HANFORD AIR OPERATING PERMIT
PERMIT NUMBER 00-05-006
RENEWAL 3
ATTACHMENT 1

State of Washington Department of Ecology (Ecology)
Nuclear Waste Program
3100 Port of Benton Blvd.
Richland, Washington 99354

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HANFORD AIR OPERATING PERMIT
PERMIT NUMBER 00-05-006
RENEWAL 3
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Number: 00-05-006 (Hanford AOP Renewal 3)

State of Washington Department of Ecology (Ecology)
Nuclear Waste Program
3100 Port of Benton Blvd.
Richland, Washington 99354

The permittee is authorized to operate the air emission units identified in this Air Operating Permit Number 00-05-006 and all insignificant emission units not specifically identified in this permit.

Dated at Richland, Washington, Month XX, XXXX

Reviewed by:

_____ _____

Philip Gent, P.E. Date
Professional Engineer Reviewer
State of Washington Department of Ecology

Approved by:

_____ _____

Alexandra K. Smith, Program Manager Date
Nuclear Waste Program
State of Washington Department of Ecology

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TABLES

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 unless replaced by another emission unit-specific requirement.

Table 1.1 General Standards for Maximum Emissions

Requirement citation (WAC or Order Citation)	Regulatory requirement, emission limit, or work practice standard	State-Only enforceable	Periodic monitoring	Periodic monitoring provisions	Test method[1]
WAC 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	2.1	EPA Method 9 of 40 CFR 60, Appendix A.
WAC 173-400-040(3)	Fallout. Prohibits emissions of particulate matter 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.	2.2	

Table 1.1 General Standards for Maximum Emissions

Requirement citation (WAC or Order Citation)	Regulatory requirement, emission limit, or work practice standard	State-Only enforceable	Periodic monitoring	Periodic monitoring provisions	Test method[1]
WAC 173-400-040(4)(a)	Fugitive emissions. The Permittee shall 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].	2.3	
WAC 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.	2.2	

Table 1.1 General Standards for Maximum Emissions

Requirement citation (WAC or Order Citation)	Regulatory requirement, emission limit, or work practice standard	State-Only enforceable	Periodic monitoring	Periodic monitoring provisions	Test method[1]
WAC 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.	2.2	
WAC 173-400-040(7)	1,000 ppm SO_2 @ 7% O_2 on a dry basis. Prohibits emission of a gas containing sulfur dioxide 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 fossil-fuel combustion units: Record-keeping or certification.	2.7	EPA Method 6 or 6C of 40 CFR 60, Appendix A.

Table 1.1 General Standards for Maximum Emissions

Requirement citation (WAC or Order Citation)	Regulatory requirement, emission limit, or work practice standard	State-Only enforceable	Periodic monitoring	Periodic monitoring provisions	Test method[1]
WAC 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.	2.2	
WAC 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].	2.3	

[1] The test methods identified in this table are used as compliance verification tools. A frequency is not applicable 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.

1.2 Insignificant Emission Units

Insignificant emission units (IEUs) are listed in the Statement of Basis for this Attachment 1. All IEUs shall maintain compliance with the general standards in Table 1.1.

All emission units not identified in Section 1.4 Discharge Points 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 insignificant emission units 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 Discharge Points are subject to the requirement to annually certify compliance with the terms and conditions of this Permit.

1.4 Discharge Points

All emission units identified in this Section are subject to the general requirements listed in Table 1.1. More stringent conditions listed for specific discharge points in this Section are used in lieu of the general requirements.

1.4.1 Discharge Point: 234-5Z, Boiler 1, 2, and 3 (>5 mmBTU/hr – Fuel Oil)

200W Area, 234-5Z Boiler Annex

Requirement Citation: 40 CFR 60, Subpart Dc (WAC 173-400-115), 97NM-138 (6/6/1997), and 97NM-138, Amendment 1 (11/19/2009)

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1, Tier 1.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Use of fuel per 97NM-138
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.05 weight percent sulfur (500 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	NO_x shall not exceed 0.150 lb/mm BTU and 115 ppm @ 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 7E of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	SO_2 shall not exceed 0.051 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 6 or 6C of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	CO shall not exceed 0.071 lb/mm BTU and 90 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Particulate matter (PM_{10}) shall not exceed 0.011 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 5 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	VOC shall not exceed 0.013 lb/mm BTU and 30 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 25 or 25A of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Monthly.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

Condition: Visual check of combustion.
Periodic Monitoring: Not Applicable.
Frequency: Daily.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Record available operating data.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Semi-annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections and work performed.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval	**6/6/1997**	
Condition:	A.	Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
	B.	Clean fireside surfaces and breaching.
	C.	Inspect refractory.
Periodic Monitoring:	Not Applicable.	
Frequency:	Annually.	
Test Method:	Not Applicable.	
Test Frequency:	Not Applicable.	
Required Records:	See Section 2.5.	
State-Only:	Yes.	
Calculation Model:	Not applicable.	

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

200E Area, 242-A Boiler Annex

Requirement Citation: 40 CFR 60, Subpart Dc (WAC 173-400-115), 97NM-138 (6/6/1997), and 97NM-138, Amendment 1 (11/19/2009)

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1, Tier 1.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval 6/6/1997

Condition:	Use of fuel per 97NM-138
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.05 weight percent sulfur (500 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval 6/6/1997

Condition:	NO_x shall not exceed 0.150 lb/mm BTU and 115 ppm @ 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 7E of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	SO_2 shall not exceed 0.051 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 6 or 6C of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	CO shall not exceed 0.071 lb/mm BTU and 90 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Particulate matter (PM_{10}) shall not exceed 0.011 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 5 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	VOC shall not exceed 0.013 lb/mm BTU and 30 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 25 or 25A of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Monthly.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

Condition: Visual check of combustion.
Periodic Monitoring: Not Applicable.
Frequency: Daily.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Record available operating data.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Semi-annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections and work performed.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval	**6/6/1997**	
Condition:	A.	Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
	B.	Clean fireside surfaces and breaching.
	C.	Inspect refractory.
Periodic Monitoring:	Not Applicable.	
Frequency:	Annually.	
Test Method:	Not Applicable.	
Test Frequency:	Not Applicable.	
Required Records:	See Section 2.5.	
State-Only:	Yes.	
Calculation Model:	Not applicable.	

1.4.3 Discharge Point: 318 Boiler (<5 mmBTU/hr – Natural Gas)

300 Area, 318 Boiler Annex

Requirement Citation: 40 CFR 60, Subpart Dc (WAC 173-400-115), 97NM-138 (6/6/1997), and 97NM-138, Amendment 1 (11/19/2009)

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1, Tier 2.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval 6/6/1997

Condition:	Visual check of combustion.
Periodic Monitoring:	Not Applicable.
Frequency:	Daily.
Test Method:	Not Applicable.
Test Frequency:	Not Applicable.
Required Records:	Record available operating data.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval 6/6/1997

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:	Not Applicable.
Frequency:	Semi-annually.
Test Method:	Not Applicable.
Test Frequency:	Not Applicable.
Required Records:	Records of inspections and work performed.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Monthly.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

Condition:
A. Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
B. Inspect refractory.
C. Clean fireside surfaces and breaching.

Periodic Monitoring: Not Applicable.
Frequency: Every two years.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections.
State-Only: Yes.
Calculation Model: Not applicable.

1.4.4 Reserved

1.4.5 Discharge Point: 3709A Boiler (<5 mmBTU/hr – Natural Gas)

300 Area, 3709A Boiler Annex

Requirement Citation: 40 CFR 60, Subpart Dc (WAC 173-400-115), 97NM-138 (6/6/1997), and 97NM-138, Amendment 1 (11/19/2009)

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1, Tier 2.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval 6/6/1997

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:	Not Applicable.
Frequency:	Monthly.
Test Method:	Not Applicable.
Test Frequency:	Not Applicable.
Required Records:	Records of inspections.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval **6/6/1997**

Condition: Visual check of combustion.
Periodic Monitoring: Not Applicable.
Frequency: Daily.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Record available operating data.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Semi-annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections and work performed.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

Condition:
A. Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
B. Inspect refractory.
C. Clean fireside surfaces and breaching.

Periodic Monitoring: Not Applicable.
Frequency: Every two years.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: See Section 2.5.
State-Only: Yes.
Calculation Model: Not applicable.

1.4.6 Discharge Point: 324 Boiler 1 and Boiler 2(>5 mmBTU/hr – Natural Gas)

300 Area, 324 Boiler Annex

Requirement Citation: 40 CFR 60, Subpart Dc (WAC 173-400-115), 97NM-138 (6/6/1997), and 97NM-138, Amendment 1 (11/19/2009)

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1, Tier 2.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	SO_2 shall not exceed 0.0006 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 6 or 6C of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	NO_x shall not exceed 0.037 lb/mm BTU and 30 ppm @ 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 7E of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	CO shall not exceed 0.225 lb/mm BTU and 300 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Particulate matter (PM_{10}) shall not exceed 0.012 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 5 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	VOC shall not exceed 0.013 lb/mm BTU and 30 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 25 or 25A of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Visual check of combustion.
Periodic Monitoring:	Not Applicable.
Frequency:	Daily.
Test Method:	Not Applicable.
Test Frequency:	Not Applicable.
Required Records:	Record available operating data.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Monthly.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Semi-annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections and work performed.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

Condition:
A. Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
B. Inspect refractory.
C. Clean fireside surfaces and breaching.

Periodic Monitoring: Not Applicable.
Frequency: Annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: See Section 2.5.
State-Only: Yes.
Calculation Model: Not applicable.

1.4.7 Discharge Point: 325 Boiler 1 and Boiler 2(>5 mmBTU/hr – Natural Gas)

300 Area, 325 Boiler Annex

Requirement Citation: 40 CFR 60, Subpart Dc (WAC 173-400-115), 97NM-138 (6/6/1997), and 97NM-138, Amendment 1 (11/19/2009)

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1, Tier 2.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	SO_2 shall not exceed 0.0006 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 6 or 6C of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	NO_x shall not exceed 0.037 lb/mm BTU and 30 ppm @ 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 7E of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	CO shall not exceed 0.225 lb/mm BTU and 300 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Particulate matter (PM_{10}) shall not exceed 0.012 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 5 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	VOC shall not exceed 0.013 lb/mm BTU and 30 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 25 or 25A of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Visual check of combustion.
Periodic Monitoring:	Not Applicable.
Frequency:	Daily.
Test Method:	Not Applicable.
Test Frequency:	Not Applicable.
Required Records:	Record available operating data.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Monthly.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Semi-annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections and work performed.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

Condition:
A. Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
B. Inspect refractory.
C. Clean fireside surfaces and breaching.

Periodic Monitoring: Not Applicable.
Frequency: Annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: See Section 2.5.
State-Only: Yes.
Calculation Model: Not applicable.

1.4.8 Discharge Point: 331 Boiler 1 and Boiler 2 (<5 mmBTU/hr – Natural Gas)

300 Area, 331 Boiler Annex

Requirement Citation: 40 CFR 60, Subpart Dc (WAC 173-400-115), 97NM-138 (6/6/1997), and 97NM-138, Amendment 1 (11/19/2009)

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1, Tier 2.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval 6/6/1997

Condition:	SO_2 shall not exceed 0.0006 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 6 or 6C of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval 6/6/1997

Condition:	NO_x shall not exceed 0.037 lb/mm BTU and 30 ppm @ 3% O_2.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 7E of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	CO shall not exceed 0.225 lb/mm BTU and 300 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Particulate matter (PM_{10}) shall not exceed 0.012 lb/mm BTU.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 5 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	VOC shall not exceed 0.013 lb/mm BTU and 30 ppm @ 3% O_2
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 25 or 25A of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Visual check of combustion.
Periodic Monitoring:	Not Applicable.
Frequency:	Daily.
Test Method:	Not Applicable.
Test Frequency:	Not Applicable.
Required Records:	Record available operating data.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Monthly.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Semi-annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections and work performed.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

Condition:
A. Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
B. Inspect refractory.
C. Clean fireside surfaces and breaching.

Periodic Monitoring: Not Applicable.
Frequency: Annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: See Section 2.5.
State-Only: Yes.
Calculation Model: Not applicable.

1.4.9 Discharge Point: Portable Boiler (<5 mmBTU/hr – Dual Fuel)

The portable boiler can be operated with either fuel oil or natural gas as the combustion source. Dependent on the source being used, the emission requirements are different. Each emission condition will list the condition followed by the type of fuel the condition applies to.

Hanford Site

Requirement Citation: 40 CFR 60, Subpart Dc (WAC 173-400-115), 97NM-138 (6/6/1997), and 97NM-138, Amendment 1 (11/19/2009)

1.4.9.1 Natural Gas

Condition Approval **6/6/1997**

Condition: SO_2 shall not exceed 0.0006 lb/mm BTU – fired using natural gas
Periodic Monitoring: Section 2.6.
Frequency: Monthly.
Test Method: EPA Method 6 or 6C of 40 CFR 60, Appendix A.
Test Frequency: Not Applicable.
Required Records: Monthly records of fuel use on each boiler (See Section 2.5).
State-Only: No.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

Condition: NO_x shall not exceed 0.037 lb/mm BTU and 30 ppm @ 3% O_2 – fired using natural gas
Periodic Monitoring: Section 2.6
Frequency: Monthly.
Test Method: EPA Method 7E of 40 CFR 60, Appendix A.
Test Frequency: Not applicable.
Required Records: Monthly records of fuel use on each boiler (See Section 2.5).
State-Only: No.
Calculation Model: Not applicable.

