam stripper temperature and pressure records.

(C) O&M manuals, or equivalent preventative maintenance programs, and maintenance records meeting the requirements of Approval Conditions 3.b and 4.a.

(D) Records of periods where control technology equipment is out of service, but still receiving emissions, in accordance with Approval Condition 4.c.

State-Only: Yes.

(3) Requirement Source: DE07NWP-003, Revision 3

Condition: PROCESSING LIMITS

Annual LERF and ETF processing is limited to 70.0 million gallons of EMF and Non-EMF wastes, combined, as these are defined in Approval Condition 2.b.

Periodic Monitoring: Tracking and recordkeeping for each ETF treatment campaign.

Required Records: For each EMF treatment campaign: source of the waste stream, start and end times, flow rate setting(s), total wastewater volume treated, and treatment processes used.

State-Only: Yes.

(4) Requirement Source: DE07NWP-003, Revision 3

(A) Condition: In accordance with Approval Condition 2.d.iii of Approval Order DE07NWP-003, Revision 3, TAP and non-TAP pollutants must be less than Tables 1 and 2 of the TSD for DE07NWP-003.

(B) In accordance with Approval Condition 2.d.iv of Approval Order DE07NWP-003, Revision 3, if there is a physical change or change in method of operation, NSR applicability must based upon the emission rates identified in Tables A-1 and A-2 of the TSD for DE07NWP-003.

Periodic Monitoring:

(A) Documentation of wastes received at LERF, each treatment campaign at ETF, and any testing done to demonstrate discharged wastes meet water quality standards.

(B) Notification to Ecology within one week if LERF or ETF receives a waste which did not meet the expected waste stream profile and within 90 days of testing showing potential emissions of a new TAP.

(C) Steam stripper monitoring.

Required Records:

(A) LERF receiving records and result summaries for any samples which are examined for the TAPs identified in the TSD for Approval Order DE07NWP-003, Revision 3, Table A-2, ETF processing records, and results of any testing done to demonstrate compliance with water discharge standards, if it is conducted.

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		(B) If required, records of notifications for unexpected waste streams or new TAPs.
		(C) Steam stripper temperature and pressure records.
State-Only:		Yes.

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1.4.20 DP: T Plant Complex Waste Storage Areas

Permittee AEI ID(s): P-291T1-001, P-296T7-001, and X-TPLANTCOMPLEX-001

Location and Description:	200W Area, T Plant Complex, 291-T-1 and 296-T-7 stacks and fugitive emissions. This DP covers multiple EUs/activities which are part of a distinct facility at the Hanford Site. For more information on which portions of the facility are covered, see the NSR authorization cited below.
NSR Authorization/AOP Inclusion:	Approval Order DE01NWP-002, Revision 1 (6/29/2006).
Additional Requirement Citation(s):	N/A.

(1) Requirement Source: DE01NWP-002, Revision 1, and WAC 173-401-615(1)(b)

Condition:	Visible emissions must not exceed limits specified in WAC 173-400-040(2).
Periodic Monitoring:	Section 2.1, Tier 3, for both WAC 173-400-040(2) and DE01NWP-002, Revision 1, Approval Condition 1.3.2.
Test Method:	(A) EPA Method 22 visual emission surveys. (B) Both EPA Method 9 and Ecology Method 9A.
Test Frequency:	When visible emissions are observed.
Required Records:	(A) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology. (B) Visible emission records
State-Only:	No.

(2) Requirement Source: DE01NWP-002, Revision 1

Condition:	Emission Limits. (A) VOC emission will not exceed 3.5 tpy. (B) All TAPs, as submitted in the Permittee's NOC Application, will be below their respective ASIL.
Periodic Monitoring:	Annual material emission estimates prepared in accordance with Section 3.0 of Approval Order DE01NWP-002, Revision 1, and analyze each proposed change to determine if emissions would exceed Emission limits using calculation method.
Required Records:	Results of analyses.
State-Only:	No - VOC. Yes - ASILs

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1.4.22 DP: Waste Receiving and Processing Building 2336W

Permittee AEI ID(s): P-296W4-001 and X-WRAP-001

Location and Description: 200W Area, WRAP, 296-W-4 stack and fugitive emissions.

This DP covers multiple EUs/activities which are part of a distinct facility at the Hanford Site. For more information on which portions of the facility are covered, see the NSR authorization cited below.

NSR Authorization/AOP Inclusion: Approval Order DE03NWP-002 (5/21/2003).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE03NWP-002

Condition: The facility will continue to perform at least once every two years, and make available upon request or inspection, IH program measurements to demonstrate compliance with the limits of DE03NWP-002. The test plan for conducting these measurements must also be maintained on file and made available upon request and/or inspection by Ecology.

Periodic Monitoring: IH Program measurements as specified in the NOC application for DE03NWP-002, including alternative methods, every two years.

Required Records:

(A) IH test plan.

(B) Measurement results.

State-Only: Yes.

(2) Requirement Source: DE03NWP-002

Condition: Total Emission Limits: For toxic compounds not included in the tBACT analysis, the emission limits must be the SQER. The calculation/measurement methods described in section 4 of the NOC Approval Order DE03NWP-002, or other method as approved by Ecology, may be used to document compliance with the SQER limit.

Periodic Monitoring: PID or other device capable of detecting TAPs measurements.

Required Records:

(A) IH Test Plan.

(B) Measurement results.

State-Only: Yes.

(3) Requirement Source: DE03NWP-002

Condition: An internal annual assessment of the facility container tracking system, such as SWITS of the data management system, must be conducted by the facility to document/verify de minimus emissions from the source. This assessment will be maintained on file, made available for Ecology inspector requests, and compiled into emission estimates that will be reported annually beginning as part of the Calendar Year 2003 nonradioactive inventory of airborne emissions.

Periodic Monitoring: Comparison to threshold annually.

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Required Records:		
		(A) Throughput records, SWITS query evaluation if > 1,000 drums.
		(B) Nonradioactive air emissions inventory report required by WAC 173-400-105.
State-Only:		Yes.

(4) Requirement Source: **DE03NWP-002**

Condition:	Total Emission Limits: The processing and repackaging activities described in the NOC application will be permitted without requiring additional emission controls, provided that the emissions from the stack, venting the 100 and 300 Series Waste Process Lines, the 200 and 400 Restricted Waste Process Lines, the process area, and the storage areas are maintained below the level described in and meeting tBACT (according to *WRAP Module 1 Best Available Control Technology Assessment*, WHC-SD-W026-TI-005, January 1993, Westinghouse Hanford Company, Richland, Washington).
Periodic Monitoring:	Recordkeeping.
Required Records:	Documentation implementing tBACT.
State-Only:	Yes.

(5) Requirement Source: **DE03NWP-002**

Condition:	An evaluation of VOC emissions must be performed annually.
Periodic Monitoring:	Emission estimation with material assessment, inventory, and calculations as identified in Approval Condition 3.0 of NOC Approval Order DE03NWP-002 Amendment 1.
Required Records:	Results of analyses.
State-Only:	No.

(6) Requirement Source: **DE03NWP-002**

Condition:	An evaluation of TAP emissions must be performed annually.
Periodic Monitoring:	Emission estimation with material assessment, inventory, and calculations as identified in Approval Condition 3.0 of NOC Approval Order DE03NWP-002 Amendment 1.
Required Records:	Results of analyses.
State-Only:	Yes.

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1.4.23 DP: Waste Treatment and Immobilization Plant – High Level Waste, Low-Activity Waste, Analytical Laboratory, Balance of Facilities, and Material Handling Facility Fugitive Dust

Permittee AEI ID(s): P-WTPHLW-001, P-WTPLAW-001, P-WTPLAB-001, P-WTPPRETREAT-001, E-WTPSITESDG-001, E-WTPSITEFIREPUMP-001, E-WTPSITETURBINE-001, and F-WTPSITEBOILER-001

Location and Description:

Location 1: 200E Area, WTP, primary vitrification and support facilities.

Location 2: WTP MHF, Battelle Blvd., FDCP requirements only (MHF engines under separate DPs).

This DP covers multiple EUs/activities which are part of two distinct facilities at the Hanford Site. The conditions below only address applicable requirements and do not identify every EU/activity associated with these facilities.

The primary WTP facility, Location 1, has BOF, LAB, LAW, HLW, and PTF sections. A portion of the activities at the MHF, Location 2, are included in this DP because they were addressed under the same NSR authorization. For more information on each section see the List of Abbreviations for Attachment 1 above, Table 1.4.23.1, and the NSR authorizations cited below.

Table 1.4.23.1 Waste Treatment and Immobilization Plant Emission Units/Activities with Unit-Specific Applicable Requirements

WTP Section ID	Emission Unit/Processes	Notes	Operating Status
BOF (Location 1)	Boilers A, B, and C – 50 MMBtu/hr each	Cleaver Brooks Model CBL-100-1200-200, manufactured in 2004 and first operated in 2019. Low-NO_x burner with steam atomization. Burner replacement planned for 2026.	Operating
BOF (Location 1)	Boilers D, E, and F – 50.2 MMBtu/hr each	Cleaver Brooks Model CBL-100-1200-200, manufactured in 2004 but never operated. Low-NO_x burner with steam atomization. Equipped with original burners.	Constructed, Not Operated
BOF (Location 1)	Emergency Generator Engine – 3,950 bhp	2004 model year. Also identified as Standby Diesel Generator in Permittee documents.	Operating

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Table 1.4.23.1 Waste Treatment and Immobilization Plant Emission Units/Activities with Unit-Specific Applicable Requirements

WTP Section ID	Emission Unit/Processes	Notes	Operating Status
BOF (Location 1)	2 Emergency Fire Pump Engines – 300 bhp Each	2004 model year.	Operating
BOF (Location 1)	2 Emergency Turbine Generators – 3.8 Megawatts Each		Not Constructed
LAB (Location 1)	Laboratory Facility - Analytical Equipment and Testing of WTP Samples	Building zones cascade internally (C2 to C3 to C5). Exhaust from each zone HEPA Filter (C2 and C3) or Filters (CC5) and independent stack.	Operating
LAW (Location 1)	Low Activity Waste Vitrification Facility – 2 Melters	Each melter has dedicated SBS and WESP. Exhaust streams combined for HEPA Filters, Carbon Bed Adsorber, TCO with TCO/SCR, and Caustic Scrubber.	Operating
MHF (location 2)	Material Handling Facility - Fugitive Emissions from Handling and Storing Components for WTP Construction at Outdoor Laydown Area	Separate outdoor storage location included for FDCP only. MHF has stationary engines exempted from NSR which are addressed by separate DPs.	Operating
HLW (Location 1)	High Level Waste Vitrification - 2 Melters	Each melter has dedicated SBS, WESP, HEME, HEPA Filters, Carbon Bed Adsorber, Silver Mordenite Adsorber, and TCO/SCR.	Partially Constructed, Not Operating
PTF (Location 1)	Pretreatment Facility - Systems to Separate and Prepare Tank Waste for Vitrification in HLW and LAW Facilities	Not used in Direct-Feed LAW and HLW operating configurations.	Partially Constructed, Not Operating or Under Construction

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NSR Authorization/AOP Inclusion:	Approval Order DE02NWP-002, Revision 4 (4/29/2026) and PSD Permit PSD-02-01, Amendment 3 (4/4/2013).
Additional Requirement Citation(s):	WAC 173-400-040(9)(a); For Standby Diesel Generator only, 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(b)(3)(iii) and 63.6640(f), Existing Emergency Engine Greater than 500 bhp at Major Source of HAP; For Fire Pump Engines Only, 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency Fire Pump CI Engines, Model Year 2004, Engine Power 300 bhp; For Emergency Turbines Only, 40 CFR 60, NSPS Subpart KKKKa and 40 CFR 63, NESHAP Subpart YYYY, 40 CFR 63.6090(b)(1)(i); For Diesel Fuel-Fired Boilers Only, 40 CFR 60, NSPS Subpart Dc and 40 CFR 63, NESHAP Subpart DDDDD.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

(1) Requirement Source: DE02NWP-002, Revision 4

Condition:	MHF FDCP As established by the Permittee's FDCP, activities which generate fugitive dust must be curtailed or ceased and preventative measures applied, as appropriate, under the conditions identified in the FDCP.
Periodic Monitoring:	As specified in the MHF FDCP.
Required Records:	FDCP and records of actions taken to minimize fugitive dust, including application of water, dust suppressants, or soil fixatives.
State-Only:	No.

(2) Requirement Source: DE02NWP-002, Revision 4

Condition:	O&M MANUALS AND FDCP. (A) Review O&M manual(s) and FDCP annually and update to reflect modifications to the emission unit or procedures. (B) Follow emission-related installation, configuration, operation, and maintenance requirements from O&M manual(s).
Periodic Monitoring:	Annual reviews.
Required Records:	Records of date, reviewer, and any updates for O&M Manual(s) and FDCP.
State-Only:	No.

(3) Requirement Source: DE02NWP-002, Revision 4, and WAC 173-401-615(1)(b)

Condition:	OPACITY LIMITS (A) PTF, HLW, and LAW stacks must not exceed 5% opacity. (B) BOF stacks must not exceed 10% opacity.
Periodic Monitoring:	(A) EPA Method 9 concurrently with LAW, HLW, and BOF source testing. (B) For combustion BOF emission points, see Section 2.1, Tier 1. (C) For non-combustion BOF, PTF, HLW, and LAW emission points, see Section 2.1, Tier 3.

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Test Method:

(A) EPA Method 22.

(B) EPA Method 9.

Test Frequency:

(A) EPA Method 9 at the same frequency as source testing for emission points subject to testing.

(B) EPA Method 22 and EPA Method 9 at the frequency required by Section 2.1 for all emission points.

Required Records:

(A) Source testing records which include EPA Method 9.

(B) Abatement control technology maintenance records for Section 2.1, Tier 3.

(C) Opacity records, including EPA Method 22 and EPA Method 9, when required by Section 2.1, Tier 1 or Tier 3.

State-Only: No.

(4) Requirement Source: DE02NWP-002, Revision 4, and PSD-02-01, Amendment 3

Condition: All BOF combustion must be fired on ULSD/ULSF.

Periodic Monitoring: Recordkeeping of fuel purchases.

Required Records: Records of fuel purchases, including certification or other documentation of sulfur content.

State-Only: No.

(5) Requirement Source: PSD-02-01, Amendment 3

Condition:

(A) Semiannual reporting of fuel type, consumption, monthly operating hours, resulting NO_x and PM_{10} emissions for BOF combustion units, as specified in PSD-02-01, Amendment 3, Approval Condition 17.3.

(B) Semiannual reporting of any days for which NOx CEMS data was not obtained, including reasons for not obtaining sufficient data and description of corrective actions taken, for LAW and HLW, as specified in PSD-02-01, Amendment 3, Approval Conditions 17.3 and 17.4.

Periodic Monitoring: Tracking fuel purchases, consumption, operating hours, and NO_X CEMS monitoring as needed for semiannual report.

Required Records: Records of fuel purchases, consumption, monthly hours of operation, resulting emissions, and NO_x CEMS monitoring.

State-Only: No.

(6) Requirement Source: DE02NWP-002, Revision 4, and PSD-02-01, Amendment 3

Condition: The BOF boilers must not exceed an annual aggregated fuel consumption limit of 13,400,000 gallons per year summed daily for the previous 365 days (PSD-02-01) and monthly for the previous 12 consecutive calendar months (DE02NWP-002, Rev. 4).

Periodic Monitoring: Fuel purchase records and flow meters.

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Required Records: Flow meter readings, fuel purchase records, and daily, monthly, and 12-calendar month rolling summations of fuel use.

State-Only: No.

(7) Requirement Source: DE02NWP-002, Revision 4, and PSD-02-01, Amendment 3

Condition: BOF Emergency Generator Engine and BOF Turbine Generators must not operate for more than 164 hours per year each on a rolling 12-calendar month basis.

Periodic Monitoring: Non-resettable hour meters/totalizers.

Required Records: Records showing hours of operation for each calendar month and rolling 12-calendar month period.

State-Only: No.

(8) Requirement Source: DE02NWP-002, Revision 4, and PSD-02-01, Amendment 3

Condition: BOF Emergency Fire Pump Engines must not operate for more than 230 hours per year each on a rolling 12-calendar month basis.

Periodic Monitoring: Non-resettable hour meters/totalizers.

Required Records: Records showing hours of operation for each calendar month and rolling 12-calendar month period.

State-Only: No.

(9) Requirement Source: DE02NWP-002, Revision 4

Condition: Except during source testing, operation of LAW and HLW emission units and control devices must be at no more than the maximum feed rate, and within the parameter ranges, established in the most recent source testing.

Periodic Monitoring: Continuous parametric and feed rate monitoring.

Required Records: Records from parametric and feed rate monitoring system.

State-Only: No.

(10) Requirement Source: DE02NWP-002, Revision 4

Condition: While LAW or HLW melters contain tank waste, simulant, or other materials which could produce unabated emissions in excess of DE02NWP-002, Rev. 4, emission limits the identified control devices must be properly installed and operated.

Periodic Monitoring: Continuous parametric and feed rate monitoring.

Required Records: Records from parametric and feed rate monitoring system.

State-Only: No.

(11) Requirement Source: DE02NWP-002, Revision 4

Condition:

(A) The date, time, duration, and cause of any periods where control technology equipment is out of service must be documented and maintained

(B) For periods of planned outage/maintenance where one or more LAW or HLW control devices is not operating and controlling emissions, the Permittee must document the analysis used to determine that emission control was not necessary.

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(C) If a report of LAW or HLW control device bypass is prepared for the DWP, WTP (OUG 10), Conditions III.10.H.1.c.viii or III.10.J.1.c.viii, this report must also be transmitted to the Section Manager and Air Engineer Team Lead for the Waste Management Section of Ecology's Nuclear Waste Program.

Periodic Monitoring: Continuous parametric and feed rate monitoring, plus any additional data required to satisfy Approval Condition 2.c.iv of DE02NWP-002, Rev. 4.

Required Records: Records of control technology status and necessity analyses, including any data used to support shutdown of control devices.

State-Only: No.

(12) Requirement Source: DE02NWP-002, Revision 4

Condition: TAP emissions from LAB stacks LB-S1 and LB-S2 must not exceed the abated emission rates identified in Attachment A, Table A-1, of DE02NWP-003, Revision 4.

Periodic Monitoring: Summing LAB samples collected on a rolling 12-calendar month basis.

Required Records: Total LAB samples collected for each calendar month and total samples for each 12-calendar month period.

State-Only: Yes.

(13) Requirement Source: DE02NWP-002, Revision 4, and PSD-02-01, Amendment 3

Condition:

(A) PM_{10} emissions from the LAW melters must not exceed 0.36 lb/hr at 21% O_2 as a 24-hr average.

(B) Emissions from LAW melters must not exceed the abated emission rates identified in Attachment A, Table A-1, of DE02NWP-003, Revision 4.

(C) PM_{10} emissions from the HLW melters must not exceed 0.135 lb/hr at 21% O_2 as a 24-hr average.

(D) Emission from HLW exhaust streams HV-S3a, HV-S3b, and HV-S4 must not exceed the abated emission rates identified in 24590-WTP-RPT-ENV-01-009, Revision 1, Pages B-3, B-4, and B-27 through B-39.

(E) Initial source testing for LAW and HLW must be conducted within 180 days of startup, and no more than 60 days from hot commissioning, in accordance with an Ecology-approved Environmental Performance Demonstration Test Plan.

(F) Initial LAW and HLW source testing must meet the requirements identified in the DWP, WTP (OUG 10) Conditions III.10.H.5.f (LAW) and III.10.J.5.f (HLW).

(G) Follow-up source testing for LAW and HLW must be conducted once every five years, in accordance with the frequency and requirements identified in PSD-02-01, Amendment 3, Approval Conditions 5.3 and 7.3 as well as the DWP, WTP (OUG 10) Conditions III.10.I.18 (LAW) and III.10.K.1.h (HLW).

(H) Source testing for LAW must include opacity, PM, hydrogen chloride, and hydrogen fluoride.

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(I) Source testing for HLW must include opacity and PM.

(J) In addition to any notification requirements for the DWP, the Section Manager and Air Engineer Team Lead for Ecology's Waste Management Section must be notified at least 30 days prior to testing, provided with test plans prior to testing, and provided with the test report within 180 calendar days of completion of the source testing.

Periodic Monitoring: Source testing.

Test Method:

(A) Methods identified in DWP, WTP (OUG 10) conditions III.10.I.18 (LAW) and III.10.K.1.h (HLW).

(B) For opacity, EPA Method 9.

(C) For PM, EPA Method 5, 201, or 201A for the front half analysis plus EPA Method 202 for the back half.

(D) For hydrogen chloride and hydrogen fluoride, EPA Method 26A.

Test Frequency: At startup and at least once every 5 years thereafter.

Required Records:

(A) Notification documentation.

(B) Environmental Performance Demonstration Test Plan and appropriate plans for follow-up testing.

(C) Results of testing, including melter feed rate and emission rate calculations.

State-Only: Yes for EPA Method 26A. No for other testing.

(14) Requirement Source: DE02NWP-002, Revision 4, and PSD-02-01, Amendment 3

Condition:

(A) PM or PM_{10} from any individual BOF boiler must not exceed 0.02 lb/MMBtu or 1.0 lb/hr averaged over 24 consecutive hours (both limits must be met).

(B) NO_X emissions from any individual BOF boiler must not exceed 0.09 lb/MMBtu 3% O_2 or 4.52 lb/hr averaged over 24 consecutive hours (both limits must be met).

(C) Emissions from any individual BOF boiler must not exceed 3.51 pounds per hour of CO, 1.51 pounds per hour of VOC, 0.15 pounds per hour of SO_2, or the emission rates identified in 24590-WTP-RPT-ENV-01-009, Revision 1, Page B-111.

(D) Within 180 days of initial startup of each BOF boiler, and once every 5 years thereafter, source testing must be conducted using the following methods:

Tested Pollutant & Source of Requirement	Test Method
CO (DE02NWP-002, Rev. 4)	EPA Method 10
NO_x (PSD-02-01, Amendment 3)	EPA Method 7E
VOC (DE02NWP-002, Rev. 4)	EPA Method 18 or 25A

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Tested Pollutant & Source of Requirement	Test Method
SO_2 (DE02NWP-002, Rev. 4)	EPA Method 6C or calculation based upon fuel sulfur content defined in DE02NWP-002, Revision 4, Approval Condition 5.b.iii.A
Opacity (DE02NWP-002, Rev. 4)	EPA Method 9
PM (PSD-02-01, Amendment 3)	EPA Method 5, 201, or 201A for the front half analysis plus EPA Method 202 for the back half

(E) Boiler firing rate during source testing must be set in accordance with Approval Conditions 5.d.ii and 5.d.iii of DE02NWP-002, Rev. 4

Periodic Monitoring: Source testing.

Test Method: As stated in condition.

Test Frequency: Initial startup and every 5 years thereafter.

Required Records:

(A) Test Records.

(B) Calculations based on testing results and hours of operation.

State-Only: No.

(15) Requirement Source: DE02NWP-002, Revision 4, and PSD-02-01, Amendment 3

Condition:

(A) Emissions of NO_X from the BOF Emergency Generator Engine must not exceed 391.1 lb/day averaged as a 24-hr average.

(B) Emissions from the BOF Emergency Generator Engine must not exceed the emission rates identified in 24590-WTP-RPT-ENV-01-009, Revision 1, Pages B-101 through B-103.

(C) Emissions of NO_X from the BOF Emergency Turbine Generators must not exceed 69.8 lb/hr (each).

(D) Emissions from the BOF Emergency Turbine Generators must not exceed the emission rates identified in 24590-WTP-RPT-ENV-12-002, Revision 1, Tables 5-5 and 5-6.

(E) BOF Emergency Generator Engine and Emergency Turbine Generator source testing must be conducted within 180 days of initial startup of each unit. The BOF Emergency Generator Engine must also be tested again every five years. Both initial and five-year retests must be conducted using the following methods:

Tested Pollutant & Source of Requirement	Test Method
NO_x (PSD-02-01, Amendment 3)	EPA Method 7E
Opacity (DE02NWP-002, Revision 4)	EPA Method 9

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Periodic Monitoring: Recordkeeping, measurements, and emission calculations.
Test Method: As stated in condition.
Test Frequency: Initial startup and every 5 years thereafter.
Required Records:

(A) Test Records.
(B) Calculations based on testing results and hours of operation.

State-Only: No.

(16) Requirement Source: DE02NWP-002, Revision 4, and PSD-02-01, Amendment 3

Condition:

(A) PM_{10} emissions from the PTF must not exceed 0.02 g/dscf or 0.456 lb/hr as a 24-hour average (both limits must be met).
(B) Within 180 days of initial startup of PTF, and once every 5 years thereafter, source testing must be conducted using the following methods:

Tested Pollutant & Source of Requirement	Test Method
PM (PSD-02-01, Amendment 3)	EPA Method 5, 201, or 201A for the front half analysis plus EPA Method 202 for the back half
Opacity (DE02NWP-002, Revision 4)	EPA Method 9

Periodic Monitoring: Recordkeeping, measurements, and emission calculations.
Test Method: As stated in condition.
Test Frequency: Initial startup and every 5 years thereafter.
Required Records:

(A) Test Records.
(B) Calculations based on testing results and hours of operation.

State-Only: No.

(17) Requirement Source: DE02NWP-002, Revision 4

Condition:

(A) During BOF boiler source testing the accuracy of a portable emissions analyzer (direct-reading measurement device) for NO_x, CO, and oxygen must be confirmed according to methods proposed by the Permittee and approved by Ecology in writing before commencing initial startup.
(B) This device must have a design measurement accuracy of five percent or better at the expected maximum NO_x and CO concentration.
(C) If the NO_x or CO concentration read by a direct-reading measurement device is consistently different than the concentration determined by source testing, this must be accounted for with a correction factor when using the device after significant maintenance. This correction factor

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may be adjusted, if necessary, for subsequent calibration, sensor replacement, or other maintenance on the direct reading measurement device if it is done in accordance with the manufacturer's recommendations.