Condition Approval	**6/6/1997**
Condition:	CO shall not exceed 0.225 lb/mm BTU and 300 ppm @ 3% O_2 – fired using natural gas.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Particulate matter (PM_{10}) shall not exceed 0.012 lb/mm BTU – fired using natural gas.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 5 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	VOC shall not exceed 0.013 lb/mm BTU and 30 ppm @ 3% O_2 – fired using natural gas.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 25 or 25A of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

1.4.9.2 Distillate Fuel-Oil

Condition Approval	**6/6/1997**
Condition:	Use of fuel per 97NM-138 – fired using distillate fuel-oil.
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	NO_x shall not exceed 0.150 lb/mm BTU and 115 ppm @ 3% O_2 – fired using distillate fuel-oil.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 7E of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	SO_2 shall not exceed 0.051 lb/mm BTU – fired using distillate fuel-oil
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 6 or 6C10 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	CO shall not exceed 0.071 lb/mm BTU and 90 ppm @ 3% O_2 – fired using distillate fuel-oil.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 10 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Particulate matter (PM_{10}) shall not exceed 0.011 lb/mm BTU – fired using distillate fuel-oil.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 5 of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	VOC shall not exceed 0.013 lb/mm BTU and 30 ppm @ 3% O_2 – fired using distillate fuel-oil.
Periodic Monitoring:	Section 2.6.
Frequency:	Monthly.
Test Method:	EPA Method 25 or 25A of 40 CFR 60, Appendix A.
Test Frequency:	Not Applicable.
Required Records:	Monthly records of fuel use on each boiler (See Section 2.5).
State-Only:	No.
Calculation Model:	Not applicable.

1.4.9.3 Conditions Applicable Regardless of Fuel Used

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1, Tier 2.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
Condition:	Visual check of combustion.
Periodic Monitoring:	Not Applicable.
Frequency:	Daily.
Test Method:	Not Applicable.
Test Frequency:	Not Applicable.
Required Records:	Record available operating data.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**6/6/1997**
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:	Not Applicable.
Frequency:	Monthly.
Test Method:	Not Applicable.
Test Frequency:	Not Applicable.
Required Records:	Records of inspections.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval **6/6/1997**

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: Not Applicable.
Frequency: Semi-annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: Records of inspections and work performed.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval **6/6/1997**

Condition:
A. Conduct boiler tune-up by manufacturer trained technician or other qualified personnel.
B. Inspect refractory.
C. Clean fireside surfaces and breaching.

Periodic Monitoring: Not Applicable.
Frequency: Annually.
Test Method: Not Applicable.
Test Frequency: Not Applicable.
Required Records: See Section 2.5.
State-Only: Yes.
Calculation Model: Not applicable.

1.4.10 Discharge Point: E-225BC 001

200E Area Internal Combustion Engine 500 Horsepower and Greater

Requirement Citation: WAC 173-400-040 (2) and WAC 173-400-040 (7)

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1, Tier 1
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	1,000 ppm SO_2 @ 7% O_2 on a dry basis. Prohibits emission of a gas containing sulfur dioxide from any emissions unit in excess of 1,000 ppm of a dry basis, corrected to 7% oxygen combustion sources, and based on the average of any period of 60 consecutive minutes.
Periodic Monitoring:	Section 2.7, Tier 1
Frequency:	Not Applicable
Test Method:	EPA Method 6 or 6C of 40 CFR 60, Appendix A
Test Frequency:	Not Applicable
Required Records:	1. Amount and type of fuel burned 2. Vendor documentation or fuel analysis once per year.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.11 Discharge Point: E-225BG 001

200E Area Internal Combustion Engine 500 Horsepower and Greater

Requirement Citation: WAC 173-400-040 (2) and WAC 173-400-040 (7)

Condition Approval

Condition:	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.
Periodic Monitoring:	Section 2.1, Tier 1
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Quarterly.
Required Records:	As specified in Section 2.1.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	1,000 ppm SO_2 @ 7% O_2 on a dry basis. Prohibits emission of a gas containing sulfur dioxide from any emissions unit in excess of 1,000 ppm of a dry basis, corrected to 7% oxygen combustion sources, and based on the average of any period of 60 consecutive minutes.
Periodic Monitoring:	Section 2.7, Tier 1
Frequency:	Not Applicable
Test Method:	EPA Method 6 or 6C of 40 CFR 60, Appendix A
Test Frequency:	Not Applicable
Required Records:	1. Amount and type of fuel burned 2. Vendor documentation or fuel analysis once per year.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.12 Discharge Point: Reserved

1.4.13 Reserved

1.4.14 Discharge Point: CWC

200W Area, Central Waste Complex

Requirement Citation (WAC or Order Citation): DE00NWP-002 Revision 1

Condition Approval	**6/29/2006**
Condition:	Visible emissions shall not exceed limits specified in WAC 173-400-040(2).
Periodic Monitoring:	(1) Section 2.1, Tier 3. (2) Visible emission surveys
Frequency:	No specified frequency.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A
Test Frequency:	When visible emissions are observed.
Required Records:	(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology. (2) Visible emission records
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/29/2006**
Condition:	VOC emissions shall not exceed 3.5 tons per year.
Periodic Monitoring:	Emission estimation (Condition 3.0 of the NOC).
Frequency:	Annually.
Test Method:	Material assessment, inventory, and calculation as identified in the NOC Approval Condition 3.0.
Test Frequency:	Annually.
Required Records:	Results of analyses.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/29/2006**
Condition:	All TAPs, as submitted in the Permittee's Notice of Construction Application, shall be below their respective ASIL.
Periodic Monitoring:	Emission estimation (Condition 3.0 of this NOC).
Frequency:	Annually.
Test Method:	Material assessment, inventory, and calculation as identified in the NOC Approval Condition 3.0.
Test Frequency:	Annually.
Required Records:	Results of analyses.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.15 Discharge Point: Concrete Batch Plant

200E Area, Vitrification

Requirement Citation (WAC or Order Citation): DE01NWP-003 (8/21/2001), 9/24/2002 Revision, and 3/12/2003 Revision

Condition Approval	**8/21/2001**
Condition:	Total Emission Limits
	A. Particulate Matter - Particulates from the bag-house exhaust shall not exceed 0.01grains per dry standard cubic foot, with no visible emissions. Engineering calculations or vendor information that the bag-house, when properly operated and maintained, will control emissions to less than 0.01 grains per dry standard cubic foot will be available at the facility. Periodic measurements shall consist of visible emission inspections per EPA Reference Method 22, 40 CFR 60, Appendix A, July 1, 2000.
	B. Fugitive Dust - Visible emissions from the sand and aggregate transfer points, truck loading station, the piles, or any other source shall not be allowed beyond 100 yards.
Periodic Monitoring:	A. Recordkeeping
Test Method:	B. EPA Method 22 of Title 40 Part 60, Appendix A, July 1, 2000.
Test Frequency:	Not applicable.
Required Records:	A. Calculations, vendor information, baghouse maintenance logs, surveillance checklists.
	B. Visible emission survey results.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**8/21/2001**	
Condition:	Fugitive Dust	
	All unpaved areas at the CBP and quarry will be controlled by watering, chemical stabilization, or both. Means of chemical stabilization include the application of petroleum resins (EPA 1998). A water spray additive, (such as, "soil cement") will also be considered for application on unpaved roads. Soil cement has been previously used on the Hanford Site with effective results.	
	Vehicle speed limit signs will be posted to control speeds. Paved roads between the quarry and CBP will be kept clear of heavy accumulations of dust and debris. Front-end loaders will be used to pick up any significant spill of sand or aggregate material on the pave roads between the quarry and CBP. The sand and aggregate stockpiles will be kept sprinkled with water to prevent the movement of materials that may migrate because of wind erosion. Transfer points at conveyors, crushers, and screens will also be sprayed with water.	
Periodic Monitoring:	Recordkeeping	
Test Method:	Not specified.	
Test Frequency:	Not applicable.	
Required Records:	Surveillance checklists.	
State-Only:	No.	
Calculation Model:	Not applicable.	

Condition Approval	**8/21/2001**	
Condition:	Emission Control Monitors	
	Emission equipment control monitors shall include but not be limited to the following:	
	A. Bag house - None required if there are no visible emissions per section 1.A. of the APPROVAL CONDITIONS, and maintenance records indicate proper maintenance practices and schedules.	
Periodic Monitoring:	Recordkeeping	
Test Method:	Not specified.	
Test Frequency:	Not applicable.	
Required Records:	Surveillance checklists and bag house maintenance logs.	
State-Only:	No.	
Calculation Model:	Not applicable.	

Condition Approval	**8/21/2001**
Condition:	General Conditions
A. Visible Emissions:	No visible emissions shall be allowed beyond 100 yards of source. During periods of high winds, an assessment shall be made to suspend operations or initiate a more comprehensive plant watering scheme.
Periodic Monitoring:	Visible Emission Surveys.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Results of visible emission surveys.
State-Only:	No.
Calculation Model:	Not applicable.
Condition Approval	**3/12/2003**
Condition:	Diesel Fuel Oil Boiler
	1. A 4.4 MMBtu diesel fuel oil boiler is permitted to operate at the Concrete Batch Plant.
	2. The diesel fuel sulfur content will be less than or equal to 0.05% S, by weight.
	3. Operation of the boiler is limited to 2000 hours per year.
	4. Good combustion engineering practices shall be followed, including adherence to the boiler manufacturer's specification for operation, maintenance, and combustion control.
	5. Specific combustion feed gas ratios, including the fuel-air ratio, monitoring, startup and shutdown procedures shall be followed to maximize combustion efficiency and minimize discharge of pollutants into the atmosphere.
Periodic Monitoring:	Recordkeeping
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	1. Manufacturer's specifications for operation, maintenance, and combustion control.
	2. Records of operating hours.
	3. Records of fuel specification (sulfur content).
	4. Records of good combustion engineering practices and operating procedures.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.16 Discharge Point: E-282ED 001

200E Area, Emergency Fire Pump Generators

Requirement Citation (WAC or Order Citation): NWP-96-1

Condition Approval	**4/30/1996**
Condition:	Engine E shall operate no more than 350 hours per year.
Periodic Monitoring:	Recordkeeping.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Maintain records showing all hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**4/30/1996**
Condition:	NO_x 75.5 pounds per hour NOx.
Periodic Monitoring:	Recordkeeping & average fuel consumption rate determination shall be performed at least once per 12 months.
Test Method:	EPA Method 7A of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	1. Monthly fuel burned (this calculation is based on fuel added to supply tank). 2. Hours of operation logged.
State-Only:	No.
Calculation Model:	2B.

Condition Approval	**4/30/1996**
Condition:	Engine E shall burn only No. 2 fuel oil with sulfur content no more than 0.05 weight percent.
Periodic Monitoring:	Recordkeeping for compliance with condition.
Test Method:	Not specified.
Test Frequency:	Not applicable.
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 $\leq$0.05wt% sulfur.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**4/30/1996**
Condition:	Opacity 10 %.
Periodic Monitoring:	Section 2.1, Tier 1.
Frequency:	At least once per quarter, if operates.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	Results of visible emissions survey or records of visual determination of the opacity.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.17 Discharge Point: E-282WD 001

200W Area, Generators

Requirement Citation (WAC or Order Citation): NWP-96-1

Condition Approval	**4/30/1996**
Condition:	10 % Opacity.
Periodic Monitoring:	Section 2.1, Tier 1
Frequency:	At least once per quarter, if operates.
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	Results of visible emissions survey or records of visual determination of the opacity.
State-Only:	No.
Calculation Model:	Not applicable.
Condition Approval	**4/30/1996**
Condition:	NO_x 42 pounds per hour.
Periodic Monitoring:	Recordkeeping & average fuel consumption rate determination shall be performed at least once per 12 months.
Test Method:	EPA Method 7A of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable.
Required Records:	1. Monthly fuel burned (this calculation is based on fuel added to supply tank). 2. Hours of operation logged.
State-Only:	No.
Calculation Model:	2B.
Condition Approval	**4/30/1996**
Condition:	Engine W shall burn only No. 2 fuel oil with sulfur content no more than 0.05 weight percent.
Periodic Monitoring:	Recordkeeping for compliance with condition.
Test Method:	Not specified.
Test Frequency:	Not applicable.
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 $\leq$0.05 wt% sulfur.
State-Only:	No.
Calculation Model:	Not applicable.

1	**Condition Approval**	**4/30/1996**
2	Condition:	Engine W shall operate no more than 350 hours per year.
3	Periodic Monitoring:	Recordkeeping.
4	Test Method:	Not specified.
5	Test Frequency:	Not applicable.
6	Required Records:	Maintain records showing all hours of operation.
7	State-Only:	No.
8	Calculation Model:	Not applicable.
9		

1.4.18 Discharge Point: Emergency Diesel Generators

300 Area, Generators

Requirement Citation (WAC or Order Citation): DE02NWP-001(1/15/2002), DE02NWP-001, Amendment 1(10/18/2011), DE02NWP-001, Amendment 2 (01/26/2012)

Condition Approval	**1/15/2002**
Condition:	Total Emission Limits A. The activities described in the Notice of Construction application will be permitted without additional control technologies required, provided that the total emissions from all activities will not result in an exceedance of WAC 173-460 ASILs. B. A new Notice of Construction will be required, if total emissions of toxic air pollutants exceed the Small Quantity Emission Rates, unless dispersion modeling demonstrates that emissions would continue to result in concentrations less than the ASILs. Results of any such dispersion modeling demonstrations/calculations will be maintained on file and made available upon inspection. C. A new NOC also is required if total emissions of criteria pollutants would exceed the WAC 173-400-110 thresholds.
Periodic Monitoring:	Analyze each proposed change to determine if emissions would exceed an ASIL or NSR threshold.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Results of analyses.
State-Only:	NSR thresholds – No. ASILs - Yes.
Calculation Model:	Not applicable.
Condition Approval	**1/26/2012**
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.
Test Method:	Not specified.
Test Frequency:	Per fuel shipment.
Required Records:	Vendor documentation or fuel analysis showing sulfur content < 0.5%.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**1/15/2002**
Condition:	Monitoring and Recordkeeping
	Specific records shall be kept on-site by the Permittee and made available for inspection by Ecology upon request. The records shall be organized in a readily accessible manner and cover a minimum of the most recent sixty (60) month period. The records to be kept shall include the following:
	A. Maintain records of the hours of operation.
Periodic Monitoring:	Recordkeeping.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	1. Hours of operation
	2. Fuel consumption.
State-Only:	No
Calculation Model:	Not applicable.