Periodic Monitoring: Confirmation of instrument accuracy every 5 years.

Required Records: Measurements taken with the direct-reading instrument during source testing and correction factor analysis.

State-Only: No.

(18) Requirement Source: DE02NWP-002, Revision 4

Condition:

(A) Emissions from BOF boilers must be monitored for CO, NO_x, and oxygen by means of a portable emissions analyzer (direct-reading measurement device) during source testing and after maintenance activities which may affect combustion efficiency. This includes tune-ups, burner/control adjustments such as fuel/air metering ratio and oxygen trim control, and replacement of any portion of the burner assembly.

(B) Post-maintenance monitoring must be done in the same load range used for source testing. If source testing included multiple load ranges, the one which is most representative of expected operation must be checked.

(C) Unless approved in writing by Ecology, oxygen-corrected NO_x and CO concentrations must not increase by more than 10 ppm or 20% (whichever is less stringent) compared to the averaged concentration established for that boiler during the most recent source testing, including any correction necessary.

Periodic Monitoring: Measurement of CO, NO_x, and oxygen during source testing and after maintenance.

Required Records: Logs of BOF boiler tune-ups and significant maintenance activities, including CO NOx, and oxygen measurement records.

State-Only: No.

(19) Requirement Source: DE02NWP-002, Revision 4

Condition: BOF boilers, Emergency Generator Engine, Emergency Fire Pump Engines, and Emergency Turbine Generators must be operated using good combustion practices with reduced operation, where practicable.

Periodic Monitoring:

(A) Maintenance and operating hour tracking.

(B) For BOF boilers, checks of NO_x, CO, and oxygen levels with a portable emissions analyzer (direct-reading measurement device) after maintenance.

Required Records: Maintenance and operating hour records.

State-Only: No.

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(20) Requirement Source: **DE02NWP-002, Revision 4**

Condition: In addition to general requirements for complaints in Section 2.2, the Permittee must assess all complaints received directly. Ecology must be notified within one business day of any complaint received directly by the Permittee. Corrective actions in response to a complaint must be implemented within three calendar days of receipt of the complaint.

Periodic Monitoring: Complaint assessments, if triggered.

Required Records: Complaint assessments and records of corrective actions taken.

State-Only: No.

(21) Requirement Source: **DE02NWP-002, Revision 4**

Condition: Emissions from the BOF Fire Pump Engines must not the emission rates identified in 24590-WTP-RPT-ENV-12-002, Revision 1, Tables 5-5 and 5-6

Periodic Monitoring: Periodic maintenance, based upon manufacturer recommendations.

Required Records: Maintenance and operating hour records.

State-Only: No.

(22) Requirement Source: **DE02NWP-002, Revision 4**

Condition: Emissions from PTF exhaust streams PT-C2, PT-S1 and PT-S2, PT-S3, and PT-S4 must not exceed the abated emission rates identified in Letter 10-ESQ-181.

Periodic Monitoring: Periodic maintenance, based upon manufacturer recommendations.

Required Records: Maintenance and operating records.

State-Only: No.

(23) Requirement Source: **PSD-02-01, Amendment 3**

Condition: NO_X emissions from the LAW Vitrification Plant must not exceed 477 ppmdv at 21% O_2as a 24-hr average or 200.1 lb/day averaged over 30 consecutive days (both limits must be met).

Periodic Monitoring: CEM.

Test Method: EPA Method 7E.

Test Frequency: Continuous, using CEMS for NO_X and a flow meter.

Required Records: CEMS and flow meter readings with calculations of emission rates.

State-Only: No.

(24) Requirement Source: **PSD-02-01, Amendment 3**

Condition: NO_X emissions from the HLW Vitrification Plant must not exceed 352 ppmdv at 21% O_2 as a 24 hr average ***or*** 23.3 lb/day averaged over 30 consecutive days (both limits must be met).

Periodic Monitoring: CEM.

Test Method: EPA Method 7E, CEMS.

Test Frequency: Continuous, using CEMS for NO_x and a flow meter.

Required Records: CEM and flow meter readings with calculations of emission rates.

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	State-Only:	No.
(25)	**Requirement Source:**	**NESHAP Subpart DDDDD**
	Condition:	For BOF boilers, demonstrate compliance with limits in NESHAP Subpart DDDDD, Table 2, Subcategories 14 (liquid fuel) and 16 (light liquid fuel). Submit compliance reports in accordance with 40 CFR 63.7550.
	Periodic Monitoring:	For each applicable limit in NESHAP Subpart DDDDD, Table 2, conduct periodic monitoring which satisfies one of the following compliance demonstration options: (A) Annual stack testing, in accordance with 40 CFR 63.7515(a); (B) An initial stack test and monthly recording of type of fuel combusted, if ultra-low sulfur liquid fuel is used, in accordance with 40 CFR 63.7515(h); or, (C) Fuel analysis at a schedule established in 40 CFR 63.7515(e) (allowable for mercury, hydrogen chloride, and total selected metals only).
	Test Method:	Multiple, with sample collection or test run duration as specified in NESHAP Subpart DDDDD, Table 2.
	Test Frequency:	Annual stack testing, unless fuel analysis or an initial test and records demonstrating continuing use of ultra-low sulfur liquid fuel are used to demonstrate compliance.
	Required Records:	(A) Results of stack testing. (B) Monthly fuel analysis or records of fuel type, if used to demonstrate compliance with a limit in NESHAP Subpart DDDDD, Table 2.
	State-Only:	No.
(26)	**Requirement Source:**	**NSPS Subpart KKKKa and NESHAP Subpart YYYY**
	Condition:	Maintain and operate the turbines and associated control devices in a manner consistent with good air pollution control practices for minimizing emissions and in accordance with the definition of emergency combustion turbine.
	Periodic Monitoring:	Tracking of maintenance in accordance with manufacturer's recommendations or permittee-developed maintenance plan.
	Required Records:	(A) Manufacturer's recommended maintenance schedule and permittee-developed maintenance plan, if applicable. (B) Records of maintenance performed.
	State-Only:	No.

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1.4.24 DP: Integrated Disposal Facility Low-Level/Activity Waste Landfill

Permittee AEI ID(s): L – IDF-001

Location and Description:	200E, IDF, landfill and associated activities. This DP covers multiple EUs/activities which are part of a distinct facility at the Hanford Site. For more information on which portions of the facility are covered, see the NSR authorization cited below.
NSR Authorization/AOP Inclusion:	Approval Order DE05NWP-004, Revision 2 (12/4/2023).
Flex Configuration Requirements:	This DP includes stationary diesel fuel-fired engines used to power generators and light stands and gasoline-fired engines used to power generators at IDF in a flexible configuration identified in Tables 1.4.24.1 through 1.4.24.3 and the conditions below.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR Part 60, Subpart IIII, see Section 2.11 below.

For compliance requirements associated with 40 CFR Part 60, Subpart JJJJ, see Section 2.12 below.

Table 1.4.24.1 Diesel Generator Engine Design

Maximum Number	1
Regulatory Use Category	Non-Emergency Stationary
Model Year	2014 or Later
Maximum Power Output	48 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.24.2 Diesel Light Plant Engine Design

Maximum Number	10
Regulatory Use Category	Non-Emergency Stationary
Model Year	2014 or Later
Maximum Power Output	16.6 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.24.3 Gasoline Generator Engine Design

Maximum Number	10
Regulatory Use Category	Non-Emergency Stationary
Model Year if displacement < 225 cc	2012 or Later
Model Year if displacement > 225 cc	2011 or Later

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Table 1.4.24.3 Gasoline Generator Engine Design

Maximum Power Output	4.02 bhp
Fuel Type	Gasoline/SI

Additional Requirement Citation(s): WAC 173-400-040(9)(a); 40 CFR 60, NSPS Subpart IIII, Stationary Model Year 2014 or Later Non-Emergency CI Engines, Multiple Engine Categories, Tier 4; 40 CFR 60, NSPS Subpart JJJJ, Stationary Non-Emergency SI Engines, 4.02 bhp, Phase 3.

(1) Requirement Source: **DE05NWP-004, Revision 2**

Condition: ENGINE DESIGN AND OPERATION

(A) Designs must be consistent with Tables 1.4.24.1, 1.4.24.2, and 1.4.24.3.

(B) Diesel and gasoline generators must not exceed a maximum of 2,080 hours per year per generator.

(C) Light stands must not exceed a maximum of 1,232 hours per year per light stand.

(D) When generators and light stands are changed out, annual hour limits apply to the total hours for both the replacement and replaced engine combined.

Periodic Monitoring:

(A) Inventory of stationary engines used for IDF. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

(B) Annual hours of engine operation, compiled monthly, on a rolling 12-month basis.

Required Records:

(A) The date and hour meter totals when engines are added and removed.

(B) Annual hours of engine operation on a rolling 12-month basis.

State-Only: No.

(2) Requirement Source: **DE05NWP-004, Revision 2**

Condition:

(A) Visible emissions must not exceed 20% opacity or remain visible at the property boundary.

(B) If a complaint is received, notify Ecology within one business day.

Periodic Monitoring:

(A) For engines, EPA Method 9 twice annually, approximately six months apart, by qualified personnel.

(B) Investigation of air-quality related complaints, including visible emissions.

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Test Method:

(A) If triggered by a complaint, EPA Method 22.

(B) EPA Method 9.

Test Frequency: Method 9 semiannually for engines, Method 22 if a complaint is received.

Required Records:

(A) EPA Method 9 observations.

(B) EPA Method 22 surveys, if triggered.

(C) For air-quality related complaints, a record of the complaint, actions to investigate, corrective action taken, and effectiveness of the remedial action.

State-Only: No.

(3) Requirement Source: DE05NWP-004, Revision 2

Condition: TOTAL EMISSION LIMITS FOR IDF

Total IDF emissions must not exceed the limitations in Appendix A, Tables A-1 and A-2, of DE05NWP-004, Revision 2.

Periodic Monitoring: Periodic monitoring identified above for container treatment, fugitive dust, fugitive emissions, waste covering operations, travel on unpaved roads, aggregate compacting activities, and aggregate storage pile.

Required Records:

(A) Records identified below for container treatment, fugitive dust, fugitive emissions, waste covering operations, travel on unpaved roads, aggregate compacting activities, and aggregate storage pile.

(B) Documentation of the date, time, duration, and cause of any periods where emission control technology equipment is out of service.

State-Only: No.

(4) Requirement Source: DE05NWP-004, Revision 2

Condition: O&M MANUALS AND FDCP.

(A) Review O&M Manual(s) and FDCP annually and update to reflect modifications to the emission unit or procedures.

(B) Follow emission-related installation, configuration, operation, and maintenance requirements from O&M Manual(s).

Periodic Monitoring: Annual reviews.

Required Records: Records of date, reviewer, and any updates for O&M Manual(s) and FDCP.

State-Only: No.

(5) Requirement Source: DE05NWP-004, Revision 2

Condition: CONTAINER TREATMENT

(A) During treatment, emissions from containers which contain one or more pollutants identified in Table 2 of DE05NWP-004, Revision 2, must be controlled by HEPA filtration and carbon adsorption.

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(B) HEPA filtration and carbon adsorption must be connected to the container outlet, unless the container must be opened for treatment. If opened, a tent under negative pressure over the container must be used to direct emissions to HEPA filtration and carbon adsorption.

(C) Treated containers must not exceed the concentration limit identified in Table 2 of DE05NWP-004, Revision 2.

Periodic Monitoring: Review of container documentation prior to treatment.

Required Records:

(A) Records of waste treated including number of containers, waste profile associated with each container, and whether HEPA filtration and carbon adsorption were used.

(B) Documentation that HEPA and carbon filters are changed according to manufacturer recommendations.

State-Only: Yes.

(6) Requirement Source: DE05NWP-004, Revision 2

Condition: EMISSION LIMITS FOR WASTE COVERING OPERATIONS

During waste covering operations, aggregate must be used to cover the waste package at the IDF. Dust control for covering the waste package will consist of watering and/or chemical wetting agents. Waste covering operations will be curtailed during high winds in accordance with abnormal operating procedures for high winds. Prior to long periods of inactivity, an assessment must be made to implement more comprehensive dust control methods, such as chemical stabilization, on disturbed areas. A reassessment will be made once per week.

Periodic Monitoring: Recordkeeping.

Required Records: Records of dust control measures undertaken, which may include daily activity reports, logs, pre-job reviews, management assessments, surveillances, or similar documents.

State-Only: Yes.

(7) Requirement Source: DE05NWP-004, Revision 2

Condition: EMISSION LIMITS FOR TRAVEL ON UNPAVED ROADS

Surface treatment for dust control must consist of watering and/or chemical stabilization. Minimize vehicle use on unpaved road. Perform regular maintenance of road surface. Reduce vehicle speed limit on unpaved roads.

Periodic Monitoring: Recordkeeping.

Required Records: Records of dust control measures undertaken, which may include daily activity reports, logs, pre-job reviews, management assessments, surveillances, or similar documents.

State-Only: Yes.

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(8) Requirement Source: **DE05NWP-004, Revision 2**

Condition: EMISSION LIMITS FOR AGGREGATE COVER COMPACTING ACTIVITIES

A water truck must be provided, and operated as needed to spray water for compaction. Waste covering operations will be curtailed during high winds in accordance with abnormal operating procedures for high winds. Prior to long periods of inactivity an assessment must be made to implement more comprehensive dust control methods, such as chemical stabilization, on disturbed areas. A reassessment will be made once per week.

Periodic Monitoring: Recordkeeping.

Required Records: Records of dust control measures undertaken, which may include daily activity reports, logs, pre-job reviews, management assessments, surveillances, or similar documents.

State-Only: Yes.

(9) Requirement Source: **DE05NWP-004, Revision 2**

Condition: EMISSION LIMITS FOR AGGREGATE STORAGE PILE

Watering must be utilized to minimize wind erosion during storage pile operation. Storage pile work must be curtailed during high winds in accordance with abnormal operating procedures for high winds. Prior to long periods of inactivity, an assessment must be made to implement more comprehensive dust control methods, such as chemical stabilization, on disturbed areas. A reassessment will be made once per week. Minimize vehicle traffic. Minimize areas of disturbance.

Periodic Monitoring Recordkeeping.

Required Records: Records of dust control measures undertaken, which may include daily activity reports, logs, pre-job reviews, management assessments, surveillances, or similar documents.

State-Only: Yes.

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1.4.25 DP: Ventilation Systems for 241-AN Tank Farm

Permittee AEI ID(s): P-241AN-001

Location and Description: 200E, Tank Farms, ventilation systems for 241-AN Tank Farm. See DP 1.4.82 for ventilation at 241-AW.

NSR Authorization/AOP Inclusion: Approval Order DE05NWP-001, Revision 2 (12/20/2019)

Additional Requirement Citation(s): N/A

(1) Requirement Source: DE05NWP-001, Revision 2, and WAC 173-401-615(1)(b)

Condition: EMISSION LIMITS

Visible emissions from each stack must not exceed 5%.

Periodic Monitoring: Compliance and monitoring must be met by Section 2.1, Tier 3 Visible Emissions Survey requirements. Should visible emissions be observed which are not solely attributable to water condensation, compliance must be met by performing an opacity determination utilizing EPA Method 9, providing that such determination must not place the visible emission observer in hazard greater than that identified for the general worker.

Test Method: EPA Method 9, as applicable.

Test Frequency: None specified (as needed for monitoring and compliance with AOP Attachment 2).

Required Records:

(A) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology.

(B) Visible emission surveys records.

State-Only: No.

(2) Requirement Source: DE05NWP-001, Revision 2

Condition: EMISSION LIMITS

The tank ventilation exhauster system must not exceed 4,000 ft^3/min (at standard temperature and pressure).

Periodic Monitoring: Compliance and monitoring of this condition must be demonstrated by stack gas flow and temperature measurement.

Required Records:

(A) Records of exhauster system stack flow rates and temperature records.

(B) Records of calibration of stack gas flow rate and temperature measurement devices.

State-Only: No.

(3) Requirement Source: DE05NWP-001, Revision 2

Condition: EMISSION LIMITS

All TAPs, as shown in Table 2 of Approval Order DE05NWP-001, Rev. 2, must be below their respective ASIL or Screening Level of Table 1 of Approval Order DE05NWP-001, Rev. 2.

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	Periodic Monitoring:	Compliance and monitoring must be met by operating the exhauster system only when in accord with tBACT emission controls for the project. tBACT for this project has been determined to be operation of the primary tank ventilation exhausters not exceeding 4,000 ft^3/min with moisture de-entrainment, pre-heater, and HEPA filtration in service in the treatment train.
	Required Records:	Documentation and record-keeping of tBACT compliance of emission control found for this project (operation of the primary tank ventilation exhauster system not exceeding 4,000 ft^3/min with moisture de-entrainment, pre-heater, and HEPA filtration in service in the treatment train).
	State-Only:	Yes.
(4)	**Requirement Source:**	**DE05NWP-001, Revision 2**
	Condition:	EMISSIONS LIMITS Emissions of ammonia must not exceed 2.9 lb/hr (3.63E-01 gram/second) from the tank ventilation exhauster system. The term 'exhauster system' means the individual primary tank ventilation exhausters within the 241-AN Tank Farm, where the exhausters may be operated in single-train or dual-train modes.
	Periodic Monitoring:	Conduct ammonia concentration readings and apply these concentration readings with contemporaneous stack flow rate and temperatures to determine instantaneous mass release rate of ammonia.
	Test Method:	Ammonia sampling and analysis will be in accord with approved alternative sampling procedures including the use of Draeger tubes to measure stack gas concentration of ammonia providing such devices are spanned to appropriately measure the stack gas ammonia concentration. Stack flow rate and temperature will be applied with the ammonia stack gas concentration to report ammonia emission rate in terms of grams per second.
	Test Frequency:	In order to assess baseline emission concentrations from the exhauster system, emission levels of ammonia will be assessed between 12 and 24 hours after initiation of exhauster operation (single train or dual train). Ammonia stack concentrations must be sampled a minimum of three times. *Baseline Assessments* - Baseline assessments must be conducted within 90 days of commencement of operations. Should dual exhauster train operation not be required by the Permittee during this 90 day period, assessment of dual train operation emissions must be conducted on the first occasion of dual train operation which is anticipated to exceed 24 hours duration. *Bi-Annual Assessment* - In order to maintain reasonable assurance of continued compliance with emission limitation the exhauster system, bi-annual assessment of ammonia stack emissions will be conducted beginning the second calendar year following completion of single train exhauster operation assessment. A minimum of three samples must be used to assess these emissions.

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	Required Records:	Results of emission assessments, baseline and bi-annual emission monitoring results, supporting data and calculations to demonstrate compliance with ammonia limit.
	State-Only:	Yes.
(5)	**Requirement Source:**	**DE05NWP-001, Revision 2**
	Condition:	EMISSIONS LIMITS Emissions of 1,3-dichloropropene must not exceed 1.37E-3 lb/hr (1.73E-04 gram/second) from the tank ventilation exhauster system, as defined in Condition 4 above.
	Periodic Monitoring:	Upon receipt of waste transfer from the 241-AP Tank Farm to the 241-AN Tank farm, either directly or indirectly through other tanks, conduct 1,3-dichloropropene concentration readings and apply these concentration readings with contemporaneous stack flow rate and temperatures to determine instantaneous mass release rate of 1,3-dichloropropene.
	Test Method:	Test method(s) specified in 40 CFR Part 60, unless an alternative method has been proposed in writing by the Permittee and approved in writing by Ecology.
	Test Frequency:	Within three months of receipt of waste from the 241-AP Tank Farm into the 241-AN Tank Farm and bi-annually thereafter.
	Required Records:	Results of emission assessments, emission monitoring results, supporting data and calculations to demonstrate compliance with 1,3-dichloropropene limit.
	State-Only:	Yes.
(6)	**Requirement Source:**	**DE05NWP-001, Revision 2**
	Condition:	REPORTING Visible emission surveys conducted and a report of the maintenance conducted to maintain the subject exhaust system's tBACT operations must be submitted to Ecology within 30 days of completion of the survey with an assessment of the cause of visible emissions.
	Periodic Monitoring:	Compliance of this condition is met by submitting to Ecology within 30 days of completion of the survey with an assessment of the cause of visible emissions.
	Required Records:	Visible emission surveys conducted and a report of the maintenance.
	State-Only:	No.
(7)	**Requirement Source:**	**DE05NWP-001, Revision 2**
	Condition:	REPORTING Identification of any TAP not previously identified within the NOC Application or Supplement emissions estimates must be submitted to Ecology within 90 days of completion of laboratory analyses which verify emissions of that TAP from the project.
	Periodic Monitoring:	Compliance of this condition is met by submitting to Ecology within 90 days of completion of laboratory analyses which verify emissions of that TAP from the project.

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	Required Records:	Laboratory analysis.
	State-Only:	Yes.
(8)	**Requirement Source:**	**DE05NWP-001, Revision 2**
	Condition:	REPORTING
		Results of baseline emission assessments conducted must be submitted to Ecology within 90 days of completion of the assessment.
	Periodic Monitoring:	Compliance of this condition is met by submitting to Ecology within 90 days of completion of such assessment.
	Required Records:	Emission assessment results.
	State-Only:	No.

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1.4.26 DP: Ventilation Systems for Single-Shell Tank Categorical Waste Retrieval

Permittee AEI ID(s): P-200AREASST-001

Location and Description:	200E and 200W Areas, active ventilation with portable exhausters during SST categorical waste retrieval at 241-AX, 241-B, 241-BX, 241-BY, 241-C, 241-S, 241-SX, 241-T, 241-TX, 241-TY and 241-U Tank Farms. See DP 1.4.117 for ventilation at 241-A.
NSR Authorization/AOP Inclusion:	Approval Order DE05NWP-002, Revision 3 (12/11/2023).
Additional Requirement Citation(s):	N/A.

(1) Requirement Source: DE05NWP-002, Revision 3, and WAC 173-401-615(1)(b)

Condition:	EMISSION LIMITS Visible emissions from each tank ventilation exhauster stack or aggregated exhauster stack must not exceed 5%.
Periodic Monitoring:	Section 2.1, Tier 3.
Test Method:	(A) EPA Method 22. (B) EPA Method 9.
Test Frequency:	When visible emissions are observed.
Required Records:	(A) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology. (B) Visible emission records
State-Only:	No.

(2) Requirement Source: DE05NWP-002, Revision 3

Condition:	EMISSION LIMITS Tank ventilation exhauster systems for the 241-C SST farm 100 series tank (241-C-101 through 241-C-112) must not exceed cumulative flow rates of 7,000 ft^3/min (at standard temperature and pressure) for three exhausters individually limited to 1,000 ft^3/min, 3,000 ft^3/min, and 3,000 ft^3/min, respectively (at standard temperature and pressure).
Periodic Monitoring:	Compliance and monitoring of this condition must be demonstrated by stack gas flow and temperature measurement.
Required Records:	(A) Records of exhauster system stack flow rates and temperature records. (B) Records of calibration of stack gas flow rate and temperature measurement devices.
State-Only:	No.

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(3) Requirement Source: **DE05NWP-002, Revision 3**

Condition: EMISSION LIMITS

SST ventilation exhauster systems for the retrieval of wastes other than those of the 241-C tank farm 100 series tanks must not exceed 1,000 ft^3/min (at standard temperature and pressure).

Periodic Monitoring: Compliance and monitoring of this condition must be demonstrated by stack gas flow and temperature measurement.

Required Records:

(A) Records of exhauster system stack flow rates and temperature records.

(B) Records of calibration of stack gas flow rate and temperature measurement devices.

State-Only: No.

(4) Requirement Source: **DE05NWP-002, Revision 3**

Condition: EMISSION LIMITS

All TAPs, as submitted in the Permittee's NOC Applications, must be below their respective ASIL or Screening Level of Table 1 in Approval Order DE05NWP-002, Rev. 3.

Periodic Monitoring: Compliance and monitoring with this condition must be met by:

(A) Operating the exhauster systems only when in accord with tBACT emission controls found for this project (operation of the tank ventilation exhauster systems with moisture de-entrainment, pre-heater, and HEPA filtration in service in the treatment train).

(B) Development and implementation of a SAP for each tank retrieval. For each retrieval, the SAP must address the emission of a minimum of the three TAPs with the higher potential ambient concentration relative to their ASILs of WAC 173-460-150 and WAC 173-460-160 or relative to their Screening Level of Table 1 of the Approval Order DE05NWP-002, Rev. 3. The TAPs addressed in the SAP must be identified from Table 2 of the Approval Order DE05NWP-002, Rev. 3, and based upon best engineering judgment and most current tank content data. Analytical methods for the analysis must be the United States EPA, OSHA, or NIOSH approved, or by approved equivalent method.

Required Records:

(A) All monitoring and operations records required to operate and maintain the emission control equipment which implements tBACT as required in Periodic Monitoring above.

(B) SAPs developed for compliance demonstration as described in Periodic Monitoring above.

(C) Laboratory analysis result summaries of any samples undertaken after the effective date of the Approval Order DE05NWP-002, Rev. 3, from SST tank farm tank headspaces or SST ventilation system exhaust which are examined for organic species or other TAPs.

State-Only: Yes.

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(5) Requirement Source: **DE05NWP-002, Revision 3**

Condition: REPORTING

Visible emission surveys, conducted pursuant to Compliance Demonstration requirement 1.3.2, per NOC approval DE05NWP-002, and a report of the maintenance conducted to maintain the subject exhaust system's tBACT operations.

Periodic Monitoring: The reporting condition must be submitted to Ecology within 30 days of completion of the survey with an assessment of the cause of visible emissions.

Required Records: Visible emission surveys conducted and a report of the maintenance.

State-Only: No.

(6) Requirement Source: **DE05NWP-002, Revision 3**

Condition: REPORTING

Identification of any TAP not previously identified within the NOC Application or Supplement emissions estimates as defined in Table 2 of DE05NWP-002, Rev. 3, must be submitted to Ecology within 90 days of completion of laboratory analyses which verify emissions of that TAP from the project.

Periodic Monitoring: The reporting condition must be submitted to Ecology within 90 days of completion of laboratory analyses which verify emissions of that TAP from the project.

Required Records: Laboratory analysis.

State-Only: Yes.

(7) Requirement Source: **DE05NWP-002, Revision 3**

Condition: REPORTING

An annual schedule (Federal fiscal year basis) of anticipated operations and installations of exhauster systems.

Periodic Monitoring: The reporting condition must be submitted by November first of each year.

Required Records: Annual Schedule.

State-Only: Yes.

(8) Requirement Source: **DE05NWP-002, Revision 3**

Condition: OPERATIONAL NOTICE

Notification must be made at least ten days prior to initial operation of any exhauster system covered by this Approval Order DE05NWP-002, as revised, when installed to ventilate a tank not previously actively ventilated under that Approval Order.

Periodic Monitoring: N/A.

Required Records: N/A.

State-Only: Yes.

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1.4.27 DP: E-85 Fuel Station

Permittee AEI ID(s): G-E85FUELSTN-001

Location and Description:	600 Area adjacent to 200E Area, aboveground E-85 automotive fuel storage tank and dispensing at fuel station, does not include DP 1.4.36 gasoline storage and transport tanks.
NSR Authorization/AOP Inclusion:	Approval Order DE06NWP-001 (4/17/2006).
Additional Requirement Citation(s):	WAC 173-491-040(4)(b), WAC 173-491-040(4)(d), WAC 173-491-040(6)(b)(iii), and WAC 173-491-040(6)(d).

(1) Requirement Source: DE06NWP-001

Condition: Emission Limits

(A) Emissions of VOC must not exceed 40 tpy.

(B) All TAPs, as submitted in the Permittee's NOC Application, must be below their respective ASIL.

Periodic Monitoring: Record fuel storage tank loading of the E-85 fuel and verify NOC Condition 1.6 requirements for each load received. Compliance with the approval condition must be demonstrated by installation of BACT and tBACT emission controls including:

(A) Submerged or bottom fill pipe such that the pipe inlet is fully submerged when the fluid level in the tank is six inches (15.2 cm) or greater, and

(B) Fitting to vapor balance gasoline vapors with the delivery transport tank.

Required Records: Retention of fuel storage tank loading records detailed in NOC (DE06NWP-001) Approval Condition 1.6.

State-Only: No – VOC.

Yes - ASILs.

(2) Requirement Source: WAC 173-491-040

Condition: WAC 173-491-040(4)(b)

All gasoline storage tanks must be equipped with submerged or bottom fill lines and fittings to vapor balance gasoline vapors with the delivery transport tank.

Periodic Monitoring: N/A.

Required Records: N/A.

State-Only: Yes.

(3) Requirement Source: WAC 173-491-040

Condition: WAC 173-491-040(4)(d)

The owner or operator must not permit the loading of gasoline into a storage tank equipped with vapor balance fittings from a transport tank equipped with vapor balance fittings unless the vapor balance system is attached to the transport tank and operated satisfactorily.

Periodic Monitoring: N/A.

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Required Records: N/A.

State-Only: Yes.

(4) Requirement Source: WAC 173-491-040

Condition: WAC 173-491-040(6)(b)(iii)

(A) Operate the vapor collection system and the gasoline loading equipment during all loadings and unloadings of transport tanks equipped for emission control such that:

(i) The tank pressure will not exceed a pressure of eighteen inches of water or a vacuum of six inches of water;

(ii) The concentration of gasoline vapors is below the lower explosive limit (LEL, measured as propane) at all points a distance of one inch from potential leak sources; and

(iii) There are no visible liquid leaks except for a liquid leak of less than four drops per minute at the product loading connection during delivery.

(iv) Upon disconnecting transfer fittings, liquid leaks do not exceed ten millimeters (0.34 fluid ounces) per disconnect averaged over three disconnects.

(B) Repair and retest a vapor collection system that exceeds the limits of WAC 173-491-040(6)(b)(iii)(A) within fifteen days.

Periodic Monitoring: As established by the condition.

Required Records: As established by the condition.

State-Only: Yes.

(5) Requirement Source: WAC 173-491-040

Condition: WAC 173-491-040(6)(d)

(A) The owner or operator of a gasoline transport tank or vapor collection system must maintain records of all certification tests and repairs for at least two years after the test or repair is completed.

(B) The records of certification tests required by this section must, as a minimum, contain:

(i) The transport tank identification number;

(ii) The initial test pressure and the time of the reading;

(iii) The final test pressure and the time of the reading;

(iv) The initial test vacuum and the time of the reading;

(v) The final test vacuum and the time of the reading;

(vi) At the top of each report page the company name, date, and location of the tests on that page; and

(vii) Name and title of the person conducting the test.

(C) The owner or operator of a gasoline transport tank must annually certify that the transport tank passed the required tests.

(D) Copies of all records required under this section must immediately be made available to Ecology, upon written request, at any reasonable time.

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1	Periodic Monitoring:	As established by the condition.
2	Required Records:	As established by the condition.
3	State-Only:	Yes.

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1.4.28 DP: Volpentest Hazardous Materials Management and Emergency Response Training and Education Facility

Permittee AEI ID(s): J-HAMMER-001

Location and Description:	Volpentest HAMMER Training and Education Facility (2890 Horn Rapids Road, Richland, Washington). This DP covers multiple EUs/activities which are part of a distinct facility at the Hanford Site. For more information on which portions of the facility are covered, see the NSR authorization cited below.
NSR Authorization/AOP Inclusion:	Approval Order DE07NWP-001 (4/9/2007) and DE07NWP-001, Amendment 1 (7/31/2007).
Additional Requirement Citation(s):	N/A.

(1) Requirement Source: DE07NWP-001, as amended, and WAC 173-401-615(1)(b)

Condition:

(A) Visible emissions from training operations must not exceed 20% opacity. [WAC 173-400-040(2)]

(B) Visible emission surveys must be submitted to Ecology with an assessment of the cause of visible emissions and a report of the actions taken to prevent further excess visible emissions.

Periodic Monitoring: Section 2.1 visible emission surveys, if visible emissions from training operations materials other than those from "fog machines," are exhibited outside structures.

Test Method:

(A) EPA Method 22

(B) Ecology Method 9A.

Test Frequency: If visible emissions are observed (see Periodic Monitoring).

Required Records: Records of visible emission event surveys including visual opacity determination results.

State-Only: No.

(2) Requirement Source: DE07NWP-001, as amended

Condition: Fugitive emissions from training operations must be minimized. [WAC 173-400-040(4)(a)]

Periodic Monitoring: Use of operating procedures: (1) keep containers closed when not in use, and (2) ensure proper handling and storage to minimize unintentional losses.

Required Records: Records of (1) fugitive release control procedure training, and (2) events which detail non-compliance with fugitive release control procedures or unintentional releases and response to such events.

State-Only: No.

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(3) Requirement Source:	**DE07NWP-001, as amended**
Condition:	Emissions of all TAPs, as identified in Table 1 of NOC Order DE07NWP-001 (4/19/2007) and Amd 1 (7/31/2007), or newly identified, must be below their respective SQERs. [WAC 173-460-150)]
Periodic Monitoring:	Materials record-keeping.
Required Records:	Material balance records which detail materials receipt and disposal with a summary assessment of losses, calculated each calendar quarter. Emission of any TAP exceeding SQERs detailed in Table 1 of Order DE07NWP-001 must be reported to Ecology in accord with WAC 173-400-108 and -109. Identification of any TAP not previously identified within Order DE07NWP-001, must be submitted to Ecology within 90 days of initiation of use in training with an estimate of annual emissions.
State-Only:	Yes.

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1.4.29 DP: 181B and 182B Emergency Compression Ignition Engines

Permittee AEI ID(s): E-181B-001, E-182B-001, E-182B-002

Location and Description:	100 Area, emergency diesel engines to pump water from Columbia River to reservoir (E-181B-001) and from reservoir to site water supply grid (E-182B-001 and E-182B-002).
NSR Authorization/AOP Inclusion:	Approval Order DE07NWP-002, Revision 2 (12/2/2015).
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary Model Year 2007 Emergency CI Engines, 1 (E-181B-001) at 275 bhp, <10 liters/cylinder, Tier 3, and 2 (E-182B-001 and E-182B-002) at 700 bhp, <10 liters/cylinder, Tier 2; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: DE07NWP-002, Revision 2, and WAC 173-401-615(1)(b)

Condition:

(A) Visible emissions will not exceed 20% during acceleration mode [WAC 173-400-040(2), 40 CFR 60.4205(b), and 40 CFR 89.113(a)(1)].

(B) Visible emissions will not exceed 15% during lugging mode [40 CFR 60.4205(b), and 40 CFR 89.113(a)(2)].

Periodic Monitoring: Section 2.1, Tier 1, and as specified in Test Frequency below.

Test Method:

(A) EPA Method 22.

(B) Both EPA Method 9 and Ecology Method 9A.

Test Frequency: Each engine authorized by this order must be surveyed for visible emissions during maintenance and readiness testing and emergency-use based upon the following frequency or events:

(A) During maintenance and readiness testing, a visible emission survey must be conducted with each readiness test startup,

(B) During emergency-use operations exceeding, or anticipated to exceed, eight hours duration, a visible emissions survey must be conducted daily,

(C) Visible emissions of each engine must be determined by procedures detailed in 40 CFR 86, Subpart I (40 CFR 86.884 et seq.) within 90 days of initial startup and as required by Ecology.

Required Records: Results of visible emissions survey and EPA Method 9 tests conducted pursuant to periodic monitoring.

State-Only: No.

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(2) Requirement Source: **DE07NWP-002, Revision 2**

Condition: Emissions of PAHs will not result in ambient concentrations exceeding 4.8E-04 µg/m^3 [WAC 173-460-080(2)].

Periodic Monitoring: Compliance will be demonstrated by calculation of the sum of PAH TAP emissions from all engines employing air pollution emission factors of AP 42, Table 3.3-2, for engines less than 600 bhp, and AP-42, Table 3.4-4, for engines 600 bhp and higher.

Required Records: Calculations and dispersion analyses prepared semiannually in concert with cumulative operating hour calculations, retained for a minimum of 60 months. AP 42, fifth edition, must be used for the calculation. Dispersion analysis only needs to be performed if the calculated emissions exceed the SQERs. [WAC 173-460-080(2)(b)]

State-Only: Yes.

(3) Requirement Source: **DE07NWP-002, Revision 2**

Condition: Emissions of TAPs, as identified in the table below, will not exceed SQERs of WAC 173-460-080(2)(e) in effect 6/27/2007.

TAPs	Chemical Abstracts Service Registry Number	TAP Class	SQER	
			Lb/yr	Lb/hr
Benzene	71-43-2	A	20	
Toluene	108-88-3	B		5
Xylene	1330-20-7	B		5
1,3-Butadiene	106-99-0	A	0.5	
Formaldehyde	50-00-0	A	20	
Acetaldehyde	75-07-0	A	50	
Acrolein	107-02-8	B		0.02

Periodic Monitoring: Compliance will be demonstrated by calculation of the sum of TAP emissions from all engines employing air pollution emission factors of AP 42, Table 3.3-2, for engines less than 600 bhp, and AP-42, Table 3.4-3, for engines 600 bhp and higher.

Required Records: Calculations prepared semiannually in concert with cumulative operating hour calculations, retained for a minimum of 60 months. AP 42, fifth edition, must be used for the calculation. Table 3.4-3 of AP-42 does not estimate emissions of 1,3-Butadiene for larger engines. An emission factor of zero may be applied to 1,3-Butadiene for engines 600 bhp or larger.

State-Only: Yes.

(4) Requirement Source: **DE07NWP-002, Revision 2**

Condition: Emissions of NO_x and NMHC will not exceed 14.2 tpy (WAC 173-400-091, AP 42 emission factors for engines in NOC application operating 500 hours per year).

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Periodic Monitoring: Compliance will be demonstrated by:

(A) Engine Limitation

(i) Installation of engines certified to meet emission limitations of 40 CFR 89 [40 CFR 60.4211(c)], and

(ii) Installation of one engine rated no higher than 450 bhp and two engines rated no higher than 900 bhp each; and

(B) Operational Limitation

(i) All recommended O&M provisions supplied by the manufacturer(s) of the engine(s) will be current [40 CFR 60.4211(a)],

(ii) Operational monitoring in accord with installed non-resettable hour meter on each engine [40 CFR 60.4209(a)],

(iii) Operational hours of use for each engine, for purposes of maintenance checks and readiness testing must not exceed 100 hours per year unless approved by the Administrator of the EPA [40 CFR 60.4211(e)], and

(iv) Operational hours of use during emergency conditions must not be limited provided maintenance of records of emergency use are consistent with Required Records below.

Required Records:

(A) Manufacturer's engine certifications,

(B) Maintenance records, and

(C) Records of cumulative operating hours for each engine, calculated semiannually, retained for a minimum of 60 months.

State-Only: No.

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1.4.30 DP: Waste Treatment and Immobilization Plant Heaters and Dehumidifiers

Permittee AEI ID(s): E-WTPSITE-004

Location and Description: 200 Area, WTP, portable climate control equipment, 30 diesel heaters with varying capacities up to 1 MMBtu/hr each, 30 propane heaters at approximately 0.45 MMBtu/hr each, and 10 propane dehumidifiers at approximately 1 MMBtu/hr each.

NSR Authorization/AOP Inclusion: Approval Order DE07NWP-004 (11/21/2007).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE07NWP-004

Condition:

(A) Nitrogen Oxides (NO_x) emission must not exceed 16.2 tpy [WAC 173-400-110(2)(a)].

(B) TAP emissions must not exceed limits specified in Table 1 of Approval Order DE07NWP-004.

(C) Diesel heaters must be fired on ULSF/ULSD.

(D) Diesel heaters must not exceed 933,100 gallons of distillate fuel oil per year, based upon a daily rolling summation.

(E) Propane heaters and dehumidifiers must not exceed 1,109,500 gallons of propane per year, based upon a daily rolling summation.

Periodic Monitoring: Compliance must be monitored by:

(A) Operation in compliance with BACT/tBACT (implementation of vendor-recommended combustion and maintenance practices).

(B) Fuel analysis and consumption tracking, including day tank allocation.

Required Records: Fuel analysis data and consumption rates, including supporting data and calculations.

State-Only: No – NO_x, VOC, and CO.

Yes – TAPs.

(2) Requirement Source: DE07NWP-004

Condition: Visible emissions from diesel heaters must not exceed five % opacity.

Periodic Monitoring: Section 2.1, Tier 3.

Test Method:

(A) EPA Method 22.

(B) EPA Method 9.

Test Frequency: When visible emissions are observed.

Required Records: Visible emission survey records, if triggered.

State-Only: No.

Calculation Model: Not applicable.

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1.4.32 DP: Ventilation Systems for 241-SY and 241-AY/AZ Tank Farms

Permittee AEI ID(s): P-241SY-001, P-241AYAZ-001

Location and Description: 200E Area, 241-SY and 241-AY/AZ Tank Farms dedicated ventilation systems. See DP 1.4.116 for ventilation at 241-AP.

NSR Authorization/AOP Inclusion: Approval Order DE11NWP-001, Revision 4 (03/03/2016).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE11NWP-001, Revision 4

Condition: EMISSION LIMITS

Visible emissions will not exceed 5% opacity.

Periodic Monitoring: Compliance and monitoring must be met by Tier 3 visible Emission Survey requirements of Section 2.1. Should visible emissions be observed which are not solely attributable to water condensation, compliance must be met by performing an opacity determination utilizing EPA Method 9, providing that such determination must not place the visible emission observer in hazard greater than that identified for the general worker.

Test Method:

(A) EPA Method 22.

(B) If triggered, EPA Method 9.

Test Frequency: When visible emissions are observed.

Required Records:

(A) Visible emission survey records in which a visible emission was observed and is not solely attributable to water condensation.

(B) EPA Method 9 results if conducted.

(C) Visible emission survey records must be submitted to Ecology within 30 days of completion of the survey with an assessment of the cause of visible emissions and a report of the maintenance conducted to maintain the subject system's tBACT operations.

State-Only: No.

(2) Requirement Source: DE11NWP-001, Revision 4

Condition: EMISSION LIMITS

VOC emissions must not exceed the amounts listed in the table below from the 241-SY and 241-AY/AZ ventilation systems.

Tank Farm(s)	Maximum Amount (tpy)
241-SY	3.2
241-AY/AZ combined ventilation system (the 241-AY/AZ combined ventilation system is comprised of the initial AY/AZ exhauster system and the AY-102 annulus system)	3.3

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Periodic Monitoring:

(A) Compliance with this condition must be demonstrated by VOC stack sampling and calculations as described in Section 3.0, and applying these concentration readings with contemporaneous stack flow rate and temperatures to determine the mass release rate of VOCs in lb/yr.

(B) During solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the WTP operations compliance with Approval Condition must be demonstrated by monitoring emissions of all TAP emission limits as described in Section 3.5.

Test Method:

(A) VOC emissions must be assessed quarterly in accord with EPA approved procedures for each exhauster system.

(B) As described in Section 3.5 during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the WTP.

Test Frequency:

(A) Quarterly.

(B) As described in Section 3.5 during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the WTP.

Required Records:

(A) Records of exhauster system stack flow rates and temperature records.

(B) Laboratory analysis result summaries or emission monitoring results from tank headspaces or primary tank ventilation system exhaust for VOCs.

(C) Supporting data and calculations to demonstrate compliance of VOC emission limits.

State-Only: No.

(3) Requirement Source: DE11NWP-001, Revision 4

Condition: EMISSION LIMITS

All TAPs, as shown in Table 7 or 9 of Approval Order DE11NWP-001, Rev. 4 must be below their respective ASIL or approved through a Second Tier review. Approved TAP emissions per ventilation system are detailed in Table 7 for the 241-SY ventilation system and Table 9 for the 241-AY/AZ ventilation system.

Periodic Monitoring: Compliance with this condition must be met by:

(A) Development and implementation of an annual SAP for each exhauster system on a calendar year basis to meet requirements of DE11NWP-001, Rev. 4 Section 3.3. Each SAP must address the emission of a minimum of three TAPs with the highest potential ambient concentration relative to their ASILs of WAC 173-460-150 in addition to dimethyl mercury, n-nitrosodimethylamine, and chromium hexavalent: soluble, except chromic trioxide. The TAPs addressed in the SAP must be identified from DE11NWP-001, Rev. 4 Table 7 and 9

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and based on engineering judgment and most current tank content data. Analytical methods for the analyses must be the EPA, OSHA, or NIOSH approved, or by approved equivalent method.

(B) Stack sampling for each exhauster system as described in Section 3 of the DE11NWP-001 for TAPs, and applying these concentration readings with contemporaneous stack flow rates and temperatures to determine the mass release rates of these TAPs in pounds and their respective release rate averaging times per WAC 173-460-150. Identification of any TAP not previously identified within the NOC application must be submitted to Ecology within 90 days of completion of laboratory analyses which verify emissions of that TAP. Approved TAP emissions per ventilation system are detailed in DE11NWP-001, Rev. 4 Table 7 for the 241-SY ventilation system and DE11NWP-001, Rev. 4 Table 9 for the 241-AY/AZ ventilation system.

(C) During solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the WTP operations compliance with Approval Condition 1.1.3 must be demonstrated by monitoring emissions of all TAP emission limits as described in Section 3.5.

(D) Operating the exhauster systems in accordance with BACT and tBACT emission controls in place. These controls are operation of each primary tank ventilation exhauster system not exceeding the maximum ventilation rates shown in the DE11NWP-001, Rev. 4 Table 5 with the appropriate moisture de-entrainers, heaters, condensers, pre-filters, and/or two-stage HEPA filtration systems in service in each treatment train. Each treatment train must be consistent with the appropriate design specified in DE11NWP-001, Rev. 4, Finding 14.

(E) Identification of any exceedance of TAP emission limits of DE11NWP-001, Revision 4, Section 1.1 must be submitted to Ecology within 90 days of identification.

Test Method: Sampling and calculations identified in the DE11NWP-001 Section 3.3.

Test Frequency: Annually.

Required Records: Records must be organized in a readily accessible manner and cover a minimum of the most recent 60-month period. The records include:

(A) Records of exhauster system stack flow rates and temperature records.

(B) Records of calibration of stack gas flow rate and temperature measurement devices.

(C) Emission monitoring results required in DE11NWP-001, Rev. 4 Section 3.0.

(D) Supporting data and calculations to demonstrate compliance as detailed in DE11NWP-001, Rev. 4 Condition 3.3 and 1.1.3

(E) Laboratory analysis result summaries taken in accordance with DE11NWP-001, Rev. 4 from 241-SY or 241-AY/AZ tank farm tank headspaces or primary tank ventilation system exhaust for which are examined for organic species or other TAPs.

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(F) Documentation and record-keeping of BACT and tBACT compliance of emission controls.

State-Only: Yes.

(4) Requirement Source: DE11NWP-001, Revision 4

Condition: EMISSION LIMITS

Ammonia emissions must not exceed the amounts listed in the table below from the 241-SY and 241-AY/AZ ventilation systems.

Tank Farm(s)	Maximum Amount (lb/24-hr)
241-SY	19.2
241-AY/AZ combined ventilation system (the 241-AY/AZ combined ventilation system is comprised of the initial AY/AZ exhauster system and the AY-102 annulus system)	19.6

Periodic Monitoring:

(A) Compliance with Approval Condition 1.1.4 must be demonstrated by stack sampling as described in Section 3.0 for ammonia, and applying these concentration readings with contemporaneous stack flow rate and temperatures to determine daily release rate of ammonia.

(B) During solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the WTP operations compliance with Approval Condition 1.1.4 must be demonstrated by monitoring emissions of all TAP emission limits as described in Section 3.5.

Test Method: Ammonia sampling and analysis will be in accord with approved alternative sampling procedures including the use of Draeger tubes or direct reading instruments to measure stack gas concentration of ammonia providing such devices are spanned to appropriately measure the stack gas ammonia concentration. Stack flow rate and temperature will be applied with the ammonia stack gas concentration to report ammonia emission in terms of lb/24-hr.

Test Frequency: *Baseline Assessments* - Baseline assessment of ammonia stack concentrations must be sampled a minimum of three times within 90 days of commencement of operations. Results of baseline emission assessments must be submitted to Ecology within 90 days of completion of such assessment.

Quarterly Assessment - In order to maintain reasonable assurance of continued compliance with emission limitations from these exhauster systems, quarterly assessment of ammonia stack emissions will be conducted according to DE11NWP-001, Rev. 4, Section 3.1.1 and 3.4. A minimum of three samples or measurements must be taken each quarter to assess these emissions.

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Required Records: Results of baseline assessments, quarterly assessments, and ammonia monitoring as required by DE11NWP-001, Rev. 4, as well as supporting data and calculations to demonstrate compliance with ammonia limits of DE11NWP-001, Rev. 4.

State-Only: Yes.

(5) Requirement Source: DE11NWP-001, Revision 4

Condition: EMISSION LIMITS

Dimethyl mercury emissions must not exceed the amounts listed in the Table below from the 241-SY and 241-AY/AZ ventilation systems.

Tank Farm(s)	Maximum Amount (lb/24-hr)
241-SY	1.04E-3
241-AY/AZ combined ventilation system (the 241-AY/AZ combined ventilation system is comprised of the initial AY/AZ exhauster system and the AY-102 annulus system)	1.06E-3

Periodic Monitoring: During solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create gas release event, or Waste Feed Delivery operations to the WTP operations compliance with Approval Conditions, Dimethyl Mercury Emission Limits must be demonstrated by monitoring emissions of all TAP emission limits as described in section 3.5 of DE11NWP-001, Rev. 4.

Test Method: All sample collection, handling, and analysis activities will follow EPA approved procedures for each exhauster system or submission with subsequent approval by Ecology of an alternative procedure.

Test Frequency:

(A) Dimethyl mercury sample collection will start no sooner than 12 hours and be completed no later than 24 hours after the start of the activity described in 3.5.2.1 that requires sample collection.

(B) Analytical results will be reported to Ecology as soon as possible, but no later than 30 days after collection of the sample. It is acceptable to report to preliminary data and to use an informal transmittal method (e.g., email).

(C) The permittee will evaluate the data to determine, (3.5.2.2.1) if dimethyl mercury have remained below permit conditions.

Required Records: Results of emission assessments, supporting data and calculations to demonstrate compliance with dimethyl mercury limits.

State-Only: Yes.

(6) Requirement Source: DE11NWP-001, Revision 4

Condition: EMISSION LIMITS

N-Nitrosodimethylamine emissions must not exceed the amounts listed in the table below from the 241-SY and 241-AY/AZ ventilation systems.

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Tank Farm(s)	Maximum Amount (lb/yr)
241-SY	61.3
241-AY/AZ combined ventilation system (the 241-AY/AZ combined ventilation system is comprised of the initial AY/AZ exhauster system and the AY-102 annulus system)	64

Periodic Monitoring: During solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create gas release event, or Waste Feed Delivery operations to the WTP operations compliance with Approval Conditions, n-Nitrosodimethylamine Emission Limits must be demonstrated by monitoring emissions of all TAP emission limits as described in section 3.5 of DE11NWP-001, Rev. 4.

Test Method: All samples collection activities will follow EPA approved procedures for each exhauster system or submission with subsequent approval by Ecology of an alternative procedure.

Test Frequency: The permittee will evaluate the data to determine if n-Nitrosodimethylamine have remained below permit conditions.

Required Records: Results of emission assessments, supporting data and calculations to demonstrate compliance with n-Nitrosodimethylamine limits.

State-Only: Yes.

(7) Requirement Source: DE11NWP-001, Revision 4

Condition: EMISSION LIMITS

(A) Ammonia must be monitored as an indicator for compliance with TAP emission limits during solid mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the WTP as it can be measured near real time, is readily emitted by all tank farm exhausters and the rate of ammonia release is expected to change (increase) with tank waste solid disturbances. A maximum concentration of ammonia in ppm by volume of ammonia emitted will be used as an indicator for compliance with release rates of TAPs. The ppm value was calculated for each exhauster from the release rate of ammonia in the application. Table 6 of DE11NWP-001, Rev. 4, lists the maximum allowable ammonia reading in ppm for the exhausters in the AY/AZ and 241-SY tank farms during solid mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations.