1.4.19 Discharge Point: P-2025E ETF

200E Area, Effluent Treatment

Requirement Citation (WAC or Order Citation): WAC 173-460-070, DE07NWP-003 (6/6/2007), Amendment 1 (8/7/2007) and Amendment 2 (9/27/2007), Revision 1 (8/10/2010)

Condition Approval	**6/6/2007 (DE07NWP-003)**
Condition:	Visible emissions from the ETF stack (Figure 1 of Order DE07NWP-003, Rev. 1) shall not exceed five percent (5%).
Periodic Monitoring:	(1) Section 2.1, Tier 3.
	(2) Visible emission surveys
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A
Test Frequency:	When visible emissions are observed.
Required Records:	(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology.
	(2) Visible emission records
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/2007 (DE07NWP-003)**
Condition:	Volatile Organic Compound (VOC) emissions from the ETF (Figure 1 of Order DE07NWP-003) shall not exceed 0.55 gram per cubic meter (g/m^3) at standard conditions or 0.50 gram per minute (g/min).
Periodic Monitoring:	Initial compliance verified by EPA Method 18 of 40 CFR 60, Appendix A in 1996 (NOC-93-3).
Test Method:	EPA Method 18 or 25A of 40 CFR 60, Appendix A.
Test Frequency:	Not applicable (initial test condition for construction).
Required Records:	Testing Results of 1996 EPA Method.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/2007 (DE07NWP-003)**
Condition:	Volatile Organic Compound (VOC) emissions from ETF operations shall not exceed 4,000 lb/yr. [WAC 173-400-110(5)(b)]
Periodic Monitoring:	Material emission estimates.
Test Method:	Calculations and record-keeping.
Test Frequency:	Annual.
Required Records:	Records of data and calculations for the VOC emissions from ETF operations.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**6/6/2007 (DE07NWP-003)**
Condition:	Particulate matter emissions shall not exceed 1,500 lb/yr.
Periodic Monitoring:	HEPA filtration of ETF stack gases
Test Method:	See Required Records.
Test Frequency:	Not applicable.
Required Records:	Maintenance and operating records of all filtration systems.
State-Only:	No.
Calculation Model:	Not applicable.
Condition Approval	**6/6/2007 (DE07NWP-003) and 9/27/2007 (Amendment 2), Revision 1 (8/10/2010)**
Condition:	All TAPs in the NOC applications and identified in Table 1 of DE07NWP-003 Amendment 2 (9/27/2007) and Revision 1 (8/10/2010), shall not exceed ASILs. [WAC 173-460-070]
Periodic Monitoring:	Waste analysis records (see Required Records).
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	(1) Laboratory or waste analysis results for TAPs identified in Table 1 of DE07NWP-003 Amendment 2 (9/27/2007) and Revision 1 (8/10/2010), and (2) Waste stream influent volumetric records.
State-Only:	Yes.
Calculation Model:	Not applicable.
Condition Approval	**6/6/2007 (DE07NWP-003)**
Condition:	All newly identified TAPs shall not exceed ASILs (with assessment of ASIL compliance). [WAC 173-460-070]
Periodic Monitoring:	Assessment of ASIL compliance (see Required Records).
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	(1) Report laboratory or waste analysis result of newly identified TAPs within 90 days of completion of analysis, and (2) Waste stream influent volumetric records.
State-Only:	Yes.
Calculation Model:	Not applicable.

1.4.20 Discharge Point: P-2706T 001

200W Area, T Plant Complex

Requirement Citation (WAC or Order Citation): DE01NWP-002 Revision 1 (6/29/2006)

Condition Approval	**6/29/2006**
Condition:	Visible Emissions
	A. Visible emissions from any T-Plant Complex stack will not exceed limits specified in WAC 173-400-040(2).
Periodic Monitoring:	(1) Section 2.1, Tier 3.
	(2) Visible emission surveys
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A
Test Frequency:	When visible emissions are observed.
Required Records:	(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology.
	(2) Visible emission records
State-Only:	No.
Calculation Model:	Not applicable
Condition Approval	**6/29/2006**
Condition:	Emission Limits
	A. VOC emission will not exceed 3.5 tons per year.
	B. All TAPs, as submitted in the Permittee's Notice of Construction Application, will be below their respective ASIL.
Periodic Monitoring:	Analyze each proposed changed to determine if emissions would exceed Emission limits.
Test Method:	Section 3.0 of the Approval Order DE01NWP-002 Revision 1
Test Frequency:	Section 3.0 of the Approval Order DE01NWP-002 Revision 1
Required Records:	Results of analyses.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.21 Reserved

1.4.22 Discharge Point: P-296W004 001

200W Area, Waste Receiving and Processing

Requirement Citation (WAC or Order Citation): DE03NWP-002

Condition Approval	**5/21/2003**
Condition:	Emission Controls Monitors: Source data from an Organic Vapor Analyzer using a Photoionization detector (PID) with at least an 11.7eV lamp, or other device capable of detecting TAPs, was conducted by the facility in providing verification of de minimis (i.e., parts per million levels) fugitive emissions in the drum storage and NDE/NDA areas. The results of source test information, conducted on or at the source(s) locations in lieu of downstream at the stack, have been provided to the permit writer under separate cover. This information has been determined to satisfy the previous approval order condition for this source in performing one-time monitoring to demonstrate TAP emissions are below the estimates provided in the NOC application and T-BACT analysis for the drum storage and DNE/NDA areas. As such, no additional sampling or monitoring will be required under this approval order. The facility will continue to perform at least once every two years, and make available upon request or inspection, results from any Industrial Hygiene program measurements to further demonstrate compliance with limits contained herein. The test plan for conducting these measurements shall also be maintained on file and made available upon request and/or inspection by Ecology.
Periodic Monitoring:	IH Program measurements as specified in NOC, including alternative methods.
Test Method:	Not specified.
Test Frequency:	Once every two years.
Required Records:	Test plan. Measurement results.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**5/21/2003**	
Condition:	Total Emission Limits: For toxic compounds not included in the T-BACT analysis, the emission limits shall be the Small Quantity Emission Rate (SQER). A modification submittal of a Notice of Construction (NOC) application will be required if the SQER limit would be exceeded for compounds not addressed under the T-BACT assessment. 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.
Test Method:	Not specified.
Test Frequency:	Once every 2 years.
Required Records:	1. IH Test Plan.
	2. Results of measurements.
State-Only:	Yes.
Calculation Model:	Not applicable.
Condition Approval	**5/21/2003**
Condition:	An internal annual assessment of the facility container tracking system, such as SWITS of the data management system (DMS), shall 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:	Recordkeeping; Comparison to threshold.
Test Method:	Not specified.
Test Frequency:	Annually.
Required Records:	1. Throughput records, SWITs query evaluation if > 1,000 drums.
	2. Nonradioactive air emissions inventory report required by WAC 173-400-105.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**5/21/2003**	
Condition:	Total Emission Limits: The processing and repackaging activities described in the Notice of Construction 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 T-BACT (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.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Documentation implementing T-BACT.
State-Only:	Yes.
Calculation Model:	Not applicable.

1.4.23 Discharge Point: P-WTP-001

200E Area, Vitrification

Requirement Citation (WAC or Order Citation): WAC 173-400-040(9)(a); DE02NWP-002, Revision 2; and PSD-02-01, Amendment 3.

Condition Approval	**11/13/2006**
Condition:	FUGITIVE DUST CONTROL 9.8 The Construction Phase Fugitive Dust Control Plan(s), prepared using EPA and Ecology guidelines, shall address fugitive dust control at the WTP construction site adjacent to the Hanford 200 Area and the Material Handling Facility. A copy of this plan(s) shall be maintained on-site at all times in a place known to facility employees that are responsible for complying with the requirements contained therein and shall be retrievable by those employees at all times when activities regulated by the documents are occurring. These documents shall be made available to Ecology upon request.
Periodic Monitoring:	Not applicable. The owner or operator shall take reasonable precautions (such as pre-job planning) to prevent fugitive dust from becoming airborne.
Test Method:	Construction Phase Fugitive Dust Control Plan
Test Frequency:	During construction or routine/*ad hoc* dust suppression
Required Records:	Fugitive Dust Control Plan and records of actions taken to minimize fugitive dust
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**11/24/2003**
Condition:	2.1.1.1 Opacity from each Pretreatment, HLW, and LAW process off-gas exhaust stack shall not exceed 5%. Compliance will be conducted over a 6 minute average as measured by EPA Reference Method 9 of 40 CFR 60, Appendix A, or an equivalent method approved in advance by Ecology. A certified opacity reader shall read and record the opacity concurrent with any source testing.
Periodic Monitoring:	(1) For Pretreatment, HLW, and LAW process off-gas exhaust stacks, See Section 2.1, Tier 3. (2) Visible emission surveys
Test Method:	EPA Reference Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	When visible emissions are observed.
Required Records:	(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology. (2) Visible emission records
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**11/24/2003**	
Condition:	1.3 Opacity from each (Pretreatment, HLW, and LAW) process off-gas stack shall not exceed 5%.Compliance shall be conducted over a 6 minute average as measured by EPA Reference Method 9 of 40 CFR 60, Appendix A, or an equivalent method approved in advance by Ecology. A certified opacity reader shall read and record the opacity concurrent with any source testing.
Periodic Monitoring:	For boilers, generators, and fire pumps, See Section 2.1, Tier 1.
Test Method:	EPA Reference Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	At least once per calendar quarter.
Required Records:	Test records.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**11/24/2003**	
Condition:	1.3 Opacity from each exhaust stack from process facilities (Pretreatment, HLW, and LAW) shall not exceed 5%, other facility stacks shall not exceed 10 percent, over a 6 minute average as measured by EPA Reference Method 9 of 40 CFR 60, Appendix A, or an equivalent method approved in advance by Ecology. A certified opacity reader shall read and record the opacity concurrent with any source testing.
Periodic Monitoring:	(1) Section 2.1, Tier 3. (2) Visible emission surveys
Test Method:	EPA Method 9 of 40 CFR 60, Appendix A
Test Frequency:	When visible emissions are observed.
Required Records:	(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology. (2) Visible emission records
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**11/24/2003**	
Condition:	2.2; PSD-02-01, Cond. 2. All boilers, emergency diesel generator, emergency turbine generators and the diesel fire pumps shall be fired on Ultra-Low Sulfur Diesel Fuel (ULSD). ULSD means fuel oil with a sulfur content of 0.0015% (15ppm) or less by weight. Compliance shall be monitored by maintaining records of fuel purchases.
Periodic Monitoring:	Recordkeeping and Semiannual report.
Test Method:	Not Specified.
Test Frequency:	Not Applicable.
Required Records:	Records of monthly fuel purchases and use and an annual certification, from the fuel distributor, stating the sulfur content of the fuel that was purchased. (PSD-02-01 Cond 17.3)
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**11/10/2005**	
Condition:	2.3; PSD-02-01, Cond. 8, Steam Generating Boilers. The operation of the six steam generating boilers shall not exceed an annual aggregated fuel consumption limit of 13,400,000 gallons per year summed daily for the previous 365 days.
Periodic Monitoring:	Fuel purchase records and a written statement in each semiannual report of the total fuel consumption over the previous 12 months.
Test Method:	Not Specified.
Test Frequency:	Daily.
Required Records:	Maintain fuel purchase records (PSD-02-01, Cond 17.3).
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval 4/4/2013

Condition:	2.4; PSD-02-01, Cond. 11, Cond.13, Emergency Turbine Generators and Type I Diesel Generator. Each emergency turbine generator and Type I emergency diesel generator shall not operate for more than 164 hours per year on a 12 month rolling summation calculated once per month. Compliance shall be monitored by installing and operating non-resettable totalizers on each generator. Compliance shall be monitored by including a written statement in each semiannual report of the hours the emergency generators operated in each of the six (6) months covered by the report and the summation of hours operated over the previous 12 months.
Periodic Monitoring:	Recordkeeping.
Test Method:	Not Specified.
Test Frequency:	Monthly.
Required Records:	Records showing all hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval 4/4/2013

Condition:	2.5; PSD-02-01, Cond. 15, Emergency Diesel Fire Pump. Each emergency diesel fire pump shall not operate for more than 230 hours per year on a 12 month rolling summation calculated once per month. Compliance shall be monitored by installing and operating a non-resettable totalizer on each fire pump. Compliance shall be monitored by including a written statement in each semiannual report of the hours the emergency diesel fire pumps operated in each of the six (6) months covered by the report and the summation of hours operated over the previous 12 months.
Periodic Monitoring:	Recordkeeping.
Test Method:	Not Specified.
Test Frequency:	Not Applicable.
Required Records:	Monthly.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**11/24/2003**	
Condition:	3.2 A new NOC will be required, if total emissions of toxic air pollutants exceed WAC 173-460 ASILs or result in criteria pollutant emission increases. These values shall be confirmed by emission calculations, for indicator constituents, derived from waste characterization data obtained through implementation of the Ecology approved Regulatory Data Objectives Supporting Tank Waste Remediation System Privatization Project (PNNL-12040). The mass feed rates for the indicator constituents will be verified to be less than or equal to the mass feed rates used in the Integrated Emissions Baseline Report for the Hanford Tank Waste Treatment and Immobilization Plant (24590-WTP-RPT-PO-03-008, Rev. 0). Results of any such calculations will be maintained on file and made available upon inspection/request.
Periodic Monitoring:	Recordkeeping	
Test Method:	Not Specified.	
Test Frequency:	At least once per calendar year.	
Required Records:	1. Calculations of TAPs emissions derived from waste feed. characterization.	
	2. Calculations of ammonia emissions from LAW and HLW.	
State-Only:	Yes.	
Calculation Model:	Not applicable.	