(B) Ecology must be notified within 24 hours of any readings exceeding Table 6 values. This notification can be performed electronically (e.g., email) and must include, at a minimum, the reading(s) in exceedance, the exhauster system involved, and the elapsed time between compliant readings as discussed in Section 3.5.1.

(C) If stack effluent readings exceed Table 6 values, tank operations (i.e., waste disturbing activities) must cease in a safe and controlled manner. Tank operations may resume when stack effluent readings

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confirm that cumulative emissions will not exceed time weighted average emissions identified in Table 6. The initial start time in calculating the cumulative time weighted average emissions must be the time of collection of the effluent readings that exceed Table 6 values.

(D) The establishment of ammonia concentrations limit in Table 6 was calculated from the best currently available data on tank waste characteristics and engineering judgement on actual tank emission activity compared to theoretical tank emission activity. To confirm and then adjust the emission limits as actual performance data is collected during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations, a method of updating the limits is established in the following sections.

(E) During the start of tank activities that include solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations; the exhauster must be sampled for, at a minimum, dimethyl mercury, n-Nitrosodimethylamine, chromium hexavalent: soluble, except chromic trioxide, and ammonia. All sample collection activities will follow EPA approved procedures for each exhauster system or submission with subsequent approval by Ecology of an alternative procedure.

(F) Ammonia samples, at a minimum, will be collected at the start of dimethyl mercury sample collection, mid-way through the dimethyl mercury sample collection, and at the end of the dimethyl mercury sample collection.

(G) Dimethyl mercury sample collection will start no sooner than 12 hours and be completed no later than 24 hours after the start of the activity described in 3.5.2.1 that requires sample collection.

(H) Chromium hexavalent: soluble, except chromic trioxide, sample collection will start no sooner than 12 hours and be completed no later than 48 hours after the start of the activity described in 3.5.2.1 that requires sample collection.

(I) Analytical results will be reported to Ecology as soon as possible, but no later than 30 days after collection of the sample. It is acceptable to report preliminary data and to use an informal transmittal method (e.g., email).

(J) The permittee will evaluate the data to determine (3.5.2.2.1) if ammonia, dimethyl mercury and n-Nitrosodimethylamine have remained below permit conditions and (3.5.2.2.2) if ammonia limits provided sufficient indicator for emissions of other TAPs.

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(K) If the sampled ratio would result in an increased emission limit in Table 6, the permittee will need to specifically request for the increased emission limit to be entered into Table 6 (informal request is acceptable). The new emission limit will be effective on the date entered in Table 6 in the 'Update Date' column.

(L) If the sampled ratio results in a decreased emission limit in Table 6, the permittee will notify Ecology, and Ecology will enter the new limit into Table 6. The new emission limit will be effective on the date entered in Table 6 in the 'Update Date' column.

(M) Stack effluent readings of ammonia (as a surrogate compound) in ppm will be collected at least hourly during solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations to the WTP. The collected ppm reading will be recorded along with, at a minimum, the date and time of reading collection and activity type occurring in the tank during reading collection (e.g., pumping, sluicing, etc.).

(N) A reduction in frequency of ammonia readings is allowed when the conditions below are met. Any frequency reduction will be reset to one hour reading collection when the tank activities change (e.g. from pumping to sluicing, or sluicing to pumping, sluicing to extended reach sluicing, etc.) or a reading above Table 6 values is recorded.

(O) Upon collection of 100 representative readings (readings collected must have occurred during the activity being evaluated in for reading frequency reduction) and at least five working days of reading collection.

(P) The Permittee can request a reading frequency reduction by submitting to Ecology (electronic submittal is acceptable) all of the readings and calculations used. Ecology will review the submission and electronically notify the Permittee of their decision within five working days, unless Ecology notifies the Permittee of additional time needed to complete the review. The Permittee must have Ecology's approval before reducing reading frequency.

(Q) Reading frequency relief will occur in two steps. The first step is reducing reading collection from one hour to four hours. The second step is reducing reading collection from four hours to eight hours. Each relief step must independently meet condition 3.5.3.2 and 3.5.3.3.

(R) When tanks are acting as receiver tanks for solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create a gas release event, or Waste Feed Delivery operations or providing supernatant for sluicing activities in other tanks, the reading frequency will start at 4 hours. Relief to 8 hour reading frequency following the requirements of 3.5.3.2 and 3.5.3.3 is allowed.

(S) Changes in active mixing, retrieval, or Waste Feed Delivery operations in Tanks sending to the AP Farm will cause the reading frequency to reset to 4-hour intervals.

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(T) The permittee can request from Ecology relief of the AP Farm reading frequency reset when enough data exists to support exhauster emissions remain consistent regardless of the activities in active mixing, retrieval, or Waste Feed Delivery operations from the feed tanks.

(U) Operation of the subject primary tank ventilation systems is intended for the storage, treatment, sampling, and Waste Feed Delivery of waste contained in the tanks as described in the NOC application. For the purposes of this authorization, "Waste Feed Delivery" includes mixing and pumping as necessary and sufficient for transfer of wastes to or from the subject tank. Waste Feed Delivery operations may encompass waste sampling activity but such sampling must not, in and of itself, be deemed the basis for identifying operations as Waste Feed Delivery operations.

Periodic Monitoring: Compliance and monitoring must be demonstrated as described above.

Test Method: All sample collection activities will follow EPA approved procedures for each exhauster system or submission with subsequent approval by Ecology of an alternative procedure.

Test Frequency: Variable, as described in Condition above.

Required Records:

(A) Records of exhauster system stack flow rates and temperature records.

(B) Records of calibration of stack gas flow rate and temperature measurement devices.

(C) Emission monitoring results required in DE11NWP-001, Rev. 4, Section 3.0.

(D) Supporting data and calculations to demonstrate compliance as detailed in DE11NWP-001, Rev. 4, Conditions 3.5, 1.1.2, 1.1.3, 1.1.4, 1.1.5, and 1.1.6.

(E) Laboratory analysis result summaries taken in accordance with DE11NWP-001, Rev. 4 from 241-SY or 241-AY/AZ tank farm tank headspaces or primary tank ventilation system exhaust for which are examined for organic species or other TAPs.

(F) Documentation and record-keeping of BACT and tBACT compliance of emission controls.

(G) Waste Feed Delivery operations will be recorded into operation records sufficient to determine the onset and cessation of such operations for each tank subject to DE11NWP-001, Rev. 4.

(H) Operations and Maintenance (O&M) manuals.

State-Only: Yes.

(8) Requirement Source: DE11NWP-001, Revision 4

Condition: OPERATIONAL LIMITS

Normal DST primary tank ventilation system flow rates during Normal Operations (e.g. storage, retrieval, and sampling) are shown in the Table below.

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Ventilation Rates

Tank Farm(s)	Normal Operations (scfm)	Maximum Operations (scfm)
241-SY	1,360	2,500
241-AY/AZ	850	1,000
AY-102 Annulus	1,000	3,800
AY-102 Portable	1,600	3,000

Periodic Monitoring: Stack gas flow measurement at the same intervals as required by RAELs.

Required Records:

(A) Records of calibration of stack gas flow rate and temperature measurement devices.

(B) Records of exhaust system stack flow rate and temperature.

State-Only: No.

(9) Requirement Source: DE11NWP-001, Revision 4

Condition: EMISSION LIMITS: Baseline Assessments

(A) Ammonia stack concentrations must be sampled or measured a minimum of three times. Stack flow rate and temperature will be applied with ammonia stack gas concentration to report ammonia emission in terms of lb/24-hr.

(B) Dimethyl mercury sampling and analysis will be in accord with EPA approved procedures for each exhauster system.

Periodic Monitoring: Ammonia sampling and analysis will be in accord with approved alternative sampling procedures including the use of Draeger tubes or direct reading instruments to measure stack gas concentration of ammonia providing such devices are spanned to appropriately measure the stack gas ammonia concentration.

Test Method:

(A) Approved sampling procedures including the use of Draeger tubes or direct reading instruments to measure stack gas concentrations of ammonia.

(B) EPA approved procedures for Dimethyl mercury.

Test Frequency: Within 90 days after commencement of operations of each exhauster system.

Required Records:

(A) Stack flow rate and temperature readings.

(B) Ammonia emissions and concentrations.

(C) Sample collection methods for ammonia and dimethyl mercury.

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		(D) Dimethyl mercury concentrations.
	State-Only:	Yes.
(10)	**Requirement Source:**	**DE11NWP-001, Revision 4**
	Condition:	OPERATIONAL LIMITS
		No more than two of the three tanks in the 241-SY Tank Farm (241-SY-101 through 241-SY-103) must be under active mixing and Waste Feed Delivery operations at any one time. Waste Feed Delivery operations are defined as those which mix and transfer waste, including transfers to the WTP.
	Periodic Monitoring:	Waste Feed Delivery operations recorded into operational records sufficient to determine onset and cessation of such operations for each tank.
	Required Records:	Operational records sufficient to determine the onset and cessation of Waste Feed Delivery operations for each tank subject to Approval Order DE11NWP-001, as revised.
	State-Only:	No.
(11)	**Requirement Source:**	**DE11NWP-001, Revision 4**
	Condition:	OPERATIONAL LIMITS
		No more than two of the four tanks in the 241-AY and 241-AZ Tank Farms (241-AY-101, 241-AY-102, 241-AZ-101, and 241-AZ-102) must be under active mixing and Waste Feed Delivery operations at any one time. Waste Feed Delivery operations are defined as those which mix and transfer waste, including transfers to the WTP.
	Periodic Monitoring:	Waste Feed Delivery operations recorded into operational records sufficient to determine onset and cessation of such operations for each tank.
	Required Records:	Operational records sufficient to determine the onset and cessation of Waste Feed Delivery operations for each tank subject to Approval Order DE11NWP-001, as revised.
	State-Only:	No.
(12)	**Requirement Source:**	**DE11NWP-001, Revision 4**
	Condition:	OPERATIONAL LIMITS
		The ventilation systems must be operated in compliance with tBACT controls identified in DE11NWP-001, Rev.4.
	Periodic Monitoring:	Compliance with the condition must be met by operating the exhauster systems in accordance with tBACT emission controls for this project, as found in DE11NWP-001, Rev. 4.
	Required Records:	All monitoring and operation records required to operate and maintain the emission control equipment which implements tBACT.
	State-Only:	Yes.

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1.4.33 DP: 6608 Biosolids Treatment System

Permittee AEI ID(s): P-6608BIO-001

Location and Description: 200W Area, 6608 Biosolids Handling Facility and connected lagoons.

This DP covers multiple EUs/activities which are part of a distinct facility at the Hanford Site. For more information on which portions of the facility are covered, see the NSR authorization cited below.

NSR Authorization/AOP Inclusion: Approval Order DE12NWP-001, Revision 2 (5/1/2018).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE12NWP-001, Revision 2

Condition: All TAPs, as submitted in the Permittee's NOC Application, must be below their respective ASIL.

Periodic Monitoring:

(A) Annual collection and analysis of wastewater between the wastewater truck discharge point and the truck unloading chamber.

(B) Quarterly collection and analysis of wastewater between the wastewater truck discharge point and the truck unloading chamber for hydrogen sulfide precursors sulfate and sulfide, unless a reduced sampling frequency is approved by Ecology.

Test Method: Surrogate wastewater sample analyzed with an EPA approved method in 40 CFR Part 136.

Test Frequency:

(A) Annually for ammonia, chloroform, and 1,3-dichlorobenzene.

(B) Quarterly for hydrogen sulfide precursors, or less frequently if approved by Ecology in writing.

Required Records: SAP(s), calculations, and results of analyses.

State-Only: Yes.

Calculation Model: Model 11.

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1.4.35 DP: Hanford Site Asbestos Landfill

Permittee AEI ID(s): L-ASBESTOSLF-001

Location and Description: 600 Area, asbestos portion of the solid waste landfill on Army Loop Road.

NSR Authorization/AOP Inclusion: No NSR authorization identified (historical equipment), Initial AOP application (DOE/RL-95-07, as supplemented).

Additional Requirement Citation(s): 40 CFR 61, NESHAP Subpart M; 40 CFR 61.151(a) and 40 CFR 61.151(d).

(1) Requirement Source: NESHAP Subpart M

Condition: 40 CFR 61.151(a)

(A) Either discharge no visible emissions to the outside air from the inactive waste disposal site subject to this permit condition; or

(B) Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material. In desert areas where vegetation would be difficult to maintain, at least 8 additional centimeters (3 inches) of well-graded, nonasbestos crushed rock may be placed on top of the final cover instead of vegetation and maintained to prevent emissions; or

(C) Cover asbestos-containing waste with at least 60 centimeters of compacted nonasbestos-containing material and maintain to prevent exposure.

Periodic Monitoring: N/A.

Required Records: N/A.

State-Only: No.

(2) Requirement Source: NESHAP Subpart M

Condition: 40 CFR 61.151(d)

Notify in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at this waste disposal site. If construction will begin on a date other than the one in the original notice, notice of the new date must be provided at least 10 working days in advance and in no event must excavation begin earlier than the date specified in the original notification. The notice must include the following:

(A) Starting and completion dates.

(B) The reason for disturbing the waste.

(C) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material.

(D) The location for any temporary storage site and the final disposal site.

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1	Periodic Monitoring:	N/A.
2	Required Records:	N/A.
3	State-Only:	No.

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1.4.36 DP: 600 Area Gasoline Distribution (G-6290)

Permittee AEI ID(s): G-6290GASDIST-001

Location and Description: 600 Area adjacent to 200E, gasoline storage and transport tanks at fuel station, does not include DP 1.4.27 E-85 storage tank and dispensing.

NSR Authorization/AOP Inclusion: No NSR authorization identified (historical equipment), Initial AOP application (DOE/RL-95-07, as supplemented).

Additional Requirement Citation(s): WAC 173-491-040(4)(b), WAC 173-491-040(4)(d), WAC 173-491-040(6)(b)(iii), and WAC 173-491-040(6)(d).

(1) Requirement Source: WAC 173-491-040

Condition: WAC 173-491-040(4)(b)

All gasoline storage tanks must be equipped with submerged or bottom fill lines and fittings to vapor balance gasoline vapors with the delivery transport tank.

Periodic Monitoring: N/A.

Required Records: N/A.

State-Only: Yes.

(2) Requirement Source: WAC 173-491-040

Condition: WAC 173-491-040(4)(d)

The owner or operator must not permit the loading of gasoline into a storage tank equipped with vapor balance fittings from a transport tank equipped with vapor balance fittings unless the vapor balance system is attached to the transport tank and operated satisfactorily.

Periodic Monitoring: N/A.

Required Records: N/A.

State-Only: Yes.

(3) Requirement Source: WAC 173-491-040

Condition: WAC 173-491-040(6)(b)(iii)

(A) Operate the vapor collection system and the gasoline loading equipment during all loadings and unloadings of transport tanks equipped for emission control such that:

(i) The tank pressure will not exceed a pressure of eighteen inches of water or a vacuum of six inches of water;

(ii) The concentration of gasoline vapors is below the lower explosive limit (LEL, measured as propane) at all points a distance of one inch from potential leak sources; and

(iii) There are no visible liquid leaks except for a liquid leak of less than four drops per minute at the product loading connection during delivery.

(iv) Upon disconnecting transfer fittings, liquid leaks do not exceed ten millimeters (0.34 fluid ounces) per disconnect averaged over three disconnects.

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(B) Repair and retest a vapor collection system that exceeds the limits of WAC 173-491-040(6)(b)(iii)(A) within fifteen days.

Periodic Monitoring: As established by the condition.

Required Records: As established by the condition.

State-Only: Yes.

(4) Requirement Source: WAC 173-491-040

Condition: WAC 173-491-040(6)(d)

(A) The owner or operator of a gasoline transport tank or vapor collection system must maintain records of all certification tests and repairs for at least two years after the test or repair is completed.

(B) The records of certification tests required by this section must, as a minimum, contain:

(i) The transport tank identification number;

(ii) The initial test pressure and the time of the reading;

(iii) The final test pressure and the time of the reading;

(iv) The initial test vacuum and the time of the reading;

(v) The final test vacuum and the time of the reading;

(vi) At the top of each report page the company name, date, and location of the tests on that page; and

(vii) Name and title of the person conducting the test.

(C) The owner or operator of a gasoline transport tank must annually certify that the transport tank passed the required tests.

(D) Copies of all records required under this section must immediately be made available to Ecology, upon written request, at any reasonable time.

Periodic Monitoring: As established by the condition.

Required Records: As established by the condition.

State-Only: Yes.

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1.4.39 DP: 385 Building Emergency Compression Ignition Engine

Permittee AEI ID(s): E-385-001

Location and Description:	300 Area, 385 Building, fire pump emergency CI engine.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 18-ESQ-0007, dated 10/24/2017.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary 2017 Model Emergency CI Fire Pump Engine, 175 bhp, <10 liters/cylinder; NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

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1.4.44 DP: 2720EA Emergency Generator Spark Ignition Engine

Permittee AEI ID(s): E-2720EA-001

Location and Description:	200E Area, 2720EA Building, emergency generator SI engine for building.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], AOP Renewal 2 application (DOE/RL-2011-27, Rev. 0, submitted with Letter 11-EMD-0063, dated 5/20/2011).
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart JJJJ, Stationary 2011 Model Emergency Lean-Burn SI Engine, 40 bhp Phase 1 Class II; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart JJJJ, see Section 2.12 below.

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1.4.45 DP: Rattlesnake Barricade Emergency Generator Spark Ignition Engine

Permittee AEI ID(s): E-RATTLESNAKE-001

Location and Description:	600 Area, Beloit Ave., emergency generator SI engine for Rattlesnake Barricade.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 20-ESQ-0035, dated 3/3/2020.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart JJJJ, Stationary 2019 Model Emergency Rich-Burn SI Engine, 92 bhp Phase 1 Class II; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart JJJJ, see Section 2.12 below.

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1.4.49 DP: 400 Area Emergency Compression Ignition Engine

Permittee AEI ID(s): E-400AEMGFIREPMP-001

Location and Description:	400 Area, Fast Flux Test Facility Complex, P-28 emergency fire pump CI engine serving entire 400 Area.
NSR Authorization/AOP Inclusion:	No NSR authorization identified (historical equipment), AOP Renewal 2 application supplement (DOE/RL-2012-04, Rev. 0).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency Fire Pump CI Engine, Model Year 1972, Engine Power 230 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.50 DP: 600 Area Fire Station Emergency Generator Spark Ignition Engine

Permittee AEI ID(s): E-609AFIRESTN-001

Location and Description:	600 Area, Building 609A Fire Station, building emergency generator SI engine.
NSR Authorization/AOP Inclusion:	No NSR authorization identified (historical equipment), AOP Renewal 2 application (DOE/RL-2011-27, Rev. 0, submitted with Letter 11-EMD-0063, dated 5/20/2011).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency SI Engine, Model Year 2004, Engine Power 162 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.51 DP: 2721E Emergency Generator Spark Ignition Engine

Permittee AEI ID(s): E-2721E-001

Location and Description:	200E Area, emergency generator SI engine adjacent to 2721E Safeguard and Security Notification Center.
NSR Authorization/AOP Inclusion:	No NSR authorization identified (historical equipment), AOP Renewal 2 application (DOE/RL-2011-27, Rev. 0, submitted with Letter 11-EMD-0063, dated 5/20/2011).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency SI Engine, Model Year 2000, Engine Power 225 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.52 DP: Yakima Barricade Emergency Generator Spark Ignition Engine

Permittee AEI ID(s): E-YAKIMABARR-001

Location and Description:	600 Area, Route 11A, emergency generator SI engine for the Yakima Barricade.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], AOP Renewal 2 application (DOE/RL-2011-27, Rev. 0, submitted with Letter 11-EMD-0063, dated 5/20/2011).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency SI Engine, Model Year 2004, Engine Power 30 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.53 DP: 282B Emergency Compression Ignition Engine

Permittee AEI ID(s): E-282BDEEPWELL-001

Location and Description:	200E Area, 282B Building, WESF Deepwell pump emergency water supply CI engine.
NSR Authorization/AOP Inclusion:	No NSR authorization identified (historical equipment), AOP Renewal 2 application (DOE/RL-2011-27, Rev. 0, submitted with Letter 11-EMD-0063, dated 5/20/2011).
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency CI Engine, Model Year Pre-1970, Engine Power 97 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.61 DP: Waste Treatment and Immobilization Plant Construction Site Pretreatment Tower Crane Emergency Generator Compression Ignition Engine

Permittee AEI ID(s): E-WTPSITE-003

Location and Description:	200E Area, WTP Construction Site, Pretreatment Tower Crane emergency generator CI engine.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 13-ECD-0051 dated 6/24/2013.
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency CI Engine, Model Year 2002, Engine Power 170 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.62 DP: Waste Treatment and Immobilization Plant Construction Site High-Level Waste Tower Crane Emergency Generator Compression Ignition Engine

Permittee AEI ID(s): E-WTPSITE-002

Location and Description:	200E Area, WTP Construction Site, HLW Tower Crane emergency generator CI engine.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 13-ECD-0051 dated 6/24/2013.
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency CI Engine, Model Year 2002, Engine Power 170 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.64 DP: Waste Transfer Corridor East Light Tower Compression Ignition Engines

Permittee AEI ID(s): E-WTCORREAST-900

Location and Description: 200E Area, Waste Transfer Corridor East light towers.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0046, dated 7/6/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the Waste Transfer Corridor East in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0046 provided the design criteria in Tables 1.4.64.1 and 1.4.64.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.64.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.64.2 Large Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0046 and WAC 173-400-110

Condition: Waste Transfer Corridor East Light Tower Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Engine inventory must not exceed any of the authorized configurations: eight small, four small and one large, or two large light plant engines.

(C) Designs must be consistent with Tables 1.4.64.1 and 1.4.64.2.

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Periodic Monitoring:	Inventory of stationary engines used for the Waste Transfer Corridor East Light Tower. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.
Required Records:	Engine inventory.
State-Only:	No.

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1.4.65 DP: Waste Transfer Corridor West Light Tower Compression Ignition Engines

Permittee AEI ID(s): E-WTCORRWEST-900

Location and Description: 200E Area, Waste Transfer Corridor West light towers.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0046, dated 7/6/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the Waste Transfer Corridor West in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0046 provided the design criteria in Tables 1.4.65.1 and 1.4.65.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.65.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.65.2 Large Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0046 and WAC 173-400-110

Condition: Waste Transfer Corridor West Light Tower Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Engine inventory must not exceed any of the authorized configurations: eight small, four small and one large, or two large light plant engines.

(C) Designs must be consistent with Tables 1.4.65.1 and 1.4.65.2.

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Periodic Monitoring:	Inventory of stationary engines used for the Waste Transfer Corridor West Light Tower. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.
Required Records:	Engine inventory.
State-Only:	No.

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1.4.66 DP: C Farm Trailer Area Light Tower Compression Ignition Engines

Permittee AEI ID(s): E-CFARMTRAILER-900

Location and Description: 200E Area, 241-C Tank Farm Trailer Area light towers.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0046, dated 7/6/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the C Farm Trailer Area in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0046 provided the design criteria in Table 1.4.66.1 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.66.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0046 and WAC 173-400-110

Condition: C Farm Trailer Area Light Tower Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Engine inventory must not exceed eight small light plant engines.

(C) Design must be consistent with Table 1.4.66.1.

Periodic Monitoring: Inventory of stationary engines used for the C Farm Trailer Area Light Tower. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.67 DP: C Farm Light Tower Compression Ignition Engines

Permittee AEI ID(s): E-CFARM-900

Location and Description: 200E Area, 241-C Tank Farm light towers.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0046, dated 7/6/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the C Farm in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0046 provided the design criteria in Tables 1.4.67.1 and 1.4.67.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.67.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.67.2 Large Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0046 and WAC 173-400-110

Condition: C Farm Light Tower Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Engine inventory must not exceed any of the authorized configurations: eight small, four small and one large, or two large light plant engines.

(C) Designs must be consistent with Tables 1.4.67.1 and 1.4.67.2.

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Periodic Monitoring:	Inventory of stationary engines used for the C Farm Light Tower. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.
Required Records:	Engine inventory.
State-Only:	No.

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1.4.68 DP: AY/AZ Farm DMI-LT Light Tower Compression Ignition Engines

Permittee AEI ID(s): E-AYAZDMI-900

Location and Description: 200E Area, A Complex.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0046, dated 7/6/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the A Complex in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0046 provided the design criteria in Tables 1.4.68.1 and 1.4.68.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.68.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.68.2 Large Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0046 and WAC 173-400-110

Condition: AY/AZ Farm DMI-LT Light Tower Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Engine inventory must not exceed any of the authorized configurations: eight small, four small and one large, or two large light plant engines.

(C) Designs must be consistent with Tables 1.4.68.1 and 1.4.68.2.

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Periodic Monitoring:	Inventory of stationary engines used for the AY/AZ Farm DMI-LT Light Tower. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.
Required Records:	Engine inventory.
State-Only:	No.

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1.4.70 DP: AN Farm Light Tower Compression Ignition Engines

Permittee AEI ID(s): E-ANFARM-900

Location and Description: 200E Area, 241-AN Tank Farm light tower engines.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0046, dated 7/6/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the AN Farm in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0046 provided the design criteria in Tables 1.4.70.1 and 1.4.70.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.70.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.70.2 Large Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0046 and WAC 173-400-110

Condition: AN Farm Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Engine inventory must not exceed any of the authorized configurations: eight small, four small and one large, or two large light plant engines.

(C) Designs must be consistent with Tables 1.4.70.1 and 1.4.70.2.

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Periodic Monitoring:	Inventory of stationary engines used for the AN Farm. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.
Required Records:	Engine inventory.
State-Only:	No.