Condition Approval	**7/8/2002**	
Condition:	2.3 A new NOC also is required if total emissions of any criteria pollutants, derived from calculations/monitoring, would exceed the estimates listed under the Emissions section of this order.	
Periodic Monitoring:	Recordkeeping	
Test Method:	Not Specified.	
Test Frequency:	At least once per calendar year.	
Required Records:	Calculations of criteria pollutants.	
State-Only:	Yes.	
Calculation Model:	Not applicable.	

Condition Approval	**11/24/2003**	
Condition:	4.1; PSD-02-01, Conditions 3.2 (PM or PM10), 4.2 (NOx), 5.2 (PM or PM10), 6.2 (NOx), and 7.2 (PM or PM10), General Testing Requirements. Within 180-days of achieving the optimized feed rate of simulant at which the LAW and HLW vitrification facilities will be operated, the permittee shall demonstrate initial compliance through a performance demonstration conducted per an Ecology approved Performance Demonstration Plan. The permittee shall utilize the Performance Demonstration Plan requirements identified in the Dangerous Waste Portion of the Resource Conservation and Recovery Act Permit for the Treatment, Storage, and Disposal of Dangerous Waste Hanford Tank Waste Treatment and Immobilization Plant (DWP), condition III.10.H.5.f (LAW) and III.10.J.5.f (HLW). Ecology shall be notified at least 30 days prior to the test and invited to participate in the test activities at least one week prior to testing.
Periodic Monitoring:	Recordkeeping.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	1. Notification Documentation.
	2. Performance Demonstration Plan.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**11/24/2003**	
Condition:	3.2 Testing per the initial compliance testing identified in 3.1 shall be conducted in accordance with the frequency identified in the DWP, condition III.10.I.1.h (LAW) and II.10.K.1.h (HLW).
Periodic Monitoring:	Recordkeeping, measurements, and emission calculations.
Test Method:	As stated in DWP conditions III.10.I.1.h (LAW) and III.10.K.1.h (HLW).
Test Frequency:	At startup and at least once every 5 years thereafter.
Required Records:	Test records.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval **11/24/2003; 11/12/03 (PSD)**

Condition: 4.5; PSD-02-01, Conditions 3-7, 9-10, 12, 14. Within 180 days of initial startup, boiler, emergency diesel generator, emergency turbine generators and LAW, HLW, and PT process facility off-gas source testing shall be conducted according to the following methods, unless an alternate method has been proposed in writing by the permittee and approved by Ecology in writing in advance of the testing.

Tested Pollutant	Reference Method (40 CFR 60 Appendix A unless otherwise defined), as of 7/1/2000
Carbon Monoxide	Method 10
Nitrogen Oxides	Method 7E
Volatile Organic Compounds	Method 18
Sulfur Dioxide	Method 6C
Visible Emissions	Method 9
Particulate Matter	40 CFR 60 Appendix A Method 5; 40 CFR 51 Appendix M Method 201 or 201A for the front half analysis and 40 CFR 51 Appendix M Method 202 for the back half

Periodic Monitoring: Recordkeeping, measurements, and emission calculations.
Test Method: As stated in condition.
Test Frequency: Initial startup and every 5 years thereafter.
Required Records: Test Records.
State-Only: No.
Calculation Model: Not applicable.

Condition Approval **11/24/2003**

Condition: 3.6 During the boiler source testing, a direct-reading measurement device for carbon monoxide with a minimum measurement accuracy of five percent or less shall take readings according to methods proposed by the permittee and approved by Ecology in writing in advance of the testing. The direct-reading instrument shall be calibrated for future use, using the results of the source testing.

Periodic Monitoring: Recordkeeping, measurements, and emission calculations.
Test Method: Portable emissions analyzer calibrated during most recent source test.
Test Frequency: Initial startup.
Required Records: Logs of boiler tune-ups and significant boiler maintenance activities will be maintained.
State-Only: Yes.
Calculation Model: Not applicable.

Condition Approval	**11/24/2003**
Condition:	4. Emissions from boilers and generators shall be monitored for CO, and Oxygen by means of a portable emissions analyzer (direct-reading measurement device) at initial startup and after routinely scheduled maintenance activities and burner/control adjustments such as fuel/air metering ratio control and oxygen trim control.
Periodic Monitoring:	Recordkeeping, measurements, and emission calculations.
Test Method:	Portable emissions analyzer calibrated during most recent source test.
Test Frequency:	Initial startup and after routinely scheduled maintenance activities and burner/control adjustments such as fuel/air metering ratio control and oxygen trim control.
Required Records:	Logs of boiler tune-ups and significant boiler maintenance activities will be maintained.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**10/10/2005 Steam Generating Boilers, Diesel Fire Pumps, Type I Emergency Generators, and Emergency Turbine Generators**
Condition:	Approval Condition 2 Use Ultra-low sulfur fuel $\leq$ 0.003% by wt.
Periodic Monitoring:	Not applicable.
Test Method:	Recordkeeping
Test Frequency:	Semiannually
Required Records:	Fuel purchase records and a written statement in each semiannual report of the type of fuel used.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**10/10/2005 Pretreatment Plant**
Condition:	Approval Condition 3. PM10 $\leq$ 0.02 g/dscf 24- hour average ***OR*** 0.456 lb/hr 24-hour average
Periodic Monitoring:	Not applicable.
Test Method:	40 CFR 60 Appendix A, Method 5, 40 CFR 51 Appendix M Method 201 ***OR*** 201A for the front half analysis and 40 CFR 51 Appendix M Method 202 for the back half.
Test Frequency:	5 years
Required Records:	Calculations based on testing results and hours of operation.
State-Only:	No.
Calculation Model:	Not applicable

Condition Approval	**10/10/2005 LAW Vitrification Plant**
Condition:	Approval Condition 5 PM10 ≤ 0.36 lb/hr at 21% O2, 24-hr average.
Periodic Monitoring:	Not applicable.
Test Method:	40 CFR 60 Appendix A, Method 5, 40 CFR 51 Appendix M Method 201 ***OR*** 201A for the front half analysis and 40 CFR 51 Appendix M Method 202 for the back half.
Test Frequency:	5 years
Required Records:	Calculations based on testing results and hours of operation.
State-Only:	No.
Calculation Model:	Not applicable

Condition Approval	**10/10/2005 LAW Vitrification Plant**
Condition:	Approval Condition 4 NOX ≤ 477 ppm dry per volume at 21% O2, 24 hr average ***OR*** 200.1 lb/day averaged over 30 consecutive days
Periodic Monitoring:	Not applicable.
Test Method:	40 CFR 60 Appendix A, Method 7E
Test Frequency:	Continuous; using a Continuous Emission Monitor (CEM) for NO_X and a flow meter
Required Records:	Testing results CEM for NOx and flow meter, and CEM performance evaluation.
State-Only:	No.
Calculation Model:	Not applicable

Condition Approval	**10/10/2005 HLW Vitrification Plant**
Condition:	Approval Condition 7 PM10 ≤ 0.135 lb/hr at 21% O_2, when averaged over 24 consecutive hours.
Periodic Monitoring:	Not applicable.
Test Method:	40 CFR 60 Appendix A, Method 5, 40 CFR 51 Appendix M Method 201 ***OR*** 201A for the front half analysis and 40 CFR 51 Appendix M Method 202 for the back half.
Test Frequency:	5 years
Required Records:	Calculations based on testing results and hours of operation.
State-Only:	No.
Calculation Model:	Not applicable

Condition Approval	**10/10/2005 HLW Vitrification Plant**
Condition:	Approval Condition 6
	NO_X 352 ppmdv at 21% O_2, over a 24 hr averaging period ***OR*** 23.3 lb/day averaged over 30 consecutive days.
Periodic Monitoring:	Not applicable.
Test Method:	40 CFR 60 Appendix A, Method 7E, CEM
Test Frequency:	CEM Continuous
Required Records:	Testing results CEM for NOx and flow meter, and CEM performance evaluation.
State-Only:	No.
Calculation Model:	Not applicable

Condition Approval	**10/10/2005 Steam Boilers**
Condition:	Approval Condition 8
	Maximum aggregated fuel consumption for steam boilers 1, 2, 3, 4, 5, and 6 shall not exceed 13,400,000 gallons per year
Periodic Monitoring:	Not applicable.
Test Method:	Verification of fuel purchases.
Test Frequency:	Semiannual
Required Records:	Fuel purchase records and a written statement in each semiannual report of the total fuel consumption over the previous 12 months.
State-Only:	No.
Calculation Model:	Not applicable

Condition Approval	**10/10/2005 Steam Boilers**
Condition:	Approval Condition 10
	PM or PM_{10} from each steam boiler ≤ 0.02 lb/MMBtu ***OR*** 1.0 lb/hr averaged over 24 consecutive hours.
Periodic Monitoring:	Not applicable.
Test Method:	40 CFR 60 Appendix A, Method 5, 40 CFR 51 Appendix M Method 201 ***OR*** 201A for the front half analysis and 40 CFR 51 Appendix M Method 202 for the back half
Test Frequency:	5 years
Required Records:	Testing results and hours of operation.
State-Only:	No.
Calculation Model:	Not applicable

Condition Approval	**10/10/2005 Steam Boilers**
Condition:	Approval Condition 9
	$NO_X \leq 0.09$ lb/MMBtu 3% O_2, ***OR*** 4.52 lb/hr averaged over 24 consecutive hours
Periodic Monitoring:	Not applicable.
Test Method:	EPA Method 7E of 40 CFR 60 Appendix A
Test Frequency:	5 years
Required Records:	Calculations based on testing results and hours of operation.
State-Only:	No.
Calculation Model:	Not applicable

Condition Approval	**10/10/2005 Steam Boilers**
Condition:	Approval Condition 2
	Use Ultra-low sulfur fuel $\leq$ 0.003% by wt.
Periodic Monitoring:	Not applicable.
Test Method:	Recordkeeping
Test Frequency:	Semiannually
Required Records:	Fuel purchase records
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**10/10/2005 Emergency Generators**
Condition:	Approval Condition 2
	Use Ultra-low sulfur fuel $\leq$ 0.003% by wt.
Periodic Monitoring:	Not applicable.
Test Method:	Recordkeeping
Test Frequency:	Semiannually
Required Records:	Fuel purchase records.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**10/10/2005 Emergency Generators**
Condition:	Approval Conditions 11 and 13
	Each Type I or Type II emergency generator shall not exceed 164 hours per year when averaged over 12 consecutive months, calculated once per month.
Periodic Monitoring:	Not applicable.
Test Method:	Installing and operating a non-resettable totalizer on each generator.
Test Frequency:	Semiannually
Required Records:	Written statement in each semiannual report of the hours the emergency generators operated in each of the six (6) months covered by the report and the summation of hours operated over the previous 12 months.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**10/10/2005 Emergency Generators**
Condition:	Approval Condition 12
	NO_X Type I Generator $\leq$ 391.1 lb/day averaged over 24 consecutive hours.
Periodic Monitoring:	Not applicable.
Test Method:	EPA Method 7E of 40 CFR 60, Appendix A
Test Frequency:	5 years
Required Records:	Calculations based on testing results and hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**10/10/2005 Emergency Generators**
Condition:	Approval Condition 14
	Emissions of NO_X from the Type II Generators shall not exceed 547.5 lb/day (each), when averaged over 24 consecutive hours.
Periodic Monitoring:	Not applicable.
Test Method:	EPA Method 7E of 40 CFR 60, Appendix A
Test Frequency:	5 years
Required Records:	Calculations based upon testing results and hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**10/10/2005 Diesel Fire Water Pumps**
Condition:	Approval Condition 2
	Use Ultra-low sulfur fuel ≤ 0.003% by wt.
Periodic Monitoring:	Not applicable.
Test Method:	Recordkeeping
Test Frequency:	Semiannually
Required Records:	Fuel purchase records
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**10/10/2005 Diesel Fire Water Pumps**
Condition:	Approval Condition 15
	Hours of operation of each pump ≤ 110 hours per year averaged over 12 consecutive months.
Periodic Monitoring:	Not applicable.
Test Method:	Installing and operating a non-resettable totalizer on each diesel fire pump.
Test Frequency:	Semiannually
Required Records:	Written statement in each semiannual report of the hours the diesel fire pumps operated in each of the six (6) months covered by the report and the summation of hours operated over the previous 12 months.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.24 Discharge Point: Integrated Disposal Facility (IDF)

200E, General Standards

Requirement Citation (WAC or Order Citation): WAC 173-400-040(9)(a), DE05NWP-004

Condition Approval	**05/31/2005**
Condition:	FUGITIVE DUST
	Requires reasonable precautions be taken to prevent fugitive dust from becoming airborne and to minimize dust generation.
Periodic Monitoring:	Pre-job planning to determine reasonable control measures.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	None listed.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**05/31/2005**
Condition:	FUGITIVE EMISSIONS
	The permittee shall 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.
Periodic Monitoring:	Pre-job planning to determine reasonable control measures.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	None listed.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**05/31/2005**
Condition:	EMISSION LIMITS FOR WASTE COVERING OPERATIONS
	During waste covering operations, aggregate, a mixture of minerals, sand and soil, will 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 shall 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.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Daily activity reports, logs, pre-job reviews, management assessments, surveillances or similar documents.
State-Only:	Yes.
Calculation Model:	Not applicable.
Condition Approval:	**05/31/2005**
Condition:	EMISSION LIMITS FOR TRAVEL ON UNPAVED ROADS
	Surface treatment for dust control will 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
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Daily activity reports, logs, pre-job reviews, management assessments, surveillances or similar documents.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**05/31/2005**	
Condition:	EMISSION LIMITS FOR AGGREGATE COVER COMPACTING ACTIVITIES	
	A water truck will 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 shall 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.	
Test Method:	Not specified.	
Test Frequency:	Not applicable.	
Required Records:	Daily activity reports, logs, pre-job reviews, management assessments, surveillances or similar documents.	
State-Only:	Yes.	
Calculation Model:	Not applicable.	
Condition Approval	**05/31/2005**	
Condition:	EMISSION LIMITS FOR AGGREGATE STORAGE PILE	
	Watering will be utilized to minimize wind erosion during storage pile operation. Storage pile work will be curtailed during high winds in accordance with abnormal operating procedures for high winds. Prior to long periods of inactivity, an assessment shall 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.	
Test Method:	Not specified.	
Test Frequency:	Not applicable.	
Required Records:	Daily activity reports, logs, pre-job reviews, management assessments, surveillances or similar documents.	
State-Only:	Yes.	
Calculation Model:	Not applicable.	