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1.4.72 DP: 251W Substation Emergency Backup Generator Spark Ignition Engine

Permittee AEI ID(s): E-251SUBST-001

Location and Description:	600 Area north of 200 Area, A8 Substation (251W) Electrical Utilities Dispatch emergency generator SI engine.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)],15-ESQ-0092, dated 7/20/2015.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart JJJJ, Stationary 2010 Model Emergency Lean-Burn SI Engine, 97.7 bhp Phase 1 Class II; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart JJJJ, see Section 2.12 below.

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1.4.75 DP: 400 Aggregate Area Compression Ignition Engines

Permittee AEI ID(s): E–400AAGGREGATE-900

Location and Description: 400 Area, Light plants and generators engines within the FFTF and MASF fenceline.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ESQ-0021, dated 12/12/2016.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants and generators at the 400 Aggregate Area in a flexible configuration, as limited in Condition (1) below. 17-ESQ-0021 provided the design criteria in Tables 1.4.75.1 and 1.4.75.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.75.1 Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 25 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.75.2 Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ESQ-0021 and WAC 173-400-110

Condition: 400 Aggregate Area CI Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.75.1 and 1.4.75.2.

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Periodic Monitoring:	Inventory of stationary engines used for the 400 Aggregate Area CI Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.
Required Records:	Engine inventory.
State-Only:	No.

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1.4.79 DP: 222-S Compression Ignition Engine for Direct Drive Ventilation

Permittee AEI ID(s): N/A

Location and Description:	200W Area, CI engine directly powering exhaust fan EF-4 for the 222-S Facility.
NSR Authorization/AOP Inclusion:	Approval Order DE15NWP-001, Revision 1 (9/08/2017).
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary 2015 Model Non-Emergency CI Engine, 333 bhp, < 10 liters/cylinder, Tier 4, No DPF Installed; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: DE15NWP-001, Revision 1

Condition: Total Emission Limits.

(A) Emissions of NO_X will not exceed 18.1 tpy.

(B) Emissions of CO will not exceed 1.16 tpy.

(C) Emissions of PM will not exceed 0.193 tpy.

(D) Emissions of total unburned hydrocarbons will not exceed 0.257 tpy.

(E) Emissions of NO_2 will not exceed ASIL limit of 470 µg/m3.

(F) Emissions of DEEP will not exceed ASIL limit of 0.00333 µg/m3.

Periodic Monitoring:

(A) Install engine to meet emission limitations of 40 CFR Part 89 [40 CFR 60.4211(c)]

(B) Maintain in accordance with all recommended O&M provisions supplied by the manufacturer of the engine [40 CFR 60.4211(a)].

(C) Operation of a non-resettable hour meter.

(D) Operating and maintaining the stationary CI internal combustion engine and control devices according to the manufacturer's emission-related written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer [40 CFR 60.4211(a)].

(E) Installing and configuring the engine according to manufacturer specifications [40 CFR 60.4211(c)].

Required Records:

(A) Manufacturer's engine certifications retained from initial use through the ten-year life of the engine.

(B) Maintenance records for maintenance conducted.

(C) Records of cumulative operating hours for each engine, calculated semi-annually, will be retained for a minimum of 60 months.

State-Only: NSR thresholds – No.

ASILs - Yes.

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(2) Requirement Source: DE15NWP-001, Revision 1

Condition:	Emissions Limit.
	Emissions of SO_2 will not exceed 0.386 tpy.
Periodic Monitoring:	Recordkeeping.
Test Method:	ASTM International D2622 or any test method approved under 40 CFR 80.585, if performing a fuel analysis.
Test Frequency:	Annually, if performing a fuel analysis.
Required Records:	Vendor documentation or fuel analysis showing sulfur content < 0.015%.
State-Only:	No.

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1.4.80 DP: Waste Treatment and Immobilization Plant Effluent Management Facility

Permittee AEI ID(s): P-WTPEMF-001

Location and Description: 200E Area, facility associated with the WTP.

This DP covers multiple EUs/activities which are part of a distinct facility at the Hanford Site. For more information on which portions of the facility are covered, see the NSR authorization cited below.

NSR Authorization/AOP Inclusion: Approval Order DE16NWP-003, Revision 1 (12/20/2019).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE16NWP-003, Revision 1

Condition: Visible emissions will not exceed 5% opacity.

Periodic Monitoring: Compliance and monitoring must be met by Tier 3 visible Emission Survey requirements of Section 2.1. Should visible emissions be observed which are not solely attributable to water condensation, compliance must be met by performing an opacity determination utilizing EPA Method 9, providing that such determination must not place the visible emission observer in hazard greater than that identified for the general worker.

Test Method:

(D) EPA Method 22.

(E) EPA Method 9.

Test Frequency: When visible emissions are observed.

Required Records: Visible emission survey records in which a visible emission was observed and is not solely attributable to water condensation. EPA Method 9 results if conducted. Visible emission survey records must be submitted to Ecology within 30 days of completion of the survey with an assessment of the cause of visible emissions and a report of the maintenance conducted to maintain the subject system's tBACT operations.

State-Only: No.

(2) Requirement Source: DE16NWP-003, Revision 1

Condition: All TAPs, as submitted in the Permittee's NOC Application as Table 1 and subsequent follow-on informational email, must be below their respective ASIL or approved through a Second Tier review.

Periodic Monitoring: Emission unit sampling as described below. Apply readings to determine the mass release rate of these TAPs in pounds and their respective release rate averaging times in WAC 173-460-150.

Test Method: Analytical methods for the analyses must be the EPA, OSHA, or NIOSH approved, or by Ecology-approved equivalent method.

Test Frequency:

(A) Baseline assessments for mercury and dimethyl mercury within 90 days after commencement of operations with actual tank waste.

(B) Annual.

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Required Records:

(A) Permittee will develop and implement an annual SAP. The SAP must address a minimum of the three analytes with the highest potential ambient concentration relative to their ASILs of WAC 173-460-150 in addition to dimethyl mercury. The SAP will need to be submitted and approved by Ecology before sampling occurs.

(B) Supporting data and calculations to demonstrate compliance.

(C) Laboratory analysis result summaries taken in accordance with this approval condition.

State-Only: Yes.

(3) Requirement Source: DE16NWP-003, Revision 1

Condition:

(A) Dimethyl mercury emissions must not exceed 1.01E-04 lb/24-hr.

(B) Ecology must be notified within 24 hours of receiving the analytical results of any exceedance of the dimethyl mercury emission limit. An assessment of the cause of the dimethyl mercury exceedance must be submitted to Ecology within 30 days of receiving the analytical results.

(C) If measured dimethyl mercury values exceed the limit in two calendar monthly samples in a 12-month rolling period, the facility will need to cease waste processing operation in a safe and controlled manner. The facility can continue to run to maintain the LAW melters in a safe and operable condition, provided feed to the melters after the point in which the second exceedance is identified does not contain, potentially contain, or create dimethyl mercury. Operations can restart waste operations once an assessment of the cause of the exceedances has been completed and corrective action(s) to prevent future exceedances have been submitted and approved by Ecology.

(D) If the EMF operated at a higher ranking during the calendar month but samples of dimethyl mercury were collected during a lower ranked operational status, Ecology must be notified within 30 days of sample collection. The notification must include an explanation and justification for why the sample was not collected at the highest ranked operational status which occurred during the month.

Periodic Monitoring: Emission unit sampling as described below. Contemporaneous stack flow rate, temperature, and pressure will be applied with the stack as concentration to report dimethyl mercury in terms of lb/24-hr.

Test Method:

(A) Dimethyl mercury sampling and analysis will be in accord with the EPA approved procedures or Ecology-approved alternative procedures, including the use of sorbent tubes.

(B) Monthly sampling for dimethyl mercury must be collected in accordance with the facility operation status precedential ranking listed in DE16NWP-003, Rev. 1, Condition 3.3.

Test Frequency: Monthly.

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Required Records:	
	(A) Permittee will develop and implement a SAP that must address monthly sampling of dimethyl mercury. This SAP is in addition to the SAP for annual sampling and analysis of TAPs. The dimethyl mercury SAP will need to be submitted and approved by Ecology before sampling occurs.
	(B) Supporting data and calculations to demonstrate compliance, including operational status during sample collection.
	(C) Documentation of highest operational status for each calendar month.
	(D) Monthly analytical results of dimethyl mercury sampling.
State-Only:	Yes.

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1.4.81 DP: High-Purge Operation of Rotary Core Tank Sampling System

Permittee AEI ID(s): P-ROTARCORESMPLR-001, and P-ROTARCORESMPLR-002

Location and Description: 200E and 200W Area Tank Farms, Operation of up to two core sampling systems with high purge gas flow rates and portable exhauster systems for SST, DST, and Miscellaneous Tanks.

NSR Authorization/AOP Inclusion: Approval Order DE14NWP-001 (10/01/2019).

Additional Requirement Citation(s): WAC 173-400-040(2).

(1) Requirement Source: DE14NWP-001, and WAC 173-401-615(1)(b)

Condition: Visible emissions from the exhauster stack associated with high air purge operations must not exceed five percent opacity.

Periodic Monitoring:

(A) Compliance and monitoring must be met by Section 2.1, Tier 3 Visible Emissions Survey requirements. Should visible emissions be observed which are not solely attributable to water condensation, compliance must be met by performing an opacity determination utilizing EPA Method 9, providing that such determination must not place the visible emission observer in hazard greater than that identified for the general worker.

(B) Results of opacity determinations due to visible emissions which are not solely attributable to water condensation must be submitted to Ecology within 30 days of completion of the determination with an assessment of the cause of visible emissions and a report of the maintenance conducted to maintain the subject exhaust systems tBACT operations.

Test Method:

(A) EPA Method 22.

(B) EPA Method 9.

Test Frequency: None specified (as needed for monitoring and compliance with AOP Attachment 2).

Required Records:

(A) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology.

(B) Visible emission surveys records and reports, if necessary.

State-Only: No.

(2) Requirement Source: DE14NWP-001

Condition: All TAPs, as shown in Table 1 of Approval Order DE14NWP-001, must be below their respective ASIL or approved through a Second Tier review.

Periodic Monitoring: Compliance with this condition must be met by:

(A) Stack sampling for high air purge operations as described in Section 3 of DE14NWP-001 for TAPs, and applying these concentration readings with contemporaneous stack flow rates and temperatures and operating times to determine the mass release rates of these TAPs

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in pounds and their respective release rate averaging times in WAC 173-460-150.

(B) Identification of any TAP not previously identified within the NOC application must be submitted to Ecology within 90 days of completion of laboratory analyses which verify emissions of that TAP.

(C) High purge gas mode rolling monthly calculations must be submitted to Ecology by January 31. The submission will cover the previous 12 months (i.e., January through December) hour meter readings and calculation of total hours of operation.

(D) Ecology must be notified within seven days of any calculation of the rolling monthly calculations that indicate exceedance of 300 hours of operations on a rolling monthly basis.

Test Method: Sampling and calculations identified in the DE14NWP-001 Section 3.0.

Test Frequency:

(A) Initial sampling the first time the core sampler is operated in rotary core mode in each tank.

(B) Resampling when the core sampler is operated in rotary core mode in any tank in which waste transfers have occurred since initial sampling.

Required Records: Records must be organized in a readily accessible manner and cover a minimum of the most recent 60-month period. The records include:

(A) Records of stack flow rates, temperatures, and operating times.

(B) Records of calibration of stack gas flow rate and temperature measurement devices.

(C) Emission monitoring results required in DE14NWP-001 Section 3.2.

(D) Supporting data and calculations to demonstrate compliance as detailed in DE14NWP-001 Condition 1.4.3.

(E) Laboratory analysis result summaries from tank headspaces or primary tank ventilation system exhaust which are examined for organic species or other TAPs.

State-Only: Yes.

(3) Requirement Source: DE14NWP-001

Condition: Ammonia emissions from the project associated with DE14NWP-001 must not exceed 3.83 lb/24-hr.

Periodic Monitoring: Sampling for high air purge operations as described in Section 3 of DE14NWP-001 for ammonia, and applying these concentration readings with contemporaneous stack flow rates and temperatures and operating times to determine the daily release rate of ammonia.

Test Method: Sampling and calculations identified in the DE14NWP-001 Section 3.0.

Test Frequency:

(A) Initial sampling the first time the core sampler is operated in rotary core mode in each tank.

(B) Resampling when the core sampler is operated in rotary core mode in any tank in which waste transfers have occurred since initial sampling.

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	Required Records:	Records must be organized in a readily accessible manner and cover a minimum of the most recent 60-month period. The records include: (A) Records of stack flow rates, temperatures, and operating times. (B) Records of calibration of stack gas flow rate and temperature measurement devices. (C) Emission monitoring results required in DE14NWP-001Section 3.1. (D) Supporting data and calculations to demonstrate compliance as detailed in DE14NWP-001 Condition 1.4.4.
	State-Only:	Yes.
(4)	**Requirement Source:**	**DE14NWP-001**
	Condition:	The core sampling system will have an operating exhaust system connected with the effluent from the tank being sampled when operating in high purge mode.
	Periodic Monitoring:	Compliance with the condition must be met by operating the exhaust system associated with the core sampling system in accordance with Condition 1.3.1 of DE14NWP-001.
	Required Records:	N/A.
	State-Only:	No.
(5)	**Requirement Source:**	**DE14NWP-001**
	Condition:	The core sampling system is limited to operating 300 hours annually in high gas purge mode.
	Periodic Monitoring:	Recording operating hours using a non-resettable hour meter while core sampling system is operating in high purge gas mode.
	Required Records:	Run time records and totals on a 12-month rolling sum basis.
	State-Only:	No.
(6)	**Requirement Source:**	**DE14NWP-001**
	Condition:	The ventilation systems must be operated in compliance with tBACT controls identified in DE14NWP-001 which have been determined to be an exhauster system with at least a pre-filter and one nuclear-grade HEPA filter.
	Periodic Monitoring:	Compliance with the condition must be met by operating the exhauster systems in accordance with tBACT emission controls for this project, as found in DE14NWP-001.
	Required Records:	All monitoring and operation records required to operate and maintain the emission control equipment which implements tBACT.
	State-Only:	No.

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1.4.82 DP: Ventilation Systems for 241-AW Tank Farm

Permittee AEI ID(s): P-241AW-001

Location and Description: 200E Area, 241-AW Tank Farm, dedicated ventilation system.

NSR Authorization/AOP Inclusion: Approval Order DE18NWP-001 (12/20/2019) and DE18NWP-001, Amendment A (2/3/2020).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE18NWP-001, as amended, and WAC 173-401-615(1)(b)

Condition: Visible emissions from each stack (296-A-46 and 296-A-47) must not exceed five % opacity.

Periodic Monitoring: Compliance and monitoring must be met by Section 2.1, Tier 3, Visible Emissions Survey requirements. Should visible emissions be observed which are not solely attributable to water condensation, compliance must be met by performing a Section 2.1, Tier 1, opacity determination utilizing EPA Method 9, providing that such determination must not place the visible emission observer in hazard greater than that identified for the general worker.

Test Method:

(A) EPA Method 22.

(B) EPA Method 9.

Test Frequency: None specified (as needed for monitoring and compliance with AOP Attachment 2).

Required Records:

(A) Results of any Tier 1 visible emissions surveys used to demonstrate compliance with the visible emissions limit.

(B) Maintenance and operational records for the maintenance and operation of abatement control used to comply with the visible emissions limit.

State-Only: No.

(2) Requirement Source: DE18NWP-001, as amended

Condition: The maximum flow rate from primary AW Tank Farm exhausters (296-A-46 and 296-A-47) must not exceed 3,000 scfm.

Periodic Monitoring: Compliance and monitoring of this condition must be demonstrated by stack gas flow and temperature measurement.

Test Method: Not specified.

Test Frequency: None specified (as needed for monitoring and compliance with AOP Attachment 2).

Required Records:

(A) Records of exhauster system stack flow rates and temperature records.

(B) Records of calibration of stack gas flow rate and temperature measurement devices.

State-Only: No.

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(3) Requirement Source: **DE18NWP-001, as amended**

Condition: At no time must more than two of the six tanks in the 241-AW Tank Farm be under waste disturbing activities.

Periodic Monitoring:

(A) Waste disturbing activities will be recorded into operational records sufficient to determine the onset and cessation of such operations for each tank in the AW Tank Farm.

(B) Activities not defined as waste disturbing or non-waste disturbing in DE18NWP-001 must be evaluated for the potential to create a gas release event.

Required Records:

(A) Operational records sufficient to determine the onset and cessation (start and stop times) of waste disturbing activities for the AW Tank Farm.

(B) Evaluations of activities to determine their potential to disturb waste and create a gas release event.

State-Only: No.

(4) Requirement Source: **DE18NWP-001, as amended**

Condition: EMISSION LIMITS

All TAPs, as shown in Table 1 of Approval Order DE18NWP-001, must be below their respective ASIL or approved through a WAC 173-460-090 Second Tier review.

Periodic Monitoring:

(A) Operating the exhauster systems (296-A-46 and 296-A-47) only when in accordance with tBACT emission controls for the project. tBACT for this project has been determined to be operation of the exhauster systems not exceeding 3,000 scfm with moisture de-entrainer, pre-heater, pre-filters, and a two-stage HEPA filtration system in service in the treatment train.

(B) Quarterly assessments, as described in a SAP submitted to Ecology before sampling occurs and also upon subsequent revisions, of at least the three TAPs with the greatest potential ambient concentration relative to their ASILs in addition to assessment of dimethyl mercury, hexavalent chromium, and ammonia.

Test Method: EPA, OSHA, or NIOSH approved, or by an Ecology-approved equivalent methods. Contemporaneous stack flow rate and temperature will be applied with the stack gas concentration to report emissions in terms of the ASIL averaging period (lb/hr, lb/24-hr, or lb/yr). Reported results must include tank waste conditions (quiescent or disturbed) at the time of sampling.

Test Frequency: Quarterly.

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Required Records:

(A) Documentation and record-keeping of tBACT compliance of emission control found for this project (operation of the exhauster systems not exceeding 3,000 scfm with moisture de-entrainer, pre-heater, pre-filters, and a two-stage HEPA filtration system in service in the treatment train).

(B) Records of calibration of stack gas flow rate measurement devices used to demonstrate compliance with TAP limits.

(C) Maintenance and operational records for the maintenance and operation of abatement control used to comply with the emissions limit.

(D) Laboratory analysis result summaries of samples from the AW Tank Farm ventilation system exhausters (296-A-46 and 296-A-47) which are examined for organic species, criteria pollutants, or other TAPs.

State-Only: Yes.

(5) Requirement Source: DE18NWP-001, as amended

Condition: EMISSIONS LIMITS

Emissions of dimethyl mercury must not exceed 2.83E-06 g/s or 5.38E-04 lb/24-hr from either exhauster system (296-A-46 and 296-A-47).

Periodic Monitoring:

(A) Operating the exhauster systems (296-A-46 and 296-A-47) only when in accordance with tBACT emission controls for the project. tBACT for this project has been determined to be operation of the exhauster systems not exceeding 3,000 scfm with moisture de-entrainer, pre-heater, pre-filters, and a two-stage HEPA filtration system in service in the treatment train.

(B) Dimethyl mercury emission assessments monthly as described in a SAP submitted to Ecology before sampling occurs and also upon subsequent revisions.

Test Method: EPA, OSHA, or NIOSH approved, or by an Ecology-approved equivalent method, including the use of Draeger tubes or direct reading instruments to measure stack gas concentrations of dimethyl mercury. Contemporaneous stack flow rate and temperature will be applied with the stack gas concentration to report dimethyl mercury in terms of lb/24-hr. Reported results must include tank waste conditions (quiescent or disturbed) at the time of sampling.

Test Frequency: Monthly sampling for dimethyl mercury must be collected during waste disturbing activities. If waste disturbing activities do not occur during the calendar month, the monthly sampling for dimethyl mercury must then be collected during quiescent tank conditions and justification must be provided.

Required Records:

(A) Results of emission assessments, baseline and monthly emission monitoring results, supporting data and calculations to demonstrate compliance with dimethyl mercury limits.

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(B) Maintenance and operational records for the maintenance and operation of abatement control used to comply with the emissions limit.

(C) SAP.

State-Only: Yes.

(6) Requirement Source: DE18NWP-001, as amended

Condition: EMISSIONS LIMITS

Emissions of hexavalent chromium must not exceed 8.73E-04 g/s or 60.6 lb/yr from either exhauster system (296-A-46 and 296-A-47).

Periodic Monitoring:

(A) Operating the exhauster systems (296-A-46 and 296-A-47) only when in accordance with tBACT emission controls for the project. tBACT for this project has been determined to be operation of the exhauster systems not exceeding 3,000 scfm with moisture de-entrainer, pre-heater, pre-filters, and a two-stage HEPA filtration system in service in the treatment train.

(B) Hexavalent chromium emission assessments annually as described in a SAP submitted to Ecology before sampling occurs and also upon subsequent revisions.

Test Method: EPA, OSHA, or NIOSH approved, or by an Ecology-approved equivalent method, including the use of Draeger tubes or direct reading instruments to measure stack gas concentrations of hexavalent chromium. Contemporaneous stack flow rate and temperature will be applied with the stack gas concentration to report hexavalent chromium in terms of lb/24-hr. Reported results must include tank waste conditions (quiescent or disturbed) at the time of sampling.

Test Frequency: Annual sampling for hexavalent chromium must be collected during waste disturbing activities. If waste disturbing activities do not occur during the calendar year, the annual sampling for hexavalent chromium must then be collected during quiescent tank conditions and justification must be provided.

Required Records:

(A) Results of emission assessments, baseline and monthly emission monitoring results, supporting data and calculations to demonstrate compliance with hexavalent chromium limits.

(B) Maintenance and operational records for the maintenance and operation of abatement control used to comply with the emissions limit.

(C) SAP.

State-Only: Yes.

(7) Requirement Source: DE18NWP-001, as amended

Condition: EMISSIONS LIMITS

Emissions of ammonia must not exceed 2.46 g/s or 468 lb/24-hr from either exhauster system (296-A-46 and 296-A-47).

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Periodic Monitoring: Ammonia emission assessments bi-annually as described in a SAP submitted to Ecology before sampling occurs and also upon subsequent revisions.

Test Method: EPA, OSHA, or NIOSH approved, or by an Ecology-approved equivalent method, including the use of Draeger tubes or direct reading instruments to measure stack gas concentrations of ammonia. Contemporaneous stack flow rate and temperature will be applied with the stack gas concentration to report Ammonia in terms of lb/24-hr. Reported results must include tank waste conditions (quiescent or disturbed) at the time of sampling.

Test Frequency: Bi-annual sampling for ammonia must be collected during waste disturbing activities. If waste disturbing activities do not occur during the calendar year, the bi-annual sampling for ammonia must then be collected during quiescent tank conditions and justification must be provided.

Required Records:

(A) Results of emission assessments, baseline and bi-annual emission monitoring results, supporting data and calculations to demonstrate compliance with ammonia limits.

(B) SAP.

State-Only: Yes.

(8) Requirement Source: DE18NWP-001, as amended

Condition: BASELINE ASSESSMENTS

(A) In addition to periodic assessments, baseline assessments are required for hexavalent chromium, dimethyl mercury, ammonia, and the three TAPs with the greatest potential ambient concentration relative to their ASIL.

(B) The initial baseline assessment must occur within 90 days of commencement of exhauster operation with the 60-foot stack height. This assessment also satisfies the requirement for the first monthly, quarterly, annual, or bi-annual periodic monitoring.

(C) One additional baseline assessment is required immediately upon commencing each of the following activities, for the first time, with the 60-foot stack height:

(i) Operation of a mixing pump,

(ii) Operation of the feed pump to the 242-A Evaporator,

(iii) Operation of the air lift circulator(s),

(iv) Transfer of tank waste,

(v) Addition of chemicals for pH adjustment,

(vi) Sluicing, and

(vii) Water addition greater than 72,000 gallons.

Periodic Monitoring: As described in SAP(s) submitted to Ecology before sampling occurs and also upon subsequent revisions.

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	Test Method:	EPA, OSHA, or NIOSH approved, or by an Ecology-approved equivalent method, including the use of Draeger tubes or direct reading instruments to measure stack gas concentrations of ammonia. Contemporaneous stack flow rate and temperature will be applied with the stack gas concentration to report Ammonia in terms of lb/24-hr. Reported results must include tank waste conditions (quiescent or disturbed) at the time of sampling.
	Test Frequency:	Single assessments required upon triggering conditions.
	Required Records:	
		(A) Results of baseline emission monitoring results, supporting data and calculations to demonstrate compliance with TAP limits.
		(B) SAP(s).
	State-Only:	Yes.
(9)	**Requirement Source:**	**DE18NWP-001, as amended**
	Condition:	REPORTING
		Results of emission assessments conducted must be submitted to Ecology within 90 days of completion of the assessment.
	Periodic Monitoring:	Compliance of this condition is met by submitting to Ecology within 90 days of completion of such assessment.
	Required Records:	Emission assessment results.
	State-Only:	No.
(10)	**Requirement Source:**	**DE18NWP-001, as amended**
	Condition:	REPORTING
		Any failures, outages, or other adverse conditions of tBACT abatement control technology must be reported to Ecology with 24 hours or by the close of the next business day, whichever is later.
	Periodic Monitoring:	Compliance of this condition is met by submitting to Ecology within 24 hours or the close of the next business day, whichever is later.
	Required Records:	Reports of tBACT failures, outages, or other adverse conditions.
	State-Only:	No.
(11)	**Requirement Source:**	**DE18NWP-001, as amended**
	Condition:	REPORTING
		Any notifications submitted to Health regarding emission units 296-A-46 and 296-A-47, as part of Radioactive Air Emissions License FF-01, must also be submitted to Ecology.
	Periodic Monitoring:	Compliance of this condition is met by submitting copies of notifications to Ecology.
	Required Records:	Notifications regarding emission units 296-A-46 and 296-A-47.
	State-Only:	No.