1.4.25 Discharge Point: Ventilation Systems for 241-AN and 241AW-Tank Farms

200E, Tank Farms – Ventilation Systems for 241-AN and 241 AW Tank Farms

Requirement Citation	(WAC or Order Citation): WAC 173-400-040(2), DE05NWP-001 (2/18/2005), Rev 1 (7/31/2007), and Amd A (3/26/2013)
Condition Approval	**2/18/2005 (DE05NWP-001)**
Condition:	EMISSION LIMITS Visible emissions from each stack shall not exceed five (5) percent.
Periodic Monitoring:	Compliance and monitoring shall 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 shall be met by performing an opacity determination utilizing 40 CFR 60, Appendix A, Method 9, providing that such determination shall not place the visible emission observer in hazard greater than that identified for the general worker.
Test Method:	40 CFR 60, Appendix A, Method 9, as applicable.
Test Frequency:	None specified (as needed for monitoring and compliance).
Required Records:	(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology. (2) Visible emission surveys records
State-Only:	No.
Calculation Model:	Not applicable.
Condition Approval	**2/18/2005 (DE05NWP-001)**
Condition:	EMISSION LIMITS Primary tank ventilation exhauster systems shall not exceed 4,000 ft^3/min (at standard temperature and pressure).
Periodic Monitoring:	Compliance and monitoring of this condition shall be demonstrated by stack gas flow and temperature measurement.
Test Method:	Not specified.
Test Frequency:	None specified (as needed for monitoring and compliance).
Required Records:	(1) Records of exhauster system stack flow rates and temperature records. (2) Records of calibration of stack gas flow rate and temperature measurement devices.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**7/31/2007 (DE05NWP-001 Rev 1) and 3/26/2013 (Amd A)**
Condition:	EMISSION LIMITS All TAPs, as shown in Table 2 of Approval Order DE05NWP-001, Rev 1 and Amd A, shall be below their respective ASIL or Screening Level of Table 1 of Approval Order DE05NWP-001 Rev 1.
Periodic Monitoring:	Compliance and monitoring shall be met by operating the exhauster systems only when in accord with T-BACT emission controls for the project. T-BACT for this project has been determined to be operation of the primary tank ventilation exhauster systems not exceeding 4,000 cubic feet per minute with moisture de-entrainment, pre-heater, and HEPA filtration in service in the treatment train.
Test Method:	Not specified.
Test Frequency:	None specified (as needed for monitoring and compliance).
Required Records:	Documentation and record-keeping of T-BACT 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.
Calculation Model:	Not applicable.

Condition Approval	**3/26/2013 (DE05NWP-001 Amd A)**
Condition:	EMISSIONS LIMITS
	Emissions of ammonia shall not exceed 2.9 pounds per hour (3.63E-01 gram/second) from either primary tank ventilation exhauster system. The term 'either exhauster system' shall mean each individual primary tank ventilation exhauster system within the 241-AN and 241-AW Tank Farms, where an exhauster system may be operated in single-train or dual-train modes.
Periodic Monitoring:	Conduct of 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 in terms of grams per second.
Test Frequency:	In order to assess baseline emission concentrations from each exhauster system, emission levels of ammonia will be assessed between 12 and 24 hours after initiation of exhauster operation (single train or duel train). Ammonia stack concentrations shall be sampled a minimum of three times.
Baseline Assessments	Baseline assessments shall be conducted within ninety (90) days of commencement of operations. Should dual exhauster train operation not be required by the Permittee during this ninety (90) day period, assessment of dual train operation emissions shall 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 limitations from these exhauster systems, 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 shall be used to assess these emissions.
Required Records:	Results of emission assessments, baseline and bi-annual emission monitoring results, supporting data and calculations to demonstrate compliance with ammonia limits.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**2/18/2005 (DE05NWP-001)**	
Condition:	REPORTING	
	Visible emission surveys conducted and a report of the maintenance conducted to maintain the subject exhaust system's T-BACT operations shall 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 thirty (30) days of completion of the survey with an assessment of the cause of visible emissions.	
Test Method:	Not specified.	
Test Frequency:	Not applicable.	
Required Records:	Visible emission surveys conducted and a report of the maintenance.	
State-Only:	No.	
Calculation Model:	Not applicable.	

Condition Approval	**2/18/2005 (DE05NWP-001)**	
Condition:	REPORTING	
	Identification of any TAP not previously identified within the Notice of Construction Application or Supplement emissions estimates shall be submitted to Ecology within ninety (90) days of completion of laboratory analyses which verify emissions of that toxic air pollutant from the project.	
Periodic Monitoring:	Compliance of this condition is met by submitting to Ecology within ninety (90) days of completion of laboratory analyses which verify emissions of that toxic air pollutant from the project.	
Test Method:	Not specified.	
Test Frequency:	Not applicable.	
Required Records:	Laboratory analysis.	
State-Only:	No.	
Calculation Model:	Not applicable.	

Condition Approval	**2/18/2005 (DE05NWP-001)**	
Condition:	REPORTING	
	Results of emission assessments conducted shall 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 ninety (90) days of completion of such assessment.	
Test Method:	Not specified.	
Test Frequency:	Not applicable.	
Required Records:	Emission assessment results.	
State-Only:	No.	
Calculation Model:	Not applicable	

1.4.26 Discharge Point: 200 Area SST Categorical Waste Retrieval

200 Area SST Categorical Waste Retrieval

Requirement Citation (WAC or Order Citation): WAC 173-400-040(2), DE05NWP-002 (2/18/2005), Rev. 1 (10/12/2005), and Rev 2 (7/31/2007).

Condition Approval	**2/18/2005 (DE05NWP-002)**
Condition:	EMISSION LIMITS
	Visible emissions from each tank ventilation exhauster stack or aggregated exhauster stack shall not exceed five percent.
Periodic Monitoring:	(1) Section 2.1, Tier 3.
	(2) Visible emission surveys
Test Method:	40 CFR 60, Appendix A, Method 9, as applicable.
Test Frequency:	When visible emissions are observed.
Required Records:	(1) Maintenance records required in AOP Attachment 2 for maintaining abatement control technology.
	(2) Visible emission records
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**2/18/2005 (DE05NWP-002)**
Condition:	EMISSION LIMITS
	Tank ventilation exhauster systems for the 241-C SST farm 100 series tank (241-C-101 through 241-C-112) shall 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 shall be demonstrated by stack gas flow and temperature measurement.
Test Method:	Not specified.
Test Frequency:	None specified (as needed for monitoring and compliance).
Required Records:	(1) Records of exhauster system stack flow rates and temperature records.
	(2) Records of calibration of stack gas flow rate and temperature measurement devices.
State-Only:	No.
Calculation Model:	Not applicable.
Condition Approval	**2/18/2005 (DE05NWP-002)**
Condition:	EMISSION LIMITS
	SST ventilation exhauster systems for the retrieval of wastes other than those of the 241-C tank farm 100 series tanks shall not exceed 1,000 ft^3/min (at standard temperature and pressure).
Periodic Monitoring:	Compliance and monitoring of this condition shall be demonstrated by stack gas flow and temperature measurement.
Test Method:	Not specified.
Test Frequency:	None specified (as needed for monitoring and compliance).
Required Records:	(1) Records of exhauster system stack flow rates and temperature records.
	(2) Records of calibration of stack gas flow rate and temperature measurement devices.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**7/31/2007 (DE05NWP-002, Rev 2)**
Condition:	EMISSION LIMITS All TAPs, as submitted in the permittee's NOC Applications, shall be below their respective ASIL or Screening Level of Table 1 in Approval Order DE05NWP-002, Rev 2.
Periodic Monitoring:	Compliance and monitoring with this condition shall be met by: (1) Operating the exhauster systems only when in accord with T-BACT 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). (2) Development and implementation of a sampling and analysis plan (SAP) for each tank retrieval. For each retrieval, the SAP shall 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 2. The TAPs addressed in the SAP shall be identified from Table 2 of the Approval Order DE05NWP-002, Rev 2, and based upon best engineering judgment and most current tank content data. Analytical methods for the analysis shall be the United States EPA, OSHA, or NIOSH approved, or by approved equivalent method.
Test Method:	Not specified.
Test Frequency:	None specified (as needed for monitoring and compliance).
Required Records:	(1) All monitoring and operations records required to operate and maintain the emission control equipment which implements T-BACT as required in Periodic Monitoring above. (2) SAPs developed for compliance demonstration as described in Periodic Monitoring above. (3) Laboratory analysis result summaries of any samples undertaken after the effective date of the Approval Order DE05NWP-002, Rev 2, from SST tank farm tank headspaces or SST ventilation system exhaust which are examined for organic species or other TAPs.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**2/18/2005 (DE05NWP-002)**
Condition:	REPORTING
	Visible emission surveys, conducted pursuant to Compliance Demonstration requirement 1.3.2, per NOC approval DE05NPW-002, and a report of the maintenance conducted to maintain the subject exhaust system's T-BACT operations.
Periodic Monitoring:	The reporting condition shall be submitted to Ecology within thirty (30) days of completion of the survey with an assessment of the cause of visible emissions.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Visible emission surveys conducted and a report of the maintenance.
State-Only:	No.
Calculation Model:	Not applicable.
Condition Approval	**10/12/2005 (DE05NWP-002, Rev. 1)**
Condition:	REPORTING
	Identification of any TAP not previously identified within the Notice of Construction Application or Supplement emissions estimates as defined in Table 2, per NOC approval DE05NWP-002R1, shall be submitted to Ecology within ninety (90) days of completion of laboratory analyses which verify emissions of that toxic air pollutant from the project.
Periodic Monitoring:	The reporting condition shall be submitted to Ecology within ninety (90) days of completion of laboratory analyses which verify emissions of that toxic air pollutant from the project.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Laboratory analysis.
State-Only:	Yes.
Calculation Model:	Not applicable.
Condition Approval	**2/18/2005 (DE05NWP-002)**
Condition:	REPORTING
	An annual schedule (Federal fiscal year basis) of anticipated operations and installations of exhauster systems.
Periodic Monitoring:	The reporting condition shall be submitted by November first of each year.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Annual Schedule.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**2/18/2005 (DE05NWP-002)**
Condition:	OPERATIONAL NOTICE Notification shall be made at least ten (10) days prior to initial operation of any exhauster system covered by this ORDER DE05NWP-002 when installed to ventilate a tank not previously actively ventilated under this ORDER.
Periodic Monitoring:	Not applicable.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Not applicable.
State-Only:	Yes.
Calculation Model:	Not applicable.

1.4.27 Discharge Point: E-85 Fuel Station

200E Area, E-85 Automotive Fuel Tank and Dispensing Facility

Requirement Citation (WAC or Order Citation): DE06NWP-001 (4/17/2006)

Condition Approval	**4/17/2006**
Condition:	Emission Limits A. Emissions of Volatile Organic Compounds shall not exceed 40 tons per year. B. All TAPs, as submitted in the Permittee's NOC Application, shall 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.
Test Method:	Compliance of the approval condition shall be demonstrated by installation of BACT and T-BACT emission controls including: (1) 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 (2) fitting to vapor balance gasoline vapors with the delivery transport tank.
Test Frequency:	Not applicable (maintenance records).
Required Records:	Retention of fuel storage tank loading records detailed in NOC (DE06NWP-001) Approval Condition 1.6.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.28 Discharge Point: HAMMER Training and Education Facility

Volpentest Hazardous Materials Management and Emergency Response (HAMMER) Training and Education Facility (2890 Horn Rapids Road, Richland, Washington)

Requirement Citation (WAC or Order Citation): DE07NWP-001

Condition Approval	**4/19/2007**
Condition:	Visible emissions from training operations shall not exceed twenty (20) percent opacity. [WAC 173-400-040(2)]
Periodic Monitoring:	Section 2.1, Tier 2
Test Method:	Section 2.1, Tier 2 and/or EPA Method 9 of 40 CFR 60, Appendix A.
Test Frequency:	Once per year, if visible emissions are observed (see Periodic Monitoring).
Required Records:	Records of Tier 2 visible emission event surveys including EPA Method 9 results.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**4/19/2007**
Condition:	Fugitive emissions from training operations shall 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.
Test Method:	Not specified.
Test Frequency:	Not applicable.
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.
Calculation Model:	Not applicable.

Condition Approval	**4/19/2007**
Condition:	Particulate Matter emissions from training materials shall not exceed 1,500 pounds per year (lb/yr). [WAC 173-400-110(5)(b)]
Periodic Monitoring:	Material record keeping.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Material balance records which detail materials receipt and disposal, with a summary assessment of losses calculated each calendar quarter.
State-Only:	No.
Calculation Model:	Not applicable.
Condition Approval	**4/19/2007 (DE07NWP-001)**
Condition:	Volatile Organic Compound (VOC) emissions from training materials shall not exceed 4,000 pounds per year (lb/yr). [WAC 173-400-110(5)(b)]
Periodic Monitoring:	Materials record keeping.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Material balance records which detail materials receipt and disposal with a summary assessment of losses, calculated each calendar quarter.
State-Only:	No.
Calculation Model:	Not applicable.
Condition Approval	**4/19/2007 (DE07NWP-001) and 7/31/2007 (Amd 1)**
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, shall be below their respective SQERs. [WAC 173-460-150)]
Periodic Monitoring:	Materials record-keeping.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
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 shall be reported to Ecology in accord with WAC 173-400-107. Identification of any TAP not previously identified within Order DE07NWP-001, shall be submitted to Ecology within 90 days of initiation of use in training with an estimate of annual emissions.
State-Only:	Yes.
Calculation Model:	Not applicable.