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(12) Requirement Source: **DE18NWP-001, as amended**

Condition:	REPORTING Identification of any TAP not previously identified within the NOC Application or Supplement emissions estimates must be submitted to Ecology within 90 days of completion of laboratory analyses which verify emissions of that TAP from the project.
Periodic Monitoring:	Compliance of this condition is met by submitting to Ecology within 90 days of completion of laboratory analyses which verify emissions of that TAP from the project.
Required Records:	Laboratory analysis.
State-Only:	Yes.

(13) Requirement Source: **DE18NWP-001, as amended**

Condition:	REPORTING Identification of any exceedance of the visible emissions, TAP, flow rate, or tank disturbance limits must be submitted to Ecology within seven days of identification.
Periodic Monitoring:	Compliance of this condition is met by submitting to Ecology reports of limit exceedance within seven days of identification of such an exceedance.
Required Records:	Exceedance reports.
State-Only:	Yes.

(14) Requirement Source: **DE18NWP-001, as amended**

Condition:	REPORTING Visible emission surveys conducted and a report of the maintenance conducted to maintain the subject exhaust system's tBACT operations must be submitted to Ecology within 30 days of completion of the survey with an assessment of the cause of visible emissions.
Periodic Monitoring:	Compliance of this condition is met by submitting to Ecology within 30 days of completion of the survey with an assessment of the cause of visible emissions.
Required Records:	Visible emission surveys conducted and a report of the maintenance conducted.
State-Only:	No.

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1.4.83 DP: 241-AX Tank Farm Area Light Plant Compression Ignition Engines

Permittee AEI ID(s): E-AXFARM-900

Location and Description: 200E Area, 241-AX Tank Farm Area light plants.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0049, dated 7/12/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the AX Farm Area in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0049 provided the design criteria in Tables 1.4.83.1 and 1.4.83.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.83.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.83.2 Large Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0049 and WAC 173-400-110

Condition: AX Farm Area Light Plant Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.83.1 and 1.4.83.2.

(C) Engines must be in one of the following configurations at all times, with the ability to switch between configurations at any time:

(i) No more than eight small (≤ 16.9 bhp) light plant stationary engines,

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(ii) No more than four small and one large (> 16.9 and ≤ 71.3 bhp) light plant stationary engines, or

(iii) No more than two large light plant stationary engines.

Periodic Monitoring: Inventory of stationary engines used for the AX Farm Area. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.84 DP: AY-102 Control Trailer Area Light Plant and Generator Compression Ignition Engines

Permittee AEI ID(s): E-AY102CTRLTRLR-900

Location and Description: 200E Area, AY-102 Control Trailer Area light plants and generators.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0049, dated 7/12/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants and a generator at the AY-102 Control Trailer Area in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0049 provided the design criteria in Tables 1.4.84.1 and 1.4.84.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.84.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.84.2 Large Light Plant & Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0049 and WAC 173-400-110

Condition: AY-102 Control Trailer Area Light Plant & Generator Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.84.1 and 1.4.84.2.

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(C) Engines must be in one of the following configurations at all times, with the ability to switch between configurations at any time:

(i) No more than eight small (≤ 16.9 bhp) light plant stationary engines,

(ii) No more than four small and one large (> 16.9 and ≤ 71.3 bhp) light plant & generator stationary engines, or

(iii) No more than two large light plant & generator stationary engines.

Periodic Monitoring: Inventory of stationary engines used for the AY-102 Control Trailer Area. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.85 DP: Inter-Farm AX Access Area Light Plant and Generator Compression Ignition Engines

Permittee AEI ID(s): E-INTERAXFARM-900

Location and Description: 200E Area, Inter-Farm AX Access Area light plants and generators.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0049, dated 7/12/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants and a generator at the Inter-Farm AX Access Area in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0049 provided the design criteria in Tables 1.4.85.1 and 1.4.85.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.85.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.85.2 Large Light Plant & Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0049 and WAC 173-400-110

Condition: Inter-Farm AX Access Area Light Plant & Generator Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.85.1 and 1.4.85.2.

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(C) Engines must be in one of the following configurations at all times, with the ability to switch between configurations at any time:

(i) No more than eight small (≤ 16.9 bhp) light plant stationary engines,

(ii) No more than four small and one large (> 16.9 and ≤ 71.3 bhp) light plant & generator stationary engines, or

(iii) No more than two large light plant & generator stationary engines.

Periodic Monitoring: Inventory of stationary engines used for the Inter-Farm AX Access Area. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.86 DP: Inter A-Farm Construction Area Light Plant and Generator Compression Ignition Engines

Permittee AEI ID(s): E-INTERAFARM-900

Location and Description: 200E Area, Inter A-Farm Construction Area light plants and generators.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0049, dated 7/12/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants and a generator at the Inter-Farm Construction Area in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0049 provided the design criteria in Tables 1.4.86.1 and 1.4.86.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.86.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.86.2 Large Light Plant & Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0049 and WAC 173-400-110

Condition: Inter-Farm Construction Area Light Plant and Generator Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.86.1 and 1.4.86.2.

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		(C) Engines must be in one of the following configurations at all times, with the ability to switch between configurations at any time: (i) No more than eight small (≤ 16.9 bhp) light plant stationary engines, (ii) No more than four small and one large (> 16.9 and ≤ 71.3 bhp) light plant and generator stationary engines, or (iii) No more than two large light plant & generator stationary engines.
	Periodic Monitoring:	Inventory of stationary engines used for the Inter-Farm Construction Area. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.
	Required Records:	Engine inventory.
	State-Only:	No.

DRAFT

1.4.87 DP: Inter A-Farm Parking Area Light Plant Compression Ignition Engines

Permittee AEI ID(s): E-INTERAFARMPARK-900

Location and Description: 200E Area, Inter A-Farm Parking Area light plants.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0049, dated 7/12/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the Inter A-Farm Parking Area in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0049 provided the design criteria in Table 1.4.87.1 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.87.1 Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0049 and WAC 173-400-110

Condition: Inter-Farm Parking Area Light Plant Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Table 1.4.87.1.

(C) No more than eight small (≤ 16.9 bhp) light plant stationary engines may be installed at any time.

Periodic Monitoring: Inventory of stationary engines used for the Inter-Farm Parking Area. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.88 DP: Marshalling Yard Area Light Plant Compression Ignition Engines

Permittee AEI ID(s): E-MARSHALYARD-900

Location and Description: 200E Area, Marshalling Yard Area light plants.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0049, dated 7/12/2017.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the Marshalling Yard Area in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0049 provided the design criteria in Table 1.4.88.1 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.88.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0049 and WAC 173-400-110

Condition: Marshalling Yard Area Light Plant Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Table 1.4.88.1.

(C) No more than eight small (≤ 16.9 bhp) light plant stationary engines may be installed at any time.

Periodic Monitoring: Inventory of stationary engines used for the Marshalling Yard Area. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.89 DP: MO098, MO164, MO173, and MO174 Trailer Area Light Plant Compression Ignition Engines

Permittee AEI ID(s): E-MO098-900, E-MO164-900, E-MO173-900, and E-MO174-900

Location and Description:	200E Area, MO098, MO164, MO173, and MO174 Trailer Area light plants.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 17-ECD-0049, dated 7/12/2017.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants at the MO098, MO164, MO173, and MO174 Trailer Area in a flexible configuration, as limited in Condition (1) below. Letter 17-ECD-0049 provided the design criteria in Tables 1.4.89.1 and 1.4.89.2 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.89.1 Small Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.89.2 Large Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 17-ECD-0049 and WAC 173-400-110

Condition: MO098, MO164, MO173, and MO174 Trailer Area Light Plant Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.89.1 and 1.4.89.2.

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(C) Engines must be in one of the following configurations at all times, with the ability to switch between configurations at any time:

(i) No more than eight small (≤ 16.9 bhp) light plant stationary engines,

(ii) No more than four small and one large (> 16.9 and ≤ 71.3 bhp) light plant stationary engines, or

(iii) No more than two large light plant stationary engines.

Periodic Monitoring: Inventory of stationary engines used for the MO098, MO164, MO173, and MO174 Trailer Area Light Plant Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.90 DP: MO194 and MO195 Trailer Area Compression Ignition Engines

Permittee AEI ID(s): E-MO194-900 and E-MO195-900

Location and Description:	200E Area, MO194 and MO195 Tailer Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the MO194 and MO195 Trailer Area in a flexible configuration, as limited in Condition (1) below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.90.1 through 1.4.90.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.90.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.90.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.90.3 Large Light Plant & Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.90.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	< 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.90.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-0003 and WAC 173-400-110

Condition: MO194 and MO195 Trailer Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.90.1 through 1.4.90.5.

Periodic Monitoring: Inventory of stationary engines used for the MO194 and MO195 Trailer Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.91 DP: Wye Barricade Emergency Generator Spark Ignition Engine

Permittee AEI ID(s): E-WYEBARR-001

Location and Description:	600 Area, Route 4 South, emergency generator SI engine for Wye Barricade adjacent to 6701 Building.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 20-ESQ-0035, dated 3/3/2020.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart JJJJ, Stationary 2019 Model Emergency Rich-Burn SI Engine, 146 bhp Phase 1 Class II; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart JJJJ, see Section 2.12 below.

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1.4.92 DP: 506BA Telecommunications Facility North Emergency Generator Compression Ignition Engine

Permittee AEI ID(s): E-506BA-001

Location and Description:	600 Area, Route 3 Between 200E and 200W, 506BA Building emergency generator CI engine.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 17-ESQ-0096, dated 8/30/2017.
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency CI Engine, Model Year 1984, Engine Power 100 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.93 DP: 182B Reservoir and Pump House Emergency Generator Compression Ignition Engine

Permittee AEI ID(s): E-182BRESPMPGEN-001

Location and Description:	100 Area, water infrastructure, emergency generator CI engine at 182B Reservoir and Pump House.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 17-ESQ-0096, dated 8/30/2017.
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency CI Engine, Engine Year 1968, Engine Power 160 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.94 DP: 200E Sewage Transfer System Main Lift Emergency Generator Compression Ignition Engine

Permittee AEI ID(s): E-2903EA-001

Location and Description:	200E Area, Baltimore Ave. and 12th Street, emergency generator CI engine for main lift station for transfer to 6608 Biosolids Treatment facility.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 18-ESQ-0078, dated 7/12/2018.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary 2017 Model Emergency CI Engine, 198 bhp, < 10 liters/cylinder, Tier 3; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

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1.4.95 DP: 273 Air Conditioning Compression Ignition Engine

Permittee AEI ID(s): E-273E-001

Location and Description:	200E Area, generator CI engine used to power HVAC unit(s) to the 273E building during hot weather.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ESQ-0028, dated 2/11/2020.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary After 2014 (2020 Request) Model Non-Emergency CI Engine, 97 bhp, < 10 liters/cylinder, Tier 4; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

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1.4.96 DP: 2711EA Air Conditioner Compression Ignition Engine

Permittee AEI ID(s): E-2711EA-001

Location and Description:	200E Area, generator CI engine used to power HVAC unit(s) to the 2711EA building during hot weather.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ESQ-0028, dated 2/11/2020.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary After 2014 (2020 Request) Model Non-Emergency CI Engine, 97 bhp, < 10 liters/cylinder, Tier 4; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

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1.4.97 DP: 2711EB Air Conditioner Compression Ignition Engine

Permittee AEI ID(s): E-2711EB-001

Location and Description:	200E Area, generator CI engine used to power HVAC unit(s) to the 2711EB building during hot weather.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ESQ-0028, dated 2/11/2020.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary After 2014 (2020 Request) Model Non-Emergency CI Engine, 161 bhp, < 10 liters/cylinder, Tier 4; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

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1.4.98 DP: L-895 200W Emergency Compression Ignition Engine

Permittee AEI ID(s): E-200WCPWTF-001

Location and Description:	200W Area, emergency generator CI engine adjacent to CPWTF.
NSR Authorization/AOP Inclusion:	Approval Order DE19NWP-001, Revision 1 (5/30/2023).
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary 2017 Model Emergency CI Engine, 1,829 bhp, < 10 liters/cylinder, Tier 2; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: DE19NWP-001, Revision 1

Condition:	Engine must operate no more than 55 hours per year for non-emergency use, as defined in DE19NWP-001.
Periodic Monitoring:	Nonresettable hour meter and recordkeeping.
Required Records:	Maintain records documenting hours of emergency and non-emergency operation, compiled monthly, on a rolling 12-month basis.
State-Only:	No.

(2) Requirement Source: DE19NWP-001, Revision 1

Condition:	Visible emissions must not exceed 20% opacity or remain visible at the property boundary.
Periodic Monitoring:	(A) Quarterly EPA Method 9 observations. (B) Investigation of complaints regarding visible emissions. (C) Notification of Ecology upon receipt of a complaint.
Test Method:	EPA Methods 9 and 22.
Test Frequency:	EPA Method 9 quarterly, EPA Method 22 only when a visual emission-related complaint is received.
Required Records:	EPA Method 9 observation and complaint investigation records.
State-Only:	No.

(3) Requirement Source: DE19NWP-001, Revision 1

Condition:	Low-load/idle operation (presumed as 30.0% of engine capacity or less, unless manufacturer has more stringent recommendation) must be minimized to the extent practicable during maintenance and other non-emergency operation.
Periodic Monitoring:	Annual review of O&M manual(s) and updates for any modification to emission units or operating procedures.

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Required Records:

(A) Instructions in the O&M manual(s) to minimize low-load/idle operation to the extent practicable.

(B) Estimates of the approximate percentage of time non-emergency operation is at low load.

(C) Documentation of date and reviewer for O&M manual reviews.

State-Only: Yes.

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1.4.99 DP: Central Plateau Water Treatment Facility Discharge to Treated Effluent Disposal Facility Lagoons

Permittee AEI ID(s): P-L897WSTLAGN-001

Location and Description: 200E Area, lagoons near Building 6653.

NSR Authorization/AOP Inclusion: Approval Order DE19NWP-001, Revision 1 (5/30/2023).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE19NWP-001, Revision 1

Condition:	CPWTF Chloroform Limits: (A) Combined surface area of the three sludge lagoons must not exceed 10,605 square feet. (B) Lagoon sludge chloroform concentration must not exceed 4.42 micrograms per liter.
Periodic Monitoring:	Monthly chloroform testing of discharge to lagoons and annual review of O&M manual(s)
Test Method:	As specified in an appropriate SAP. Chlorine Residual targets must be identified within O&M manual(s).
Test Frequency:	Monthly.
Required Records:	SAP(s), O&M manual(s), water sampling records, chlorine residual concentrations. Records generated for other permits, such as Quarterly Disinfection By-Product Compound Reports, can be used for this recordkeeping.
State-Only:	Yes.

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1.4.100 DP: Central Plateau Water Treatment Facility L-849 Sanitary Water Storage in 200 East

Permittee AEI ID(s): T-L849WTRTNK-001

Location and Description: 200E Area, L-849 Potable Water Tank located near 282E Building.

NSR Authorization/AOP Inclusion: Approval Order DE19NWP-001, Revision 1 (5/30/2023).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE19NWP-001, Revision 1

Condition:	CPWTF Chloroform Limits: L-849 Potable Water Tank chloroform concentration must not exceed 85.6 micrograms per liter.
Periodic Monitoring:	Weekly chlorine residual testing of discharge to L-849 Potable Water Tank and annual review of O&M manual(s)
Test Method:	As specified in an appropriate SAP. Chlorine Residual targets must be identified within O&M manual(s).
Test Frequency:	Weekly chlorine residual testing for water discharged to the L-849 Potable Water Tank.
Required Records:	SAP(s), O&M manual(s), water sampling records, chlorine residual concentrations. Records generated for other permits, such as Quarterly Disinfection By-Product Compound Reports, can be used for this recordkeeping.
State-Only:	Yes.

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1.4.101 DP: Central Plateau Water Treatment Facility L-850 Sanitary Water Storage in 200 West

Permittee AEI ID(s): T-L850WTRTNK-001

Location and Description:	200W Area, tank located near 282W Building, L-850 Potable Water Tank.
NSR Authorization/AOP Inclusion:	Approval Order DE19NWP-001, Revision 1 (5/30/2023).
Additional Requirement Citation(s):	N/A.

(1) Requirement Source: DE19NWP-001, Revision 1

Condition:	CPWTF Chloroform Limits:
	L-850 Potable Water Tank chloroform concentration must not exceed 85.6 micrograms per liter.
Periodic Monitoring:	Weekly chlorine residual testing of discharge to L-850 Potable Water Tank and annual review of O&M manual(s)
Test Method:	As specified in an appropriate SAP. Chlorine Residual targets must be identified within O&M manual(s).
Test Frequency:	Weekly chlorine residual testing for water discharged to the L-850 Potable Water Tank.
Required Records:	SAP(s), O&M manual(s), water sampling records, chlorine residual concentrations. Records generated for other permits, such as Quarterly Disinfection By-Product Compound Reports, can be used for this recordkeeping.
State-Only:	Yes.

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1.4.102 DP: Gable Mountain Spark Ignition Engines – 6220 Building Backup

Permittee AEI ID(s): E-6220MET-001

Location and Description:	600 Area, 6220 Building at base of 622 Meteorological Tower, emergency SI engines.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 21-ESQ-0005, dated 10/27/2020.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart JJJJ, Stationary 2020 Model Emergency Lean-Burn SI Engine, 113 bhp Phase 1 Class II; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart JJJJ, see Section 2.12 below.

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1.4.104 DP: 2506E4 Telecommunications Building Emergency Spark Ignition Engine

Permittee AEI ID(s): E-2506E4-001

Location and Description:	200E Area, 2506E4 Telecommunications Facility emergency generator SI engine.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 20-ESQ-0016, dated 12/20/2019.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart JJJJ, Stationary 2019 Model Emergency Lean-Burn SI Engine, 79 bhp Phase 1 Class II; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart JJJJ, see Section 2.12 below.

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1.4.105 DP: Effluent Treatment Facility Area Compression Ignition Engines

Permittee AEI ID(s): E-ETFAREA-900

Location and Description:	200E Area, ETF Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the ETF Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.105.1 through 1.4.105.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.105.1 Small Light Plant & Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.105.2 Medium Light Plant & Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.105.3 Large Light Plant & Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.105.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.105.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-0003 and WAC 173-400-110

Condition: ETF Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.105.1 through 1.4.105.5.

Periodic Monitoring: Inventory of stationary engines used for the ETF Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.106 DP: Liquid Effluent Retention Facility Area Compression Ignition Engines

Permittee AEI ID(s): E-LERFAREA-900

Location and Description: 200E Area, LERF Area light plants, generators, and compressors.

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the LERF Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.106.1 through 1.4.106.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.106.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.106.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.106.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.106.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.106.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-0003 and WAC 173-400-110

Condition: LERF Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.106.1 through 1.4.106.5.

Periodic Monitoring: Inventory of stationary engines used for the LERF Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.107 DP: MO493 Trailer Area Compression Ignition Engines

Permittee AEI ID(s): E-MO493-900

Location and Description:	200E Area, MO493 Trailer Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the MO493 Trailer Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.107.1 through 1.4.107.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.107.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.107.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.107.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.107.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.107.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-003 and WAC 173-400-110

Condition: MO493 Trailer Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.107.1 through 1.4.107.5.

Periodic Monitoring: Inventory of stationary engines used for the MO493 Trailer Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.108 DP: 241-AY Farm Area Compression Ignition Engines

Permittee AEI ID(s): E-AYFARMAREA-900

Location and Description:	200E Area, 241-AY Farm Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the AY Farm Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.108.1 through 1.4.108.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.108.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.108.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.108.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.108.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.108.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-003 and WAC 173-400-110

Condition: AY Farm Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.108.1 through 1.4.108.5.

Periodic Monitoring: Inventory of stationary engines used for the AY Farm Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.109 DP: 241-AY Tank Farm Power Supply Area Compression Ignition Engines

Permittee AEI ID(s): E-AYFARMSUPPLY-900

Location and Description:	200E Area, 241-AY Tank Farm Power Supply Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the AY Farm Power Supply Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.109.1 through 1.4.109.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.109.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.109.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.109.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.109.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.109.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-003 and WAC 173-400-110

Condition: AY Farm Power Supply Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.109.1 through 1.4.109.5.

Periodic Monitoring: Inventory of stationary engines used for the AY Farm Power Supply Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

DRAFT

1.4.110 DP: 241-A Tank Farm Area Compression Ignition Engines

Permittee AEI ID(s): E-AFARMAREA-900

Location and Description:	200E Area, 241-A Tank Farm Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the A Farm Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.110.1 through 1.4.110.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.110.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.110.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.110.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.110.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.110.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-003 and WAC 173-400-110

Condition: A Farm Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.110.1 through 1.4.110.5.

Periodic Monitoring: Inventory of stationary engines used for the A Farm Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.111 DP: 241-AW Tank Farm Area Compression Ignition Engines

Permittee AEI ID(s): E-AWFARMAREA-900

Location and Description:	200E Area, 241-AW Tank Farm Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the AW Farm Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.111.1 through 1.4.111.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.111.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.111.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.111.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.111.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.111.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-003 and WAC 173-400-110

Condition: AW Farm Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.111.1 through 1.4.111.5.

Periodic Monitoring: Inventory of stationary engines used for the AW Farm Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.112 DP: 241-AP Tank Farm North Area Compression Ignition Engines

Permittee AEI ID(s): E-APFARMNORTH-900

Location and Description:	200E Area, 241-AP Farm North Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the AP Farm North Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.112.1 through 1.4.112.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.112.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.112.2 Medium Light Plant Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.112.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.112.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.112.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-003 and WAC 173-400-110

Condition: AP Farm North Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.112.1 through 1.4.112.5.

Periodic Monitoring: Inventory of stationary engines used for the AP Farm North Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.113 DP: 241-AP Tank Farm East Area Compression Ignition Engines

Permittee AEI ID(s): E-APFARMEAST-900

Location and Description:	200E Area, 241-AP Tank Farm East Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the AP Farm East Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.113.1 through 1.4.113.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.113.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.113.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.113.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.113.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.113.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-003 and WAC 173-400-110

Condition: AP Farm East Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.113.1 through 1.4.113.5.

Periodic Monitoring: Inventory of stationary engines used for the AP Farm East Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.114 DP: 241-SY Tank Farm Area Compression Ignition Engines

Permittee AEI ID(s): E-SYFARMAREA-900

Location and Description:	200W Area, 241-SY Tank Farm Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the SY Farm Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.114.1 through 1.4.114.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.114.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.114.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.114.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.114.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.114.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-003 and WAC 173-400-110

Condition: SY Farm Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.114.1 through 1.4.114.5.

Periodic Monitoring: Inventory of stationary engines used for the SY Farm Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.115 DP: 222-S Laboratory Area Compression Ignition Engines

Permittee AEI ID(s): N/A

Location and Description:	200W Area, 222-S Laboratory Area light plants, generators, and compressors.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0003, dated 2/11/2020.
Flex Configuration Requirements:	This DP covers stationary diesel fuel-fired engines used to power light plants, generators, and compressors at the 222-S Laboratory Area in a flexible configuration identified in the conditions below. Letter 20-ECD-0003 provided the design criteria in Tables 1.4.115.1 through 1.4.115.5 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.115.1 Small Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2008 or Later
Maximum Power Output	≤ 16.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.115.2 Medium Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 16.9 and ≤ 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.115.3 Large Light Plant and Generator Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2013 or Later
Maximum Power Output	> 71.3 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

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Table 1.4.115.4 Small Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≤ 74.9 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Table 1.4.115.5 Large Compressor Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2012 or Later
Maximum Power Output	≥ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/CI

Additional Requirement Citation(s): 40 CFR 60, NSPS Subpart IIII, Multiple Regulatory Categories; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-003 and WAC 173-400-110

Condition: 222-S Laboratory Area Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Tables 1.4.115.1 through 1.4.115.5.

Periodic Monitoring: Inventory of stationary engines used for the 222-S Laboratory Area Engines. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.116 DP: Ventilation Systems for 241-AP Tank Farm

Permittee AEI ID(s): P-241AP-001

Location and Description: 200E, 241-AP Tank Farm, dedicated ventilation system.

NSR Authorization/AOP Inclusion: Approval Order DE19NWP-003 (11/30/2022).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE19NWP-003

Condition: EMISSION LIMITS

(A) Visible emissions from each stack (296-A-048 and 296-A-049) must not exceed 5% opacity.

(B) There must be no visible emissions from 296-A-048 and 296-A-049 at the property boundary.

Periodic Monitoring:

(A) Compliance and monitoring must be met by Section 2.1, Tier 3, Visible Emissions Survey requirements. Should there be a complaint where visible emissions are observed which are not solely attributable to water condensation, compliance may be demonstrated by performing a Section 2.1, Tier 3, opacity determination utilizing EPA Method 9.

(B) Should a complaint be received by a third party concerning visible emissions at the property boundary, a visual observation using EPA Method 22, must be used to determine if the operating exhauster stack is potentially the source of visible emissions.

(C) For 296-A-048 and 296-A-049, compliance with this limitation will be demonstrated through properly operating and maintaining required abatement control technology as well as investigating opacity or other signs of abnormal operation.

Test Method: EPA Method 9 or EPA Method 22, as applicable.

Test Frequency: None specified (as needed for monitoring and compliance with AOP Attachment 2 or complaint investigation).

Required Records: For all air-quality related complaints from a third party (e.g., a neighboring property owner or member of the public), the following records must be kept:

(A) A written record of the complaint received by or forwarded to the Permittee.

(B) The Permittee's action to investigate the validity of the complaint, any corrective action that was taken in response to the complaint, and the effectiveness of the corrective action(s).

State-Only: No.

(2) Requirement Source: DE19NWP-003

Condition: OPERATIONAL LIMITS

(A) The maximum flow rate from primary AP Tank Farm exhausters must not exceed 3,000 scfm combined.

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(B) When switching between 296-A-048 and 296-A-049, a software interlock and appropriate standard operating procedures must be used to ensure the combined stack flow rate remains less than 3,000 scfm. Simultaneous operation of both exhausters is only allowed during these switching periods.