1.4.29 Discharge Point: 100B-181B/182B

100 Area, Emergency Diesel Engines

Requirement Citation (WAC or Order Citation): DE07NWP-002

Condition Approval	**6/27/2007**
Condition:	(1) 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)]. (2) Visible emissions will not exceed 15 % during lugging mode [40 CFR §60.4205(b), and 40 CFR §89.113(a)(2)]. (3) Visible emissions will not exceed 50 % during peak in either acceleration or lugging mode. [WAC 173-400-040(2)(a), 40 CFR §60.4205(b), and 40 CFR §89.113(a)(3)].
Periodic Monitoring:	Use Tier 1 Visible Emission Survey (Section 2.1 of AOP Attachment 1), unless otherwise specified (see Test Frequency below).
Test Method:	Tier 1 Visible Emissions Survey and EPA Method 9 (40 CFR §60, Appendix A).
Test Frequency:	Each engine authorized by this order shall be surveyed for visible emissions during maintenance and readiness testing and emergency-use based upon the following frequency or events: (1) During maintenance and readiness testing, a visible emission survey shall be conducted with each readiness test startup, (2) During emergency-use operations exceeding, or anticipated to exceed, eight hours duration, a visible emissions survey shall be conducted daily, (3) Visible emissions of each engine shall 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.
Calculation Model:	Not applicable.

Condition Approval **6/27/2007**

Condition: Emissions of Polyaromatic Hydrocarbons (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 HP, and AP-42, Table 3.4-4, for engines 600 HP and higher.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Calculations and dispersion analyses prepared semiannually in concert with cumulative operating hour calculations, retained for a minimum of 36 months. AP 42, fifth edition, shall be used for the calculation.

State-Only: Yes.

Calculation Model: Not applicable.

Condition Approval **6/27/2007**

Condition: Emissions of Toxic Air Pollutants (TAPs), as identified in the table below, will not exceed SQERs of WAC 173-460-080(2)(e).

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 HP, and AP-42, Table 3.4-3, for engines 600 HP and higher.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Calculations and dispersion analyses prepared semiannually in concert with cumulative operating hour calculations, retained for a minimum of 36 months. AP 42, fifth edition, shall 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 shall be applied to 1,3-Butadiene for engines 600 HP or larger.

State-Only: Yes.

Calculation Model Not applicable.

Condition Approval	**6/27/2007**	
Condition:	Emissions of sulfur dioxide will not exceed two tons per year [WAC 173-400-110(5)(b)].	
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing (1) no greater than 0.05 weight percent sulfur (500 parts per million by weight) from installation to May 30, 2010 [40 CFR §60.4207(a), 40 CFR §80.510(a)], and (2) no greater than 0.0015 weight percent sulfur (15 parts per million by weight) on and after June 1, 2010 [40 CFR §60.4207(b), 40 CFR §80.510(b)].	
Test Method:	Not applicable.	
Test Frequency:	Not applicable.	
Required Records:	Diesel fuel quality shall be documented by annual fuel analysis or vendor documentation of fuel purchases from retail outlet(s) that demonstrate compliance with diesel fuel quality standards of 40 CFR §80.510 for all purchases.	
State-Only:	No.	
Calculation Model:	Not applicable.	

Condition Approval	**6/27/2007**
Condition:	Emissions of Nitrogen Oxides (NO_x) and Non-methane Hydrocarbons (NMHC) will not exceed 14.2 tons per year [WAC 173-400-091, AP 42 emission factors for engines in NOC application operating 500 hours per year].
	Emissions of Carbon Monoxide (CO) will not exceed 5 tons per year [WAC 173-400-110(5)(b)].
	Emissions of particulate matter (PM) will not exceed 0.75 tons per year [WAC 173-400-110(5)(b)].
Periodic Monitoring:	Compliance will be demonstrated by:
	(A) Engine Limitation
	(1) Installation of engines certified to meet emission limitations of 40 CFR §89 [40 CFR §60.4211(c)], and
	(2) Installation of one engine rated no higher than 450 horsepower (HP) and two engines rated no higher than 900 HP each; and
	(B) Operational Limitation
	(1) All recommended operation and equipment maintenance provisions supplied by the manufacturer(s) of the engine(s) will be current [40 CFR §60.4211(a)],
	(2) Operational monitoring in accord with installed non-resettable hour meter on each engine [40 CFR §60.4209(a)],
	(3) Operational hours of use for each engine, for purposes of maintenance checks and readiness testing shall not exceed 100 hours per year unless approved by the Administrator of the United States Environmental Protection Agency [40 CFR §60.4211(e)], and
	(4) Operational hours of use during emergency conditions shall not be limited provided maintenance of records of emergency use are consistent with Required Records below.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	(1) Manufacturer's engine certifications,
	(2) Maintenance records, and
	(3) Records of cumulative operating hours for each engine, calculated semiannually, retained for a minimum of 36 months.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval **6/27/2007**

Condition: Emission rates of installed engines shall not exceed values identified in the table below [40 CFR §60.4205(b) and 40 CFR §89.112].

Pollutant	Engine Rating	Gram/kilowatt-hour (g/kW-hr)	Pound/horsepower-hour (lb/HP-hr)
Carbon Monoxide	130 to 560 kW (174 to 751 HP)	3.5	5.8E-03
Particulate Matter	130 to 560 kW (174 to 751 HP)	0.2	3.3E-04
Non-methane Hydrocarbons and Nitrogen Oxides	130 to 560 kW (174 to 751 HP)	4.0	6.6E-03
	>560 kW (>751 HP)	6.4	1.1E-02

Periodic Monitoring: Compliance shall be demonstrated by:

(1) Procuring and installing only engines certified to emission standards of 40 CFR §60.4205(b) for the same model year and maximum engine rating [40 CFR §60.4211(c)].

(2) Operating and maintaining the stationary compression ignition internal combustion engines and control devices according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer [40 CFR §60.4211(a)].

(3) Installing and configuring the engines according to manufacturer specifications [40 CFR §60.4211(c)].

(4) Maintaining records of engine certification as detailed in the Required Records below.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: (1) Manufacturer's engine certifications.

(2) Records of cumulative operating hours for each engine, calculated semi-annually, will be retained for a minimum of 36 months.

(3) Records of emergency use operational duration and the basis of the emergency.

State-Only: No.

Calculation Model: Not applicable.

1.4.30 Discharge Point: WTP Heaters and Dehumidifiers

200 Area, Hanford Tank Waste Treatment and Immobilization Plant (WTP)

Requirement Citation (WAC or Order Citation): WAC 173-400-110, WAC 173-460-070, and DE07NWP-004 (11/21/2007)

Condition Approval **11/21/2007**

Condition: Emission Limits:

(1) Total Suspended Particulates emission shall not exceed 1.25 tons per year [WAC 173-400-110(5)(b)].

(2) PM-10 particulate emission shall not exceed 0.75 tons per year [WAC 173-400-110(5)(b)].

Periodic Monitoring: Compliance shall be monitored by:

(1) Emission of visible emissions of no more than five percent opacity during normal operation of diesel-fired heaters.

(2) Diesel-fired heaters exceeding five percent opacity shall be removed from operation until maintenance of the unit results in visible emissions in compliance (no more than 5%).

(3) Compliance with visible emissions survey requirements of Approval Condition 3.0 of the Approval Order DE07NWP-004. Visible emissions (VE) from diesel-fired heaters in normal operation (not start-up or shut-down) will be monitored through a VE survey described herein. A minimum representation of 20 percent of active diesel-fired heaters under this ORDER shall be subject to VE survey. If VEs from one of these emission units are observed for more than 10 consecutive minutes, an attempt to identify the cause(s) of the VEs will be made and those results recorded. The recorded entry also will identify any corrective actions taken and the likely frequency of a future reoccurrence. If the event is likely to be re-occurring, and can not be demonstrated to consist of water vapor, a determination of opacity will be made using EPA Method 9 of 40 CFR 60, Appendix A. A VE survey shall be conducted weekly for a period of three months. If weekly VE surveys do not demonstrate emissions in excess of Approval Condition 1.3.1, the VE survey frequency will reduce to once every three months for a period of six months. After nine months of no excess visible emissions, visible emission surveys will be performed for any diesel-fired heater subject to this ORDER only when visible emissions are observed during normal operation.

Test Method: VE Surveys and/or EPA Method 9 of 40 CFR 60, Appendix A (if needed).

Test Frequency: Not specified.

Required Records: (1) VE Surveys and/or EPA Method 9 of 40 CFR 60, Appendix A, results.

(2) Maintenance records for any diesel-fired heater removed from service.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval	**11/21/2007**
Condition:	Emission Limits:
	Sulfur Oxides (SO_x) emission shall not exceed 2.0 tons per year [WAC 173-400-110(5)(b)].
Periodic Monitoring:	Compliance shall be monitored by:
	(1) Combustion of distillate fuel oil No. 2 with a sulfur content no greater than 0.0015 wt percent (15 ppm) for diesel heaters.
	(2) Combustion of no greater than 933,100 gallons of distillate fuel oil per year, based upon a daily rolling summation.
Test Method:	Record-keeping.
Test Frequency:	Per daily rolling summation and/or fuel shipment.
Required Records:	Fuel analysis data and consumption rates, including supporting data and calculations.
State-Only:	No.
Calculation Model:	Not specified.
Condition Approval	**11/21/2007**
Condition:	Emission Limits:
	(1) Nitrogen Oxides (NOx) emission shall not exceed 16.2 tons per year [WAC 173-400-110(2)(a)].
	(2) Total Volatile Organic Compounds emission shall not exceed 2.0 tons per year [WAC 173-400-110(5)b)].
	(3) Carbon Monoxide emissions shall not exceed 5.0 tons per year [WAC 173-400-110(5)(b)].
	(4) Toxic Air Pollutant (TAP) emissions as specified in Table 1 of Approval Order DE07NWP-004 [WAC 173-460-070].
Periodic Monitoring:	Compliance shall be monitored by:
	(1) Operation in compliance with BACT/T-BACT (implementation of vendor-recommended combustion and maintenance practices).
	(2) Fuel Limitation: (a) combustion of no greater than 933,100 gallons of distillate fuel oil per year, based upon a daily rolling summation, and (b) combustion of no greater than 1,109,500 gallons of propane per year, based upon a daily rolling summation.
Test Method:	Record-keeping.
Test Frequency:	Per daily rolling summation and/or fuel shipment.
Required Records:	Fuel analysis data and consumption rates, including supporting data and calculations.
State-Only:	No.
Calculation Model:	Not specified.

1.4.31 Discharge Point: 300 Area/339A

300 Area Building 339A, Emergency Diesel Engine

Requirement Citation (WAC or Order Citation): DE08NWP-001

Condition Approval	**9/24/2008**
Condition:	Visible emissions will not exceed 20 %. [WAC 173-400-040(2)]
Periodic Monitoring:	Use Tier 1 Visible Emission Survey (Section 2.1 of AOP Attachment 1), unless otherwise specified.
Test Method:	Tier 1 Visible Emissions Survey and EPA Method 9 (40 CFR §60, Appendix A).
Test Frequency:	The engine authorized by this order shall be surveyed daily for visible emissions during emergency-use exceeding, or anticipated to exceed, eight hours duration.
Required Records:	Results of visible emissions survey and EPA Method 9 tests conducted pursuant to periodic monitoring.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**9/24/2008**
Conditions:	Emissions of Nitrogen Oxides (NO_x) will not exceed 1.25 tons per year. [WAC 173-400-091 operating 500 hours per year].
	Emissions of Carbon Monoxide (CO) will not exceed 5 tons per year. [WAC 173-400-110(5)(b)].
	Emissions of particulate matter (PM) will not exceed 0.75 tons per year. [WAC 173-400-110(5)(b)].
	Emissions of volatile organic compounds (VOC) will not exceed 2 tons per year. [WAC 173-400-110(5)(b)].
Periodic Monitoring:	Compliance will be demonstrated by: (A) Engine Limitation: (1) Installation of one engine rated no higher than 350 horsepower (HP). (B) Operational Limitation: (1) Operational monitoring in accord with installed non-resettable hour meter on the approved engine [40 CFR §60.4209(a)], (2) Operational hours of use for the engine, for purposes of maintenance checks and readiness testing shall not exceed 100 hours per year unless approved by the Administrator of the United States Environmental Protection Agency [40 CFR §60.4211(e)], (3) Operation of the engine, for purposes other than emergency use or maintenance checks and readiness testing, is prohibited [40 CFR §60.4211(e)], and (4) Operational hours of use during emergency conditions shall not be limited provided records of emergency use are retained as defined in Approval Condition 1.6 of the ORDER DE08NWP-001.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	(1) Manufacturer's engine data, (2) Maintenance records, and (3) Records of cumulative operating hours for the engine (36 months maximum), recorded annually.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval **9/24/2008**

Condition: Emissions of Toxic Air Pollutants (TAPs), as identified in the table below, will not exceed SQERs of WAC 173-460-080(2)(e).

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 the engine employing air pollution emission factors of AP 42, Table 3.3-2, for engines less than 600 HP.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Calculations and dispersion analyses calculated annually.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval **9/24/2008**

Condition: Emissions of Polyaromatic Hydrocarbons (PAHs) will not result in ambient concentrations exceeding 4.8E-04 $\mu g/m^3$ [WAC 173-460-080(3)].

Periodic Monitoring: Compliance will be demonstrated by calculation of the sum of PAH TAP emissions from the engine employing air pollution emission factors of AP 42, Table 3.3-2, for engines less than 600 HP. Dispersion analysis shall demonstrate that calculated emissions comply with the standard of this approval condition.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Calculations and dispersion analyses calculated annually.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval	**9/24/2008**
Condition:	Emissions of sulfur dioxide will not exceed two tons per year [WAC 173-400-110(5)(b)].
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing (1) no greater than 0.05 weight percent sulfur (500 parts per million by weight) from installation to May 31, 2010 [40 CFR §60.4207(a), 40 CFR §80.510(a)], and (2) no greater than 0.0015 weight percent sulfur (15 parts per million by weight) on and after June 1, 2010 [40 CFR §60.4207(b), 40 CFR §80.510(b)].
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Diesel fuel quality shall be documented by annual fuel analysis or vendor documentation of fuel purchases from retail outlet(s) that demonstrate compliance with diesel fuel quality standards of 40 CFR §80.510 for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval **9/24/2008**

Condition: Emission rates of installed engine shall not exceed values identified in the table below [40 CFR §60.4205(a), NSPS IIII Table 1].

Pollutant	Engine Rating	Gram/kilowatt-hour (g/kW-hr)	Pound/horsepower-hour (lb/HP-hr)
Hydrocarbons	225≤kW<450 (300≤HP<600)	1.3	2.20E-03
Carbon Monoxide		11.4	1.87E-02
Particulate Matter		0.54	8.82E-04
Nitrogen Oxides		9.2	1.52E-02

Periodic Monitoring: Compliance shall be demonstrated by:

(1) Procuring and installing an engine compliant with emission standards of 40 CFR §60.4205(a) for the same model year and maximum engine rating [40 CFR §60.4211(b)(3) with emission standards expressed in Table 1 to NSPS IIII].

(2) Operating and maintaining the stationary compression ignition internal combustion engines and control devices according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer [40 CFR §60.4211(a)].

(3) Maintaining records of engine manufacturing data as detailed in the Required Records below.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: (1) Manufacturer's engine data will be retained through the life of the engine.

(2) Maintenance records for Periodic Monitoring (2) above shall be retained for 60 months minimum.

(3) Records of cumulative operating hours for the engine, recorded annually, will be retained for 36 months maximum.

(4) Records of emergency use operational duration and the basis of the emergency.

State-Only: No.

Calculation Model: Not applicable.

1.4.32 Discharge Point: 241-AP, 241-SY, and 241-AY/AZ Ventilation

200E Area, Tank Farms - Ventilation

Requirement Citation (WAC or Order Citation): NOC Approval Order DE11NWP-001, Rev. 4(03/03/2016)

Condition Approval	03/03/2016
Condition:	EMISSION LIMITS Visible emissions will not exceed five (5)% opacity. [WAC 173-400-040(2)]
Periodic Monitoring:	Compliance and monitoring shall be met by Tier 3 visible Emission Survey requirements of the Hanford AOP, Section 2. Should visible emissions be observed which are not solely attributable to water condensation, compliance shall be met by performing an opacity determination utilizing 40 CFR 60, Appendix A, Method 9, providing that such determination shall not place the visible emission observer in hazard greater than that identified for the general worker.
Test Method:	40 CFR 60, Appendix A, Method 9
Test Frequency:	Not specified except 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. 40 CFR 60, Appendix A, Method 9 results if conducted. Visible emission survey records shall be submitted to Ecology within thirty (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.
Calculation Model:	Not applicable.

Condition Approval 03/03/2016

Condition: EMISSION LIMITS

VOC emissions shall not exceed the amounts listed in the table below from the 241-AP, 241-SY, and 241-AY/AZ ventilation systems. As the ventilation systems become fully operational, the volatile organic emissions shall not be exceeded emission limits established for the respective exhauster systems.

Tank Farm(s)	Maximum Amount (tons per year)
Total for the 241-AP, 241-SY, and 241-AY/AZ ventilation systems	10.1
241-SY	3.2
241-AP	3.6
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

Periodic Monitoring: (1) Compliance with this condition shall 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 pounds per year.

(2) 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 Hanford Waste Treatment and Immobilization Plant operations compliance with Approval Condition shall be demonstrated by monitoring emissions of all TAP emission limits as described in Section 3.5.

Test Method: VOC emissions shall be assessed quarterly in accord with EPA approved procedures for each exhauster system.

Test Frequency: Quarterly.

Required Records: (1) Records of exhauster system stack flow rates and temperature records.

(2) Laboratory analysis result summaries from tank headspaces or primary tank ventilation system exhaust for VOCs.

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

State-Only: No.

Calculation Model: Not applicable.

Condition Approval	03/03/2016
Condition:	EMISSION LIMITS
	All TAPs, as shown in Table 7, 8 or 9 of Approval Order DE11NWP-001, Rev. 4 shall 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, Table 8 for the 241-AP ventilation system, and Table 9 for the 241-AY/AZ ventilation system.
Periodic Monitoring:	Compliance with this condition shall be met by:
	(1) (3.3) Development and implementation of an annual sampling and analysis plan (SAP) for each exhauster system to meet requirements of DE11NWP-001, Rev. 4 Section 3.3. Each SAP shall 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 shall be identified from DE11NWP-001, Rev. 4 Table 7, 8 and 9 and based on engineering judgment and most current tank content data. Analytical methods for the analyses shall be the EPA, Occupational Safety and Health Administration (OSHA), or National Institute for Occupational Safety and Health (NIOSH) approved, or by approved equivalent method.
	(2) (1.3.3.2) 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 and their respective release rate averaging times per WAC 173-460-150. Identification of any TAP not previously identified shall be submitted to Ecology within ninety (90) days 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, DE11NWP-001, Rev. 4 Table 8 for the 241-AP ventilation system, and DE11NWP-001, Rev. 4 Table 9 for the 241-AY/AZ ventilation system.
	(3) (1.3.4) 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 Hanford Waste Treatment Plant (WTP) operations compliance with Approval Condition 1.1.3 shall be demonstrated by monitoring emissions of all TAP emission limits as described in Section 3.5.
	(4) 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 a moisture de-entrainer, heater, pre-filters, and a two-stage high Efficiency Particulate Air (HEPA) filtration system in service in each treatment train.
	(5) Identification of any TAP not previously identified within the Notice of Construction Application Emission Limits shall be submitted to Ecology within 90 days of identification.
Test Method:	Stack sampling and calculations identified in the DE11NWP-001 Section 3.3.
Test Frequency:	Annually.

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

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

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

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

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

(5) Laboratory analysis result summaries from tank headspaces or primary tank ventilation system exhaust for TAPs.

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

State-Only: No.

Calculation Model: Not applicable.

Condition Approval 03/03/2016

Condition: EMISSION LIMITS

Ammonia emissions shall not exceed the amounts listed in the table below from the 241-AP, 241-SY, and 241-AY/AZ ventilation systems. As the ventilation systems become fully operational, the emissions of ammonia shall not be exceeded emission limits established for the respective exhauster systems.

Tank Farm(s)	Maximum Amount (pounds per 24 hours)
Total for the 241-AP, 241-SY, and 241-AY/AZ ventilation systems	59.9
241-SY	19.2
241-AP	21.1
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: (1) Compliance with Approval Condition 1.1.4 shall 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 mass release rate of ammonia.

(2) 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 Hanford Waste Treatment and Immobilization Plant operations compliance with approval condition 1.4 shall 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 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 pounds per day.

Test Frequency: *Baseline Assessments* Baseline assessment of ammonia stack concentrations shall be sampled a minimum of three times within ninety (90) days of commencement of operations. Results of baseline emission assessments shall be submitted to Ecology within ninety (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 shall be used to assess these emissions.

Required Records: Results of emission assessments, baseline and quarterly emission monitoring results, supporting data and calculations to demonstrate compliance with ammonia limits.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval 03/03/2016

Condition: EMISSION LIMITS

Dimethyl mercury emissions shall not exceed the amounts listed in the Table below from the 241-AP, 241-SY, and 241-AY/AZ ventilation systems. As the ventilation systems become fully operational, the dimethyl mercury emissions shall not be exceeded from the respective exhauster systems.

Tank Farm(s)	Maximum Amount (pounds per 24 hours)
Total for the 241-AP, 241-SY, and 241-AY/AZ ventilation systems	3.23E-3
241-SY	1.04E-3
241-AP	1.14E-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:	(1.3.4) During solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create gas release event, or Waste Feed Delivery operations to the Hanford Waste Treatment and Immobilization Plant (WTP) operations compliance with Approval Conditions, Dimethyl Mercury Emission Limits shall be demonstrated by monitoring emissions of all TAP emission limits as described in section 3.5 of DE11NWP-001, Rev. 4.
Test Method:	(3.5.2.1) 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:	(3.5.2.1.2) 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. (3.5.2.1.4) Analytical results will be reported to Ecology as soon as possible, but no later than 30 days after collection of sample. It is acceptable to report to preliminary data and to use an informal transmittal method (e.g. email). (3.5.2.2) 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:	No.
Calculation Model:	Not applicable.

Condition Approval 03/03/2016

Condition: EMISSION LIMITS

N-Nitrosodimethylamine emissions shall not exceed the amounts listed in the table below from the 241-AP, 241-SY, and 241-AY/AZ ventilation systems. As the ventilation systems become fully operational, the N-Nitrosodimethylamine emissions shall not be exceeded from the respective exhauster systems.

Tank Farm(s)	Maximum Amount (pounds per year)
Total for the 241-AP, 241-SY, and 241-AY/AZ ventilation systems	199.9
241-SY	61.3
241-AP	74.6
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:	(1.3.4) During solids mixing, disturbing bulk tank solids, removal of enough supernatant to potentially create gas release event, or Waste Feed Delivery operations to the Hanford Waste Treatment and Immobilization Plant (WTP) operations compliance with Approval Conditions, n-Nitrosodimethylamine Emission Limits shall be demonstrated by monitoring emissions of all TAP emission limits as described in section 3.5 of DE11NWP-001, Rev. 4.
Test Method:	(3.5.2.1) 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:	(3.5.2.2) The permittee will evaluate the data to determine, (3.5.2.2.1) 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:	No.
Calculation Model:	Not applicable.
Condition Approval	03/03/2016
Condition:	EMISSION LIMITS

(3.5) Ammonia shall 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 parts per million (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 lists the maximum allowable ammonia reading in ppm for the exhausters in the AY/AZ and AP 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.

Ecology must be notified within 24 hours of any readings exceeding Table 6 values. This notification can be performed electronically (e.g. email) and shall 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. Table 6 values will be kept current and available for public viewing on Ecology's website.

(3.5.1) If stack effluent readings exceed Table 6 values, tank operations (not ventilation) shall cease in a safe and controlled manner. Tank operations may resume when stack effluent readings 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 shall be the time of collection of the effluent readings that exceed Table 6 values.

(3.5.2) 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.

(3.5.2.1) 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 shall 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.

(3.5.2.1.1) 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.

(3.5.2.1.2) 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.

(3.5.2.1.3) 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.

(3.5.2.1.4) 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).

(3.5.2.2) 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 toxic air pollutants.

(3.5.2.3) 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.

(3.5.2.4) If the sampled ratio results in a decrease emission limit in Table 6, the new limit will automatically be entered into Table 6. The new emission limit will be effective on the date entered in Table 6 in the ‘Update Date’ column.

(3.5.2.5) The permittee will be notified of the new emission limit and sent an electronic copy of the permit. Ecology will also post on the Nuclear Waste Program web page a copy of the permit with the latest updated Table 6 values.

(3.5.3) 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.).

(3.5.3.1) 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.

(3.5.3.2) 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 (5) working days of reading collection.

(3.5.3.3) 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 (5) 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.

(3.5.3.4) 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.

(3.5.4) When tanks are acting as receiver tanks for solids mixing, disturbing bulk 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.

(3.5.4.1) 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.

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

(4.0) 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 shall not, in and of itself, be deemed the basis for identifying operations as Waste Feed Delivery operations.

Periodic Monitoring:	Compliance and monitoring shall 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:	Not specified.
Required Records:	(1) Analytical test results
	(2) Supporting calculations.
	(3) Operations and Maintenance (O&M) manuals
	(4) Operational records – Waste Feed Delivery operations will be recorded into operational records sufficient to determine the onset and cessation of such operations for each tank subject to this Order.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval 03/03/2016

Condition: OPERATIONAL LIMITS

Normal Double-Shell Tank (DST) primary tank ventilation system flow rates during Normal Operations (e.g. storage, retrieval, and sampling) are shown in the Table below. The maximum flow rates for the DST ventilation systems shall not exceed ventilation rates for Maximum Operations (Table below).

Project Farm Ventilation Rates

Tank Farm(s)	Normal Operations (scfm)	Maximum Operations (scfm)
241-SY	1,360	2,500
241-AP (Upgraded System)	1,500	1,750
241-AP (Existing System)	850	1,000
241-AY/AZ	850	1,000
AY-102 Annulus	1,000	3,800
AY-102 Portable	1,600	3,000
scfm = standard cubic foot per minute, 1 atmosphere pressure at 20°C		

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

Frequency: Same intervals as required by RAELs.

Test Method: None Specified.

Required Records: 1) Records of calibration of stack gas flow rate and temperature measurement devices.
2) Records of exhaust system stack flow rate and temperature measurements.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval 03/03/2016

Condition: EMISSION LIMITS: Baseline Assessments

(1) 3.1.1 Ammonia stack concentrations shall 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 pounds per day.

(2) 3.1.2 Dimethyl mercury sampling and analysis will be in accord with U.S. 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: (1) Approved sampling procedures including the use of Draegar tubes or direct reading instruments to measure stack gas concentrations of ammonia.