(C) All emissions to the atmosphere from DSTs 241-AP-101 through 241-AP-108 and TSCR-MISC must be controlled by exhauster 296-A-048 and/or 296-A-049. Each exhauster must include a moisture de-entrainer, heater, pre-filter, and two banks of nuclear grade HEPA filters in series.

Periodic Monitoring: Stack temperature, operating status for 296-A-048 and 296-A-049 (on or off), and ventilation rates for the operating exhauster(s).

Required Records: See Condition 6, Required Records, below.

State-Only: No.

(3) Requirement Source: DE19NWP-003

Condition: EMISSION LIMITS

All TAPs, as shown in Table 3 of Approval Order DE19NWP-003, must be below their respective Emission Limit.

Periodic Monitoring:

(A) Ventilation rates for operating exhauster(s).

(B) Assessments, as described in a SAP submitted to Ecology before sampling occurs and also upon subsequent revisions, of VOC and TAPs.

Test Method:

(A) EPA, OSHA, or NIOSH approved, or by an Ecology-approved equivalent methods.

(B) Unless otherwise approved, VOC sampling is expected to be through EPA Method 25A with the exception that sample lines are not insulated.

(C) Unless otherwise approved, TAP sampling is expected to include EPA Method 29 for metals and Draeger tubes for ammonia.

Test Frequency: <u>Monthly:</u>

(A) Ammonia (CAS 7664-41-7).

(B) N-Nitrosodimethylamine (NDMA, CAS 62-75-9).

<u>Quarterly:</u>

(A) Ethylene dibromide (CAS 106-93-4).

(B) 1,1,2,2-tetrachloroethane (CAS 79-34-5).

(C) VOC and additional organic TAPs:

(i) If results of the most recent four quarters of VOC emissions testing are less than or equal to 2 tpy, the Permittee may assume that emission rates for TAPs without specific testing schedules are less than their limits identified in DE19NWP-003, Table 3.

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(ii) If results of the most recent four quarters of VOC emissions testing are between 2 and 3.5 tpy, quarterly sampling is required for all TAPs identified in DE19NWP-003 Appendix A, Table A-1.

(iii) If results of the most recent four quarters of VOC emissions testing are 3.5 tpy or greater, quarterly sampling is required for all TAPs identified in DE19NWP-003 Appendix A, Tables A-1 and A-2.

(D) If the Permittee or Ecology determines that emissions of the new compound or TIC would potentially exceed the de minimis threshold it must be considered in the next quarterly TAP sampling. At a minimum, the Permittee must attempt to confirm the presence and identity of a TIC in subsequent sampling if it is possible using available test methods.

Annually and as required to demonstrate compliance:

(A) Metals, at a minimum chromium, mercury, arsenic, cadmium, and nickel annually.

(i) For any metal other than chromium, the analytical instrument(s) selected must have a detection threshold capable of demonstrating emissions are less than the WAC 173-400-150 de minimis emission rate. If none of the instruments listed in Method 29 provide this sensitivity, the Permittee must notify Ecology. Ecology may approve use of a less-sensitive instrument.

(ii) For arsenic, Letter 25-NWP-063, dated May 1, 2025, approved Method 29 sensitivity at 90% of the SQER or better through at least the effective period of AOP Renewal 4. This approval requires review of potential improvements in Method 29 sensitivity be conducted and reported in conjunction with the application for future AOP renewals, including Renewal 5. Any valid arsenic result showing exceedance of the approval order limit must be reported no later than 60 days after the end of the month in which testing occurred.

(iii) If exhauster flow rate data and EPA Method 29 results indicate total chromium emissions exceed the limit for Chromium VI, additional sampling is required to determine the relative fraction of Chromium VI within 3 months of Method 29 testing. This fraction may be used to determine compliance with the Chromium VI emission limit.

Required Records: See Condition 6, Required Records, below.

State-Only: Yes.

(4) Requirement Source: DE19NWP-003

Condition: EMISSIONS LIMITS

Elemental mercury, as shown in Table 3 of Approval Order DE19NWP-003, must be below 4.68E-1 lb/24-hr.

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Periodic Monitoring:

(A) Monthly sampling for mercury is required for at least three consecutive calendar months, using EPA Method 30B, if the 241-AP DSTs contain waste which potentially exceeds a flux rate of 5.77E-06 grams per second for elemental mercury (instantaneous emission rate equivalent to one half of the SQER) triggered by either of the following:

(i) Prior to transfer into 241-AP, the Permittee must determine if waste has any valid (in excess of the detection threshold and not marked invalid) tank headspace or stack sampling result in TWINS or SWIHD which would create a flux rate greater than 5.77E-06 g/s for mercury, total mercury compounds, or any specific mercury compound at a flow rate of 3,000 scfm. Dilution, blending, or mixing cannot be taken into account unless there is subsequent sampling which demonstrates the potential mercury flux for that waste has been reduced.

(ii) If testing in 241-AP, including annual EPA Method 29 metals testing, exceeds 5.77E-06 g/s for mercury, total mercury compounds, or any specific mercury compound.

(B) To discontinue monthly sampling for mercury, three consecutive monthly samples from 241-AP must have a flux rate less than 5.77E-06 grams per second. If sampling was triggered by pre-transfer sampling found in TWINS or SWIHD, there must be at least one monthly Method 30B sampling after completion of the transfer (as defined by the Permittee) which is less than 5.77E-06 grams per second.

Test Method: EPA Method 30B.

Test Frequency: Monthly, if triggered, for at least three consecutive calendar months. Testing must begin in the calendar month after triggering test results are received or in the first month waste is stored in 241-AP, if based upon waste analysis.

Required Records: If triggered, results of EPA Method 30B testing.

State-Only: Yes.

(5) Requirement Source: DE19NWP-003

Condition: EMISSIONS LIMITS

After startup of TSCR-MISC, replacement of TSCR components, such as filters and ion exchange columns, must only occur after the system has been flushed and isolated from tank headspaces to prevent uncontrolled emissions. The liquid from these washes must be discharged to a 241-AP DST.

Periodic Monitoring: As described in a SAP submitted to Ecology before sampling occurs and also upon subsequent revisions.

Required Records: See Condition 6, Required Records, below.

State-Only: No.

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(6) Requirement Source: **DE19NWP-003**

Condition: REQUIRED RECORDS

(A) For limits with hourly and 24-hour averaging periods, records must exist in one or more systems to be able to demonstrate compliance, upon request, for any such period. This may require combining data from more than one system at the time of request.

(B) For limits with an annual basis, emissions must be calculated and summed on a rolling 12-month basis.

(C) For any pollutant that is also VOC, emissions must be calculated and summed as total VOC on a rolling 12-month basis.

(D) Sampling records must include status of the exhausters (on/off, ventilation rate, and stack temperature) during sampling and the activities occurring in the tank or tanks associated with the sampling if waste is being disturbed. If TSCR-MISC is connected to the tank or tanks and contains waste at the time of sampling this must also be recorded.

(E) Hourly records of the stack temperature, operating status for 296-A-048 and 296-A-049 (on or off), and ventilation rates for the operating exhauster(s).

(F) Records of calibration of stack gas flow rate and temperature measurement devices.

(G) Supporting data and calculations to demonstrate compliance including, but not limited to, laboratory analysis reports, flow test results, and emission calculations.

(H) Records of any waste transfer into or out of 241-AP, including quantity, waste type, and waste composition.

(I) All monitoring and operations records required to operate and maintain the emission control equipment.

(J) The date, time, duration, and cause of any periods where control technology equipment is out of service, but still receiving emissions (i.e., not disconnected for maintenance).

(K) Results of metals testing must include all compounds containing that metal, but can be reported in terms of the mass of metal alone.

Periodic Monitoring: Compliance of this condition is met by adhering to the reporting requirements in DE19NWP-003, Section 4.

Required Records: Records of any required notifications and reports.

State-Only: No.

(7) Requirement Source: **DE19NWP-003**

Condition: REPORTING

(A) The Permittee must notify Ecology within one business day of receipt of any third-party air quality complaint, including odor, associated with equipment and activities subject to Approval Order DE19NWP-003.

(B) The Permittee must submit calendar month and rolling 12-month VOC totals to Ecology annually. Information for the previous calendar year, January through December, must be submitted by July 31.

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		(C) If additional TAP testing is ever triggered under Approval Conditions 5.c.iii or 5.c.iv, the Permittee must notify Ecology prior to conducting the additional testing. Results must be reported to Ecology within 90 days following completion of sample analysis.
		(D) If compounds not previously identified in emissions estimates are found during sampling, including TICs, the Permittee must notify Ecology.
	Periodic Monitoring:	Compliance of this condition is met by adhering to the reporting requirements in DE19NWP-003, Section 6.
	Required Records:	N/A.
	State-Only:	No – VOC & complaints.
		Yes – TAPs.

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1.4.117 DP: Ventilation Systems for 241-A Tank Farm

Permittee AEI ID(s): P-241A-001

Location and Description: 200E, 241-A Tank Farm, dedicated ventilation system.

NSR Authorization/AOP Inclusion: DE23NWP-001, Revision 1 (9/25/2024).

Additional Requirement Citation(s): N/A.

(1) Requirement Source: DE23NWP-001, Revision 1

Condition: MAXIMUM VENTILATION RATE

The tank ventilation exhauster system must not exceed 6,000 scfm.

(A) 296-P-71 (POR518) must not exceed 3,000 scfm.
(B) 296-P-75 (POR519) must not exceed 3,000 scfm.

Periodic Monitoring: Compliance must be demonstrated by adhering to the SOPs for the 241-A Tank Farm which must, at a minimum, ensure compliance with Attachment 2.

Required Records: SOPs and ventilation rate data.

State-Only: No.

(2) Requirement Source: DE23NWP-001, Revision 1

Condition: VISUAL EMISSIONS ASSESSMENT

Visible emissions from POR518 and/or POR519 must not exceed five % opacity.

Periodic Monitoring: Section 2.1, Tier 3 Visible Emissions Survey requirements except that surveys may be 15, rather than 18, consecutive minutes. Should visible emissions be observed, compliance must be met by:

(A) Corrective action, within 24 hours of the EPA Method 22 visible emissions survey, and an immediate follow-up survey demonstrating visible emissions ceased;
(B) EPA Method 9; or,
(C) Ceasing operations and contacting Ecology to discuss options to re-start operations.

Test Method:

(A) EPA Method 22.
(B) EPA Method 9.

Test Frequency: Once per calendar month in which active ventilation is used.

Required Records:

(A) Records of EPA Method 22 surveys.
(B) EPA Method 9 records.
(C) If operation of POR518 and/or POR519 ceases to address visible emissions, records of shutdown and actions taken prior to re-start of operation.

State-Only: No.

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(3) Requirement Source: **DE23NWP-001, Revision 1**

Condition: EQUIPMENT/ACTIVITY RESTRICTIONS

During active ventilation, tank emissions from the 241-A Tank Farm routed through POR518 or POR519 must be controlled by the following control technology: moisture eliminator, preheater, prefilter, and high-efficiency particulate air filtration.

Periodic Monitoring: Verification that the exhauster system tBACT emission controls are operated in accordance with O&M procedures during periods of active ventilation.

Required Records:

(A) O&M records (e.g., work packages, procedures, data sheets, real-time monitoring, etc.) demonstrating tBACT controls were properly installed, maintained, and operating during each period of active ventilation.

(B) Equipment modification records.

(C) Date, time, duration, and cause of any periods where control technology equipment is out of service.

State-Only: No.

(4) Requirement Source: **DE23NWP-001, Revision 1**

Condition: EMISSION LIMITS

TAP emissions from POR518 and/or POR519 are limited to the following:

(A) Mercury (elemental) vapor: 3.58E-01 lb/24-hr.

(B) Ammonia: 3.00E+03 lb/24-hr.

(C) N-Nitrosodimethylamine: 5.86E+01 lb/yr.

(D) 1,3-butadiene: 2.23E+03 lb/yr.

Periodic Monitoring: Monthly or quarterly testing, as appropriate.

Test Method: As established in the SAP(s).

Test Frequency:

(A) Monthly: mercury and ammonia.

(B) Quarterly: N-Nitrosodimethylamine and 1,3-butadiene.

Required Records:

(A) SAP(s)

(B) All sampling results, including those for compounds not previously identified and TICs

(C) Discussion of any abnormalities associated with sampling results.

(D) Emissions calculations.

State-Only: Yes.

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(5) Requirement Source: **DE23NWP-001, Revision 1**

Condition: REPORTING

The following notifications and reports are required:

(A) Within one business day:

(i) The receipt of any air-quality complaint.

(ii) Control technology failure(s).

(B) Within one week:

(i) Notify Ecology when operation of POR518 and POR519 begins, including:

(ii) Exhauster identification(s), tank identification(s), a description of the retrieval or other planned activities, including the expected duration, and the planned exhauster flow rate(s) in scfm.

(C) Within 60 days:

(i) Changes in operation not detailed in the NOC.

(ii) Discontinued operation of active ventilation, including a shutdown status maintenance plan.

(iii) If reactivating active ventilation after operation is discontinued for 18 months or more, documentation of shutdown maintenance and any testing performed to demonstrate emission units are still capable of meeting requirements or documentation demonstrating why such testing isn't necessary.

(D) Annually, by March 15 for the subsequent calendar year:

(i) TAPs sampling data.

(ii) Emission calculations.

(iii) A summary of results reported in units and averaging periods consistent with the applicable emission limit.

(iv) Discussion of abnormalities associated with the results.

(E) Prior to conducting quarterly TAP sampling, if compounds not previously identified in emissions estimates are found in air sampling, including TICs, which potentially relate to waste stored in the 241-A Tank Farm:

(i) The name of the compound or what is known regarding identity of a TIC; and

(ii) Any information available to establish potential emissions of that compound or TIC for the 241-A Tank Farm.

Periodic Monitoring: Source testing.

Required Records: Records of any required notifications and reports.

State-Only: Yes.

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1.4.118 DP: Waste Encapsulation and Storage Facility Air Compressor Compression Ignition Engine

Permittee AEI ID(s): E-225BCMP-001

Location and Description:	200E Area, WESF, Doosan XP825/HP750WCU-T4F Air Compressor with Cummins QSB6.7 Tier 4 Diesel Engine.
NSR Authorization/AOP Inclusion:	Approval Order DE25NWP-001 (9/2/2025).
Additional Requirement Citation(s):	NSPS Subpart IIII, Stationary 2023 Model Non-Emergency CI Engine, 280 bhp, < 10 liters/cylinder, Tier 4; NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: DE25NWP-001

Condition:

(A) Fueling rate for the engine must not exceed 13.6 gallons per hour of ULSD, with no other fuel authorized, based upon the average of four consecutive quarters.

(B) Cumulative runtime, including operation for maintenance and reliability testing, is not restricted.

(C) Notification is required within one month if maximum fuel consumption rate is exceeded.

Periodic Monitoring:

(A) Quarterly measurement of quantity of fuel in engine tank(s).

(B) Tracking of the amount and type of fuel delivered.

(C) Non-resettable hour meter.

Required Records:

(A) Quantity of fuel in the engine tank on a percent-full basis or gallons present measured quarterly.

(B) Fuel delivery receipts showing type of diesel, quantity (total and amount delivered), and sulfur content for each delivery.

(C) Annual hours of operation, compiled monthly, on a rolling 12-month basis.

State-Only: No.

(2) Requirement Source: DE25NWP-001

Condition:

(A) The exhaust stack must be installed such that bends, obstructions, and building interferences with exhaust dispersion are minimized.

(B) Exhaust must be discharged vertically. If a stack cap is used, it must open to at least 30° from the horizontal at less than 25% load and at least 45° at or above 25% load.

Periodic Monitoring: Routine observation for abnormal operation or condition issues during maintenance.

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Required Records: Manufacturer documentation/specifications for air compressor.

State-Only: No.

(3) Requirement Source: DE25NWP-001

Condition: Emissions from the engine must not exceed the following emission rates listed in the TSD for Approval Order DE25NWP-001.

(A) Column "WESF engine PTE (tons/year)" of Table 1, Potential emissions for pollutants listed under WAC 173-400-110(5), versus the Minor NSR Exemption Levels.

(B) Column "PTE" of Table 2, TAP and HAP emissions increase and TAP de minimis emission values.

(C) TAPs listed in WAC 173-460-150, but not listed in Table 2, Potential TAP and HAP emissions increase and TAP de minimis emission values of the TSD for Approval Order DE25NWP-001, are assumed to be emitted at the rate of zero pounds per year for the purposes of future NSR applicability determinations.

Periodic Monitoring: Same as Section 2.11.

Required Records: Same as Section 2.11.

State-Only: TAPs – Yes. HAPs and criteria pollutants - No.

(4) Requirement Source: DE25NWP-001

Condition: 5% opacity limit, except for a two-minute period after unit startup.

Periodic Monitoring: EPA Method 9 semiannually.

Test Method: EPA Method 9.

Test Frequency: Semiannually, at least four but no more than eight months between observations. If the engine does not operate for more than eight months the next observation must be performed within one month of operation resuming.

Required Records: Records of EPA Method 9 observations.

State-Only: No.

(5) Requirement Source: DE25NWP-001

Condition: For discontinued operation, the following apply:

(A) A notification, including a shutdown status maintenance plan, must be submitted within 30 days. Maintenance performed during the shutdown must allow startup in a timely manner with minimum amount of work and emissions. Allowable emission levels as of the date of shutdown cannot increase upon reopening.

(B) Reactivating the WESF Air Pallet Compressor Engine after discontinued operations of 18 months or more requires a notification and start-up plan which includes documentation of maintenance performed and testing (or other acceptable demonstration) showing that the engine is still able to meet the requirements of Approval Order DE25NWP-001.

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(C) Temporary relocation lasting less than 12 months to the MASF for operator training, procedure development, and other activities related to the successful performance of the air pallet's purpose at WESF are not considered discontinuing operations at WESF.

Periodic Monitoring: N/A.

Required Records: If operation is discontinued, notifications and records of maintenance performed during this period.

State-Only: No.

(6) Requirement Source: DE25NWP-001

Condition: Complaints must be assessed. Corrective action in response to a complaint must be initiated within three calendar days of receipt of the complaint.

Periodic Monitoring: N/A.

Required Records: Complaints, if received, and corrective actions taken in response.

State-Only: No.

(7) Requirement Source: DE25NWP-001

Condition: Notifications of the following events are required within three business days:

(A) Receipt of any complaint.

(B) Failure or damage to the physical or electronic emissions controls

(C) Failure of the engine involving damage to the engine block, pistons, rods, similar core components of the engine, or electronic controls of the engine.

Periodic Monitoring: N/A.

Required Records: Notifications, if submitted.

State-Only: No.

(8) Requirement Source: DE25NWP-001

Condition: Annual review of O&M manual(s) and updates for any modification to emission units or operating procedures.

Periodic Monitoring: N/A

Required Records:

Documentation of date and reviewer for O&M manual reviews.

State-Only: Yes.

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1.4.119 DP: Waste Treatment and Immobilization Plant Construction Site T-52 Building Emergency Spark Ignition Engine

Permittee AEI ID(s): E-WTPSITE-001

Location and Description:	200E Area, WTP, T-52 Building, SI engine previously under DP 1.4.63.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(h)(xxxix)], Letter 23-ECD-0095, dated 11/14/2023.
Additional Requirement Citation(s):	40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii) and 40 CFR 63.6640(f), Emergency SI Engine, Model Year 2002, Engine Power 74 bhp.

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

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1.4.120 DP: Tank-Side Cesium Removal Heating, Ventilation, and Air Conditioning Generator Compression Ignition Engine

Permittee AEI ID(s): E-TSCRHVAC-001

Location and Description:	200E Area, 241-AP Tank Farm, generator CI engine used to power HVAC for structure(s) associated with TSCR System.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 24-ECD-0192, dated 1/17/2024.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary 2024 Model Non-Emergency CI Engine, 40.2 bhp, < 10 liters/cylinder, Tier 4; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

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1.4.121 DP: Waste Treatment and Immobilization Plant Material Handling Facility South-40 Operational Engineer Tent Generator Compression Ignition Engine

Permittee AEI ID(s): N/A

Location and Description:	WTP MHF, Battelle Blvd., South 40 Laydown Area, OE Tent, generator powering OE and Carpenter tents.
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 25-ECD-0048, dated 3/31/2025.
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary 2022 Model Non-Emergency CI Engine, 65.7 bhp, < 10 liters/cylinder, Tier 4; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c).

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

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1.4.122 DP: MO-153 Restroom Trailer Generator Compression Ignition Engine

Permittee AEI ID(s): N/A

Location and Description: 200E Area, east of 2704HV, powering generator for MO-153 Restroom Trailer

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 25-ECD-0144, dated 10/23/2025

Flex Configuration Requirements: This DP covers one stationary diesel fuel-fired engine used to power the MO-153 Restroom Trailer in a flexible configuration, as limited in Condition (1) below. Letter 25-ECD-0144, dated October 23, 2025, provided the design criteria in Table 1.4.122.1 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.122.1 Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	2019 or Later
Maximum Power Output	≤ 75 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/Compression Ignition

Additional Requirement Citation(s): NSPS Subpart IIII, Multiple Regulatory Categories; NESHAP Subpart ZZZZ, 40 CFR 63.6590(c)

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 25-ECD-0144 and WAC 173-400-110

Condition: The MO-153 Restroom Trailer Generator CI Engine must meet the following requirements:

(A) Maximum mechanical power output rating for the engine must be 75 bhp or less.

(B) Designs must be consistent with Table 1.4.122.1.

Periodic Monitoring: Inventory of stationary engines used for the MO-153 Restroom Trailer Generator CI Engine. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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1.4.123 DP: Direct Push Compression Ignition Generator Engine at 200W S/SX Farm Complex

Permittee AEI ID(s): N/A

Location and Description:	200E Area, East of 241-S Farm, Change Trailer and/or Cool Down/Warm-Up Tent
NSR Authorization/AOP Inclusion:	NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 25-ECD-0145, dated 11/4/2025
Additional Requirement Citation(s):	40 CFR 60, NSPS Subpart IIII, Stationary 2019 Model Non-Emergency CI Engine, 40.2 bhp, < 10 liters/cylinder, Tier 4; 40 CFR 63, NESHAP Subpart ZZZZ, 40 CFR 63.6590(c)

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

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1.4.124 DP: 11A and Canton Avenue Light Plant Compression Ignition Engines

Permittee AEI ID(s): N/A

Location and Description: 200E Area, intersection of 11A and Canton Avenue north of DP 1.4.29

NSR Authorization/AOP Inclusion: NSR exempt [WAC 173-400-110(4)(c)(iv)], Letter 20-ECD-0061, dated 05/12/2026

Flex Configuration Requirements: This DP covers stationary diesel fuel-fired engines used to power light plants at the intersection of 11A and Canton Avenue in a flexible configuration, as limited in Condition (1) below. Letter 26-ECD-0061, received May 12, 2026, provided the design criteria in Table 1.4.124.1 to qualify for an NSR exemption under WAC 173-400-110(4)(c)(iv).

Table 1.4.124.1 Light Plant Engine Design

Regulatory Use Category	Non-Emergency Stationary
Model Year	20013 or Later
Maximum Power Output	≤ 18 bhp
Displacement	< 10 liters per cylinder
Fuel Type	Diesel/Compression Ignition

Additional Requirement Citation(s): NSPS Subpart IIII, Multiple Regulatory Categories; NESHAP Subpart ZZZZ, 40 CFR 63.6590(c)

For compliance requirements associated with 40 CFR 63, NESHAP Subpart ZZZZ, see Section 2.10 below.

For compliance requirements associated with 40 CFR 60, NSPS Subpart IIII, see Section 2.11 below.

(1) Requirement Source: Letter 20-ECD-0061 and WAC 173-400-110

Condition: 11A and Canton Avenue Light Plant Engines must meet the following requirements:

(A) Maximum combined mechanical power output ratings for the engines must be 142.7 bhp or less.

(B) Designs must be consistent with Table 1.4.124.1.

Periodic Monitoring: Inventory of stationary engines used for the 11A and Canton Avenue light plants. At a minimum, record the current and past stationary engines with the date the engine became stationary and the date it was removed, if applicable.

Required Records: Engine inventory.

State-Only: No.

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2.0 COMPLIANCE AND PERIODIC MONITORING PROVISIONS

Compliance and periodic monitoring provisions are provided in the following sections.

2.1 Visible Emission Surveys and Visual Opacity Determination

Visible emission surveys must be performed in accordance with EPA Method 22. To determine that corrective action or opacity determination is not required, visible emission surveys must be conducted during daylight hours when the emission unit is operating. If emission units are only operated at night, or daylight operation is not representative of the worst-case scenario for opacity, a survey may be conducted at night with sufficient illumination. EPA Method 22 requires a minimum of 6 consecutive minutes of readings per survey. A minimum of 3 surveys per evaluation event must be performed. The surveys may be conducted consecutively, or the observer may take a break of up to 15 minutes between surveys.

If the Permittee determines that visible emissions are present, EPA Method 22 surveys may be cut short or skipped if the corrective action or opacity determination is initiated immediately. When any visible emission surveys are performed, a record will be established indicating if visible emissions were or were not observed. Any unusual circumstances with a survey, including readings taken outside of daylight hours, must be documented.

When opacity of visible emissions is quantified, two potential methods apply. For federal standards and/or when the compliance determination requires six-minute averages, EPA Method 9 must be used. This method is also generally appropriate to determine whether equipment is properly maintained and in compliance with emission unit-specific limits established by approval orders issued by Ecology.

When opacity of visible emissions must be quantified to demonstrate compliance with the WAC 173-400-040(2) general standard for opacity, Ecology Method 9A must be used. Ecology Method 9A adopts EPA Method 9 by reference with modifications to data recording and analysis. These modifications are necessary for the format of the general standard which, with limited exceptions, prohibits more than 3 minutes (12 readings) of opacity exceeding 20% in any 1-hour period. When conducting an Ecology Method 9A survey, the observer may stop short of 60 minutes if 13 readings exceeding 20% opacity have been recorded for that particular survey. At the point the 13th reading exceeding 20% opacity is recorded, the standard has been exceeded and further readings will not change the result of the survey.

If quantified visible emissions do not exceed the specified opacity limit, and they are representative of normal operation, no further observations are required until the next required periodic monitoring. Records of corrective actions taken to reduce opacity must be maintained and available for Ecology inspection.

If quantified visible emissions exceed an opacity limit a deviation report must be filed with Ecology as required by Section 5.16 of the Standards Terms and General Condition of the Hanford AOP.

In certain cases, approval orders issued by Ecology require EPA Method 9 for 20% opacity limits cited to WAC 173-400-040. In these cases, Section 1.4 requires that the opacity determination be done using both EPA Method 9 (to comply with the approval order) and Ecology Method 9A (to demonstrate compliance with WAC). EPA Method 9 and Ecology Method 9A may be performed using the same set of readings. The EPA Method 9 must start at the same time as the Ecology Method 9A with a new EPA Method 9 survey starting at each 6-minute interval for the duration of the Ecology 9A.

Tier 1

Tier 1 applies primarily to fossil-fuel combustion units and other emission units that might be a source of visible emissions. It is broken into two parts, Part A and Part B, which are described below.

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Part A – If the combustion unit is certified to meet EPA emission standards contained in 40 CFR Part 1039, and there is no Tier 1 survey schedule specified in Section 1.4, then limited visible emission surveys may be performed if manufacturer directions are followed for O&M. It is important to note that the Tier reference in 40 CFR Part 1039 is not the Tier reference used in this section. A visible emission survey will be performed, as described in Part B, upon initial installation to document no visible emissions are observed during normal operations. If visible emissions are observed during normal operations, including during the initial installation survey, then visible emission surveys must continue to be performed as described in Part B.

Part B – This consists of operating personnel surveying for visible emissions from the emission unit according to the frequency identified in Section 1.4. Where no frequency is specified and the unit is not subject to limited surveys under Part A, surveys will be performed a minimum of once per quarter.

If visible emissions are present the cause(s) of the visible emissions will be determined and corrective actions taken as necessary or opacity must be quantified. If corrective actions are taken, the visual emissions survey must be repeated upon completion. If visible emissions are still present after corrective action, visible emissions must be quantified.

Tier 2

Tier 2 was established to set visible emission survey frequencies which could be reduced if visible emissions were not found at certain facilities. It has been retired, due to complexity and the limited number of subject emission units. Where Tier 2 was previously identified, appropriate specific requirements are now listed in Section 1.4 instead.

Tier 3

Tier 3 applies to units which will not typically produce visible emissions when operated and maintained properly, such as tank ventilation systems. For these units, compliance is generally demonstrated by one of the following:

For emission units identified in both Attachment 1 and Attachment 2 of the Hanford AOP: maintain abatement control technology as required in Attachment 2 for that particular emission unit, unless specific requirements are also listed in Section 1.4. In those cases, requirements from both attachments must be met.

For emission units identified only in Attachment 1: meet specific requirements in Section 1.4, if any, and properly operate and maintain equipment in accordance with manufacturer recommendations, approval orders, and/or federal standards, as appropriate. When maintenance schedules conflict, the most restrictive maintenance schedule must be followed, unless Ecology approves a less restrictive schedule. Approval may be case-by-case or by emission unit type.

If visible emissions are seen during normal operation or a complaint regarding visible emissions is received, an EPA Method 22 visible emissions survey must be conducted. If any visible emissions are present, the cause(s) of the visible emissions must be determined, and corrective actions taken as necessary, or opacity must be quantified. If corrective actions are taken, an EPA Method 22 visual emissions survey must be conducted upon completion. If any visible emissions are present after corrective action, visible emissions must be quantified.

2.2 General Standards Complaint Investigations

Complaints forwarded by Ecology must be addressed promptly and assessed for corrective action. An initial informal response must be made to Ecology within 30 working days of the Permittee receiving the complaint. This initial response must document preliminary investigation results and any planned or completed corrective actions. Follow-up report(s) must be provided as directed by Ecology. The Permittee must maintain records of complaints forwarded by Ecology.

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2.3 Measures to Control Fugitive Emissions and Fugitive Dust

Construction projects with a potential to generate particulates will address fugitive emissions and fugitive dust control during pre-job planning and job safety analysis. Measures to control fugitive emissions and fugitive dust may include but are not limited to:

1. Watering.
2. Use of chemical stabilizers.
3. Use of physical barriers and/or physical stabilization.
4. Use of vegetative stabilization.
5. Clearing only limited areas to reduce dust generation.
6. Covering haul vehicles.
7. Minimizing track-out.
8. Controlling site traffic to decrease disturbance of soil and vegetation to decrease dust generated from unnecessary vehicular travel.

2.4 General Standards for Combustion, Incineration, and General Process Units

Any combustion and incineration or general process unit, as defined in WAC 173-400-030, must meet the PM limit specified in WAC 173-400-050(1) or 173-400-060, as appropriate. In accordance with WAC 173-400-050(3), measured concentrations for combustion and incineration units must be corrected to 7% oxygen, unless Ecology determined that an alternate oxygen correction factor is more representative. Proper O&M must be used to ensure that these units continue to comply with these limits. If complaints of dust or smoke are received, Ecology will review them through the process described in Section 2.2.

2.5 Recordkeeping for Non-Waste Treatment and Immobilization Plant Boilers/Steam Generating Units

The Permittee and contractor must maintain appropriate monthly records of the fuel use on each individual boiler. This data, along with the emission factors presented in Ecology Regulatory Order 97NM-138, will be used to determine monthly emission levels for individual boilers, and collectively for the 200 East, 200 West, and 300 Area. If Ecology or the Permittee determines that emission factors different than the factors specified in Regulatory Order 97NM-138 are appropriate, the public will be provided with an opportunity for review. WAC 173-400-115 compliance with the standard may be determined based on a certification from the fuel supplier containing the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41b. An annual report including records of fuel supplier certifications and a certification by the owner or operator that the records of fuel supplier certifications submitted represent all of the fuel combusted during the year. Logs of boiler tune-ups and significant boiler maintenance activities will be kept.

2.6 Non-Waste Treatment and Immobilization Plant Boiler/Steam Generating Unit Source Tests

Approval Order 97NM-138 authorized a significant update to steam production on site and installation of “approximately 41” new boilers ranging in size from 10 to 700 BHP (0.4 to 26.3 MMBtu/hr) on June 6, 1997. This approval order was later amended via letter “Re: Determination of Complete Application and Approval, Modification of Order 97NM-138” on November 19, 2009. This amendment allowed the trailer-mounted portable boiler to operate on dual fuel and move around the site as needed.

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The 97NM-138 boilers were identified in Table 1.1 of the original issuance of the Hanford Site AOP on June 20, 2001. Steam production needs for the Hanford Site have steadily dropped over the years. As individual boilers were decommissioned, they were also taken out of the AOP. When the current discharge point system was created for Renewal 3 of the Hanford Site AOP, the remaining boilers were established as DPs 1.4.1 through 1.4.9. Boilers have continued to be taken out of service, leading to many of these DPs also being retired.

97NM-138 requires initial and recurring source testing for up to five representative units, which occurred in 1998 and 2003. On June 7, 2005, the Permittee requested removal of these source testing requirements with Letter 05-AMRC-0291. Ecology agreed and removed boiler source testing from this AOP but did not revise the underlying approval order which established testing as an applicable requirement. Based upon the AOP change, the Permittee discontinued testing.

Subsequently, EPA established new testing requirements which are applicable to the diesel fuel-fired boilers 10 MMBtu/hr or greater under 40 CFR 63, NESHAP Subpart DDDDD. This includes testing for pollutants which weren't addressed by Approval Order 97NM-138 or tested for in 1998 and 2003. Testing for NESHAP Subpart DDDDD was required no later than January 31, 2016.

Ecology identified that the Permittee was out of compliance with both sets of testing requirements in the report for AOP Inspection 25.AQ06, transmitted with Letter 26-NWP-070 on May 15, 2026. That inspection report established a schedule to come back into compliance, incorporated into Section 2.13 below, that must be met.

2.7 Sulfur Dioxide Emissions Compliance

Tier 1: Fuel-Oil Fired Combustion Units:

Required records	Calculation Model (Statement of Basis Section 3.1.1)
1. Amount and type of fuel burned. 2. Vendor documentation or fuel analysis once per year.	Model 1

Tier 2: Other Significant Emission Units:

Ecology has determined, based on process knowledge that, when properly operated and maintained, these emission units would not exceed WAC 173-400-40(7). Compliance is demonstrated through following all operational requirements, evaluation of modifications for emission changes and NSR exemption levels prior to implementation, and Ecology inspections.

2.8 Visible Emissions Enforceability

WAC 173-400-040(2)(c) and (2)(d) were specific exceptions to EPA's approval of the Washington State Implementation Plan, as noted in Federal Register Volume 85, Number 36 (February 24, 2020).

2.9 Sulfur Dioxide Enforceability

WAC 173-400-040(7) is federally enforceable.

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2.10 Engines Subject to Code of Federal Regulations Title 40, Part 63, Subpart ZZZZ

For engines which are subject to both 40 CFR 60, NSPS Subpart IIII or JJJJ, and 40 CFR 63, NESHAP Subpart ZZZZ, compliance is demonstrated through the NSPS subpart [40 CFR 63.6590(c)]. See Section 2.11 or 2.12 below, as appropriate. Engines addressed by Section 2.11 or 2.12 may also optionally utilize an oil analysis program described under NESHAP Subpart ZZZZ, as addressed in Section 2.10.1.

All stationary engines must be installed, configured, operated, and maintained in a manner that is compliant with the requirements of NESHAP Subpart ZZZZ. Conditions in Sections 2.10.2 and 2.10.3 establish the required compliance demonstrations for Hanford Site engines subject to Subpart ZZZZ which are not subject to NSPS Subpart IIII or JJJJ.

2.10.1 Any Engine Covered by an Oil Analysis Program

(1) Requirement Source: **NESHAP Subpart ZZZZ**

Condition: If an oil analysis program meeting the requirements of 40 CFR 63.6625(i) is used to extend oil and oil filter change requirements, the program must meet the following requirements:

(A) The oil analysis program must be identified in maintenance procedures for the engine, even if it is used to meet manufacturer's recommendations.

(B) Oil analysis must occur at least as frequently as replacement of the oil and oil filter would be required by the most stringent applicable requirement.

(C) At a minimum, the program must analyze Total Base Number, viscosity, and percent water content.

(D) Oil and oil filter must be replaced if Total Base Number is less than 30% of the value when new, viscosity has changed by more than 20% from the value when new, or water content is greater than 0.5% by volume.

(E) When oil analysis triggers oil and oil filter replacement, it must be done within 2 business days of receiving the results if the engine is operating. If the engine is not operating when results are received, the oil and oil filter replacement must be done within 2 business days or before commencing operation, whichever is later.

Periodic Monitoring: Oil analysis at the frequency specified for replacement of the oil and oil filter.

Required Records: Records of parameters that are analyzed as part of the program, the results of the analysis, and the oil and filter changes for the engine

State-Only: No.

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2.10.2 Existing Compression Ignition emergency engines (as defined for National Emission Standards for Hazardous Air Pollutants Subpart ZZZZ) less than or equal to 500 brake horsepower

(1) Requirement Source: **NESHAP Subpart ZZZZ**

Condition: Maintain existing emergency engine status under 40 CFR 63.6640(f) or meet all applicable non-emergency requirements of NESHAP Subpart ZZZZ.

Periodic Monitoring: Operation of a non-resettable hour meter.

Required Records:

(A) Hours of operation.

(B) Documentation of how many hours are spent for emergency operation (including what classified the operation as emergency) and non-emergency operation.

State-Only: No.

(2) Requirement Source: **NESHAP Subpart ZZZZ**

Condition:

(A) Operate and maintain the engine in accordance with the manufacturer's recommendations or instructions. If there is no manufacturer's recommendation for one of the following maintenance tasks identified in Table 2c of NESHAP Subpart ZZZZ, or the manufacturer's recommendation is less strict, develop and follow a maintenance plan for that task to ensure the task is completed to the more restrictive standard which follows:

(i) Change oil and filter every 500 hours of operation or annually, whichever comes first, unless oil analysis program meeting 40 CFR 63.6625(i) determines replacement is not yet needed.

(ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.

(iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(B) An oil analysis program meeting 40 CFR 63.6625(i) may be used to determine whether oil and oil filter need to be replaced, even if the manufacturer did not specifically address this option.

(C) Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

Compliance Requirement: Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

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Required Records:

(A) Manufacturer's maintenance or operation manual.

(B) Developed maintenance plan, if applicable.

(C) Documentation of maintenance performed.

(D) Hours of operation.

State-Only: No.

2.10.3 Existing Spark Ignition emergency engines (as defined for National Emission Standards for Hazardous Air Pollutants Subpart ZZZZ) less than or equal to 500 brake horsepower

(1) Requirement Source: NESHAP Subpart ZZZZ

Condition: Maintain existing emergency engine status under 40 CFR 63.6640(f) or meet all applicable non-emergency requirements of NESHAP Subpart ZZZZ.

Periodic Monitoring: Operation of a non-resettable hour meter.

Required Records:

(A) Hours of operation.

(B) Documentation of how many hours are spent for emergency operation (including what classified the operation as emergency) and non-emergency operation.

State-Only: No.

(2) Requirement Source: NESHAP Subpart ZZZZ

Condition:

(A) Operate and maintain the engine in accordance with the manufacturer's recommendations or instructions. If there is no manufacturer's recommendation for one of the following maintenance tasks identified in Table 2c of NESHAP Subpart ZZZZ, or the manufacturer's recommendation is less strict, develop and follow a maintenance plan for that task to ensure it is completed to the more restrictive standard which follows:

(i) Change oil and filter every 500 hours of operation or annually, whichever comes first, unless oil analysis program meeting 40 CFR 63.6625(j) determines replacement is not yet needed.

(ii) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first.

(iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(B) An oil analysis program meeting 40 CFR 63.6625(i) may be used to determine whether oil and oil filter need to be replaced, even if the manufacturer did not specifically address this option.

(C) Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

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Compliance Requirement: Compliance will be demonstrated by operating and maintaining the engine and after treatment control devices according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Required Records:

(A) Manufacturer’s maintenance or operation manual.

(B) Developed maintenance plan, if applicable.

(C) Documentation of maintenance performed.

(D) Hours of operation.

State-Only: No.

2.11 Engines Subject to Code of Federal Regulations Title 40, Part 60, Subpart IIII, and Code of Federal Regulations Title 40, Part 63, Subpart ZZZZ

For engines which are subject to 40 CFR 60, NSPS Subpart IIII, and 40 CFR 63, NESHAP Subpart ZZZZ, compliance is demonstrated through the NSPS subpart [40 CFR 63.6590(c)]. These engines may optionally utilize an oil analysis program described under NESHAP Subpart ZZZZ, as addressed in Section 2.10.1 above.

These engines must be installed, configured, operated, and maintained in a manner that is compliant with the requirements of NSPS Subpart IIII. Conditions in Sections 2.11.1 and 2.11.2 establish the required compliance demonstrations for the NSPS Subpart IIII engines currently identified at the Hanford Site.

2.11.1 Emergency Compression Ignition engines (as defined for Federal Regulations)

(1) Requirement Source: NSPS Subpart IIII

Condition:

(A) Purchase, operate, and maintain the engine to meet the emission standards in 40 CFR 60. 4205, as applicable, for the specific model year, engine design, and use. If modified or reconstructed, comply with 40 CFR 60.4205(f).

(B) Either:

(i) Operate and maintain engine and control devices according to the manufacturer's emission-related written instructions and change only those emission-related settings that are permitted by the manufacturer; or,

(ii) Create a user-developed maintenance plan and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. Conduct performance testing, if required, in accordance with 40 CFR 60.4211(g).

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(C) A determination that oil and oil filter replacement is not needed under an oil analysis program meeting the requirements of Section 2.10.1 above is equivalent to replacement of these consumables for the purposes of manufacturer's recommendations, even if it isn't specifically addressed in the manufacturer's operation or maintenance manual.

Periodic Monitoring:

(A) Operation of a non-resettable hour meter.

(B) Maintenance in accordance with manufacturer's emission-related instructions or, if applicable, user-developed maintenance plan.

(C) If required by 40 CFR 60.4211(g), initial performance testing.

Required Records:

(A) Documentation of engine certification (label, nameplate, specification sheet, or other manufacturer information).

(B) Hour meter readings.

(C) Records of maintenance performed.

(D) Manufacturer's maintenance or operation manual.

(E) If applicable, user-developed maintenance plan.

(F) If required, records of performance testing.

State-Only: No.

(2) Requirement Source: NSPS Subpart IIII

Condition: Maintain emergency engine status under NSPS Subpart IIII or meet all applicable requirements for non-emergency operation.

Periodic Monitoring: Operation of a non-resettable hour meter.

Required Records:

(A) Hour meter readings.

(B) Documentation of how many hours are spent for emergency operation (including what classified the operation as emergency) and non-emergency operation.

State-Only: No.

2.11.2 Non-emergency Compression Ignition engines (as defined for Federal Regulations)

(1) Requirement Source: NSPS Subpart IIII

Condition:

(A) Purchase, operate, and maintain the engines to meet the emission standards in 40 CFR 60.4204, as applicable, for the specific model year, engine design, and use. If modified or reconstructed, comply with 40 CFR 60.4204(e).

(B) Either:

(i) Operate and maintain engine and control devices according to the manufacturer's emission-related written instructions and change only those emission-related settings that are permitted by the manufacturer; or,

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(ii) Create a user-developed maintenance plan and, to the extent practicable, maintain and operate engine in a manner consistent with good air pollution control practice for minimizing emissions. Conduct performance testing, if required, in accordance with 40 CFR 60.4211(g).

(C) A determination that oil and oil filter replacement is not needed under an oil analysis program meeting the requirements of Section 2.10.1 above is equivalent to replacement of these consumables for the purposes of manufacturer's recommendations, even if it isn't specifically addressed in the manufacturer's operation or maintenance manual.

(D) If engine is equipped with a DPF to comply with the emission standards in 40 CFR 60.4204, the DPF must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

(i) Corrective action must be taken when the monitor indicates that backpressure may exceed, or has exceeded, the manufacturer's recommended operating range.

Periodic Monitoring:

(A) Operation of a non-resettable hour meter.

(B) Maintenance in accordance with manufacturer's emission-related instructions or, if applicable, user-developed maintenance plan.

(C) If required by 40 CFR 60.4211(g), initial performance testing.

(D) If equipped with a DPF to comply with 40 CFR 60.4204, backpressure monitoring.

Required Records:

(A) Documentation of engine certification (label, nameplate, specification sheet, or other manufacturer information).

(B) Hour meter readings.

(C) Records of maintenance performed.

(D) Manufacturer's maintenance or operation manual.

(E) If applicable, user-developed maintenance plan.

(F) If required, records of performance testing.

(G) If equipped with a DPF to comply with 40 CFR 60.4204, records of backpressure monitoring and any corrective action taken addressing the DPF.

State-Only: No.

2.12 Engines Subject to Code of Federal Regulations Title 40, Part 60, Subpart JJJJ, and Code of Federal Regulations Title 40, Part 63, Subpart ZZZZ

For engines which are subject to 40 CFR 60, NSPS Subpart JJJJ, and 40 CFR 63, NESHAP Subpart ZZZZ, compliance is demonstrated through the NSPS subpart [40 CFR 63.6590(c)]. These engines may optionally utilize an oil analysis program described under NESHAP Subpart ZZZZ, as addressed in Section 2.10.1 above.

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These engines must be installed, configured, operated, and maintained in a manner that is compliant with the requirements of NSPS Subpart JJJJ. Conditions in Sections 2.12.1 and 2.12.2 identify the required compliance demonstrations for the NSPS Subpart JJJJ engines currently identified at the Hanford Site

2.12.1 Emergency Spart Ignition engines (as defined for Federal Regulations)

(1) Requirement Source: **NSPS Subpart JJJJ**

Condition: Maintain emergency engine status under NSPS Subpart JJJJ or meet all applicable requirements for non-emergency operation.

Periodic Monitoring: Operation of a non-resettable hour meter.

Required Records:

(A) Hour meter readings.
(B) Documentation of how many hours are spent for emergency operation (including what classified the operation as emergency) and non-emergency operation.

State-Only: No.

(2) Requirement Source: **NSPS Subpart JJJJ**

Condition:

(A) In accordance with 40 CFR 60.4243(a), purchase an engine certified to meet the emission standards in 40 CFR 60.4233(a), (b), (c), (d), or (e), as applicable, for the specific model year, engine design, fuel, and use. If modified or reconstructed, comply with 40 CFR 60.4233(f) and 60.4243(c).
(B) Either:
(i) Operate and maintain the engine and control devices according to the manufacturer's emission-related instructions, keep records of conducted maintenance, and meet any requirements specified in 40 CFR Part 1068 Subparts A through D which specifically apply; or,
(ii) If the engine and control devices are not operated and maintained according to the manufacturer's emission-related instructions, demonstrate compliance as a non-certified engine by meeting the requirements of 40 CFR 60.4243(a)(2) or 60.4243(b)(2), as appropriate for the specific model year, engine design, fuel, and use. Keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
(C) A determination that oil and oil filter replacement is not needed under an oil analysis program meeting the requirements of Section 2.10.1 above is equivalent to replacement of these consumables for the purposes of manufacturer's recommendations, even if it isn't specifically addressed in the manufacturer's operation or maintenance manual.

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Periodic Monitoring:

(A) Operation of a non-resettable hour meter.

(B) Maintenance in accordance with manufacturer's emission-related instructions or, if applicable, user-developed maintenance plan.

(C) If required by 40 CFR 60.4243(a)(2) or 60.4243(b)(2), performance testing which demonstrates compliance with NSPS Subpart JJJJ.

Required Records:

(A) Documentation of engine certification (label, nameplate, specification sheet, or other manufacturer information).

(B) Hour meter readings.

(C) Records of maintenance performed.

(D) Manufacturer's maintenance or operation manual.

(E) If applicable, user-developed maintenance plan.

(F) If required, records of performance testing.

State-Only: No.

2.12.2 Non-emergency Spark Ignition engines (as defined for Federal Regulations)

(1) Requirement Source: NSPS Subpart JJJJ

Condition:

(A) In accordance with 40 CFR 60.4243(a), purchase an engine certified to meet the emission standards in 40 CFR 60.4233(a), (b), (c), (d), or (e), as applicable, for the specific model year, engine design, fuel, and use. If modified or reconstructed, comply with 40 CFR 60.4233(f) and 60.4243(c).

(B) Either:

(i) Operate and maintain the engine and control devices according to the manufacturer's emission-related instructions, keep records of conducted maintenance, and meet any requirements specified in 40 CFR Part 1068 Subparts A through D which specifically apply; or,

(ii) If the engine and control devices are not operated and maintained according to the manufacturer's emission-related instructions, demonstrate compliance as a non-certified engine by meeting the requirements of 40 CFR 60.4243(a)(2) or 60.4243(b)(2), as appropriate for the specific model year, engine design, fuel, and use. Keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

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(C) A determination that oil and oil filter replacement is not needed under an oil analysis program meeting the requirements of Section 2.10.1 above is equivalent to replacement of these consumables for the purposes of manufacturer's recommendations, even if it isn't specifically addressed in the manufacturer's operation or maintenance manual.

Periodic Monitoring:

(A) Operation of a non-resettable hour meter.

(B) Maintenance in accordance with manufacturer's emission-related instructions or, if applicable, user-developed maintenance plan.

(C) If required by 40 CFR 60.4243(a)(2) or 60.4243(b)(2), performance testing which demonstrates compliance with NSPS Subpart JJJJ.

Required Records:

(A) Documentation of engine certification (label, nameplate, specification sheet, or other manufacturer information).

(B) Hour meter readings.

(C) Records of maintenance performed.

(D) Manufacturer's maintenance or operation manual.

(E) If applicable, user-developed maintenance plan.

(F) If required, records of performance testing.

State-Only: No.

2.13 Schedule of Compliance

The Permittee must continue to comply with all applicable requirements with which they are currently in compliance. The Permittee must also meet all requirements which become effective during the permit term of this AOP on a timely basis. [WAC 173-401-510(2)(h)(iii)(A) and (B)]

The following are requirements with which the Permittee is not in compliance and the schedule which they must meet to return to compliance [WAC 173-401-630(3)]:

Source testing for DP 1.4.2, 1.4.3, 1.4.7, and 1.4.8:

1. Performance testing that meets the requirements of approval order 97NM-138 and 40 CFR Part 63, NESHAP Subpart DDDDD needs to be performed in 2026.
   - DP 1.4.2, 242-A Boilers #2 and #3 must be tested for 40 CFR 63, NESHAP Subpart DDDDD compliance.
   - Of the boilers approved by 97NM-138, five boilers need to be tested, unless there are less than five boilers approved by 97NM-138 still in use, in which case all remaining boilers need to be tested.
2. A sensitivity analysis addressing the use of obstructive stack caps needs to be performed in Calendar Year 2026. As an alternative to performing a sensitivity analysis, the obstructive stack caps may be permanently removed. A non-obstructive cap may be used in place of the current obstructive caps.
3. An alternative means of compliance for the above items is to permanently shut down the boilers in question prior to December 31st, 2026, followed by removal of the boilers no later than December 31st, 2027.

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Progress reports for this Schedule of Compliance must be submitted with the semiannual report required for Standard Terms and General Conditions Section 5.6. [WAC 173-401-630(4)]

3.0 RECORDKEEPING

The Permittee must maintain records of all required monitoring data and support information. These records must be maintained for 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original continuous monitoring records (such as strip charts or equivalent), and required reports. Most of these records are retained on-site in electronic format. Regulatory agencies accept electronic records as supporting information. [WAC 173-401-615(2)(a), WAC 173-401-615(2)(c)]

3.1 Emission Calculations

Emission calculations for SO_2, NO_x, VOC, ammonia, gas cylinders, chemical inventory, air concentrations, and TAPs can be found in Section 3.1 of the Statement of Basis for Attachment 1.

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