		(2) EPA approved procedures for Dimethyl mercury
	Test Frequency:	Within 90 days after commencement of operations of each exhauster system.
	Required Records:	(1) Stack flow rate and temperature readings
		(2) Ammonia emissions and concentrations
		(3) Test method
		(4) Dimethyl mercury concentrations
	State-Only:	No.
	Calculation Model:	Not applicable.
	Condition Approval	03/03/2016
	Condition:	EMISSION LIMITS: Emission Assessments
		(1) VOC emissions from each exhauster system will be performed.
		(2) 3.1.2 Dimethyl mercury sampling and analysis will be in accord with U.S. 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:	(1) Approved sampling procedures including the use of Draegar tubes or direct reading instruments to measure stack gas concentrations of ammonia.
		(2) EPA approved procedures for Dimethyl mercury
	Test Frequency:	Within 90 days after commencement of operations of each exhauster system.
	Required Records:	(1) Stack flow rate and temperature readings
		(2) Ammonia emissions and concentrations
		(3) Test method
		(4) Dimethyl mercury concentrations
	State-Only:	No.
	Calculation Model:	Not applicable.
	Condition Approval	**03/03/2016**
	Condition:	OPERATIONAL LIMITS
		No more than two of the three tanks in the 241-SY Tank Farm (241-SY-101 through 241-SY-103) shall 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 Waste Treatment and Immobilization Plant.
	Periodic Monitoring:	Compliance and monitoring of this condition shall be demonstrated by operational record keeping of Waste Feed Delivery operations recorded into operational records sufficient to determine onset and cessation of such operations for each tank.

Test Method:	Not specified
Test Frequency:	Not applicable.
Required Records:	Operational records sufficient to determine the onset and cessation of Waste Feed Delivery operations for each tank subject to this Order.
State-Only:	No.
Calculation Model:	Not applicable.
Condition Approval	**03/03/2016**
Condition:	OPERATIONAL LIMITS
	No more than two of the three tanks in the 241-SY Tank Farm (241-SY-101 through 241-SY-103) shall 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 Waste Treatment and Immobilization Plant.
Periodic Monitoring:	Compliance and monitoring of this condition shall be demonstrated by operational record keeping of Waste Feed Delivery operations recorded into operational records sufficient to determine onset and cessation of such operations for each tank.
Test Method:	Not specified
Test Frequency:	Not applicable.
Required Records:	Operational records sufficient to determine the onset and cessation of Waste Feed Delivery operations for each tank subject to this Order.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**03/03/2016**
Condition:	OPERATIONAL LIMITS
	No more than two of the eight tanks in the 241-AP Tank Farm (241-AP-101 through 241-AP-108) shall 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 Waste Treatment and immobilization Plant.
Periodic Monitoring:	Compliance and monitoring of this condition shall be demonstrated by operational record keeping of Waste Feed Delivery operations recorded into operational records sufficient to determine onset and cessation of such operations for each tank.
Test Method:	Not specified
Test Frequency:	Not applicable.
Required Records:	Operational records.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**03/03/2016**
Condition:	OPERATIONAL LIMITS
	Compliance of condition shall be met by operating the exhauster systems in accordance with tBACT emission controls found for this project.
Periodic Monitoring:	Compliance and monitoring of this condition shall be demonstrated by operational record keeping of Waste Feed Delivery operations recorded into operational records sufficient to determine onset and cessation of such operations for each tank.
Test Method:	Not specified
Test Frequency:	Not applicable.
Required Records:	All monitoring and operation records required to operate and maintain the emission control equipment which implements tBACT.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.33 Discharge Point: Lagoon Treatment System

200W Area

Requirement Citation (WAC or Order Citation): NOC Approval Order DE12NWP-001, Rev. 1 (7/24/2013)

Condition Approval 2/6/2012

Condition:	All TAPs, as submitted in the Permittee's Notice of Construction Application, shall be below their respective ASIL.
Periodic Monitoring:	Annual collection and analysis of wastewater between the wastewater truck discharge point and the truck unloading chamber.
Test Method:	Surrogate wastewater sample analyzed with an EPA approved method in 40CFR Part 136.
Test Frequency:	Annually.
Required Records:	Results of analyses.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.34 Discharge Point: SST Retrieval Direct Fired Water Heaters

200 Area

Requirement Citation (WAC or Order Citation): NOC Approval Order DE12NWP-003 (2/6/2013)

Condition Approval	**2/6/2013**
Condition:	OPERATIONAL LIMITS
	Maximum number of units is 10 and maximum accumulated heating capacity is 25 mmBtu/hr.
Periodic Monitoring:	Compliance will be determined by submittal of operational notification prior to initial operation of each unit with information required to completely update Table 1 of the Approval Order.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Manufacturer's data for information required to complete Table 1 of the Approval Order.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval	**2/6/2013**
Condition:	EMISSION LIMIT
	Emission of sulfur dioxide (SO_2) will not exceed 1.63 tons/yr.
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**2/6/2013**
Conditions:	EMISSION LIMITS
	Emission of Nitrogen Oxides (NO_x) will not exceed 0.78 tons/yr.
	Emission of Carbon Monoxide (CO) will not exceed 0.22 tons/yr.
	Emission of Volatile Organic Carbon (VOC) will not exceed 0.08 tons/yr.
	Emission of particulate matter (PM) will not exceed 0.08 tons/yr.
Periodic Monitoring:	Compliance will be demonstrated by:
	(A) Use of high efficiency burners
	(B) Operation of no more than 10 diesel fueled water heaters at any time.
	(C) Operating and maintaining the heater in accordance with manufacturer's specifications.
	(D) Installation and use of non-resettable hour meter.
	(E) Limiting operating hours equal to or less than 1.0 as calculated by Equation 1 in the Approval Order.
Test Method:	Calculation of ratio using Equation 1.
Test Frequency:	Monthly.
Required Records:	(1) Manufacturer's data and instructions,
	(2) Maintenance records, and
	(3) Twelve-month cumulative operating hours for each engine, calculated monthly.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**2/6/2013**
Condition:	REPORTING
	Emissions will be compiled into estimates and reported annually, beginning as part of the calendar year 2013 non-radioactive inventory of airborne emissions, pursuant to WAC 173-400-105.
Periodic Monitoring:	The estimated emissions shall be reported annually.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Emissions estimates.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval	**2/6/2013**
Condition:	REPORTING
	Monthly operating hours per unit and cumulative annual operating hours on a month-by-month basis will be reported annually, beginning as part of the calendar year 2013 non-radioactive inventory of airborne emissions, pursuant to WAC 173-400-105.
Periodic Monitoring:	The monthly operating hours and cumulative annual operating hours shall be reported annually.
Test Method:	Not specified.
Test Frequency:	Not applicable.
Required Records:	Twelve-month cumulative operating hours for each heater.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.35 Discharge Point: Hanford Site Asbestos Landfill

600 Area

Requirement Citation: 40 CFR 61.151(a), 40 CFR 61.151(d), WAC 173-400-040(2), and WAC 173-400-040(7)

Condition Approval

Condition: 40 CFR 61.151(a)

(1) Either discharge no visible emissions to the outside air from an inactive waste disposal site subject to this paragraph; or
(2) 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
(3) Cover asbestos-containing waste with at least 60 centimeter of compacted nonasbestos-containing material, and maintain to prevent exposure.

Periodic Monitoring: Not applicable.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Not applicable.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval

Condition: 40 CFR 61.151(d)

Notify in writing at least 45 days prior to excavation. 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.
(1) Notice shall contain starting and completion dates.
(2) Notice shall contain reason for disturbing the waste.
(3) Notice shall contain procedures to be used to control emissions
(4) Notice shall contain a location for any temporary storage site and the final disposal site.

Periodic Monitoring: Not applicable.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Not applicable.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval

Condition:	WAC 173-400-040(2)
	Permittee is considered to be in compliance if no complaints are forwarded or generated by Ecology.
Periodic Monitoring:	Not applicable.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Not applicable.
State-Only:	Yes.
Calculation Model:	Not applicable.

Condition Approval

Condition:	WAC 173-400-040(7)
	Permittee is considered to be in compliance if no complaints are forwarded or generated by Ecology.
Periodic Monitoring:	Monitor per Section 2.7, Tier 2.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Not applicable.
State-Only:	Yes.
Calculation Model:	Not applicable.

1.4.36 Discharge Point: 600 Area Gas Distribution

600 Area

Requirement Citation: WAC 173-491-040(4)(b), WAC 173-491-040(4)(d), WAC 173-491-040(6)(d), WAC 173-400-040(2), and WAC 173-400-040(6)

Condition Approval

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

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

Periodic Monitoring: Not applicable.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Not applicable.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval

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

The owner or operator shall 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: Not applicable.

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Not applicable.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval

Condition:	WAC 173-491-040(6)(d)
	(i) The owner or operator of a gasoline transport tank or vapor collection system shall maintain records of all certification tests and repairs for at least two years after the test or repair is completed. (ii) The records of certification tests required by this section shall, as a minimum, contain: (A) The transport tank identification number; (B) The initial test pressure and the time of the reading; (C) The final test pressure and the time of the reading; (D) The initial test vacuum and the time of the reading; (E) The final test vacuum and the time of the reading; (F) At the top of each report page the company name, date, and location of the tests on that page; and (G) Name and title of the person conducting the test. (iii) The owner or operator of a gasoline transport tank shall annually certify that the transport tank passed the required tests. (iv) Copies of all records required under this section shall immediately be made available to the department, upon written request, at any reasonable time.
Periodic Monitoring:	Annually
Test Method:	Not applicable
Test Frequency:	Not applicable
Required Records:	As established by the condition.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	WAC 173-400-040(2)
	Permittee is considered to be in compliance if no complaints are forwarded or generated by Ecology.
Periodic Monitoring:	Not applicable.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Not applicable.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	WAC 173-400-040(6) Ecology has determined, based on process knowledge, that these emission units do not emit significant levels of SO_2.
Periodic Monitoring:	Not applicable.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	The Permittee shall annually certify that the processes have not been modified to increase SO_2 emissions and no SO_2 monitoring is required.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.37 Discharge Point: 6120 Tent (200 East)

200 East Area, SE corner near 6120 tent

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr. (3) Particulate matter emission limit of 0.40 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b)
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.38 Discharge Point: 100K Water Treatment Plant

100K Water Treatment Plant

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 4.0 g/KW-hr.
	(2) Particulate matter emission limit of 0.20 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual.
	(2) Documentation of maintenance performed.
	(3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.39 Discharge Point: 385 Building

385 Building

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 4.0 g/KW-hr.
	(2) Particulate matter emission limit of 0.30 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual.
	(2) Documentation of maintenance performed.
	(3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.40 Discharge Point: 219H Tent and MO-414 (200 east)

219H Tent and MO-414 (200 East)

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr. (3) Particulate matter emission limit of 0.40 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.41 Discharge Point: North of MO-414 (200 East) 1 of 2

MO-414

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 5.5 g/KW-hr. (3) Particulate matter emission limit of 0.30 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Mode:	Not applicable.

1.4.42 Discharge Point: North of MO-414 (200 East) 2 of 2

MO-414

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 5.5 g/KW-hr. (3) Particulate matter emission limit of 0.30 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Mode:	Not applicable.

1.4.43 Discharge Point: WTP MHF South-40 Laydown Critical Equipment Storage

WTP MHF South-40 Laydown Critical Equipment Storage
Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 4.7 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 5.0 g/KW-hr. (3) Particulate matter emission limit of 0.40 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.44 Discharge Point: 2720EA

2720EA

Requirement Citation: NSPS Subpart JJJJ

Condition Approval

Condition:	(1) Hydrocarbons (HC) and nitrogen oxides (NO_X) emission limit of 13.4 g/kW-hr. (2) Carbon monoxide (CO) emission limit of 519 g/kW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.45 Discharge Point: Rattle Snake Barricade

Rattle Snake Barricade

Requirement Citation: NSPS Subpart JJJJ

Condition Approval

Condition:	(1) Hydrocarbons (HC) and nitrogen oxides (NO_X) emission limit of 8 g/kW-hr.
	(2) Carbon monoxide (CO) emission limit of 610 g/kW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual.
	(2) Documentation of maintenance performed.
	(3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.46 Reserved

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1.4.47 Discharge Point: 242-A

242-A Evaporator

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions; or develop a written maintenance plan in a manner consistent with good air pollution control practice for minimizing emissions.
	(2) Change oil and filter every 500 hours of operation or annually, whichever comes first.
	(3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
	(4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual.
	(2) Documentation of maintenance performed.
	(3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.48 Discharge Point: 234-5Z

234-5Z

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 500 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.49 Discharge Point: 400 Area

400 Area

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 500 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.50 Discharge Point: 600 Area Fire Station (Building 609A)

600 Area Fire Station (Building 609A)

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions.
	(2) Change oil and filter every 500 hours of operation or annually, whichever comes first.
	(3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
	(4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	(1) Compliance will be determined by operating and maintaining the engine in accordance with the manufacturer's recommendations or instructions.
	(2) Compliance will be demonstrated by installation and operation of non-resettable hour meter.
Required Records:	(1) Manufacturer's maintenance or operation manual.
	(2) Hour meter readings.
	(3) Documentation of maintenance performed.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.51 Discharge Point: 2721E

2721E

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 500 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.52 Discharge Point: Yakima Barricade

Yakima Barricade

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 500 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.53 Discharge Point: 282-B

282-B

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 500 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.54 Reserved

1.4.55 Reserved

1.4.56 Discharge Point: TEDF Pump Station 2 (225E)

TEDF Pump Station 2 (225E)

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 500 hours of operation or annually, whichever comes first. (3) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.57 Discharge Point: WTP MHF South-40 Laydown Entry Gate (Light Tower)

WTP MHF South-40 Laydown Entry Gate

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 1,000 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.58 Reserved

1.4.59 Reserved

1.4.60 Discharge Point: WTP MHF South-40 Laydown Yard East X-Ray Tent

WTP MHF South-40 Laydown Yard East X-Ray Tent

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 1,000 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.61 Discharge Point: WTP Construction Site Pretreatment Tower Crane

WTP Construction Site Pretreatment Tower Crane

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 500 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.62 Discharge Point: WTP Construction Site High-Level Waste Tower Crane

WTP Construction Site High-Level Waste Tower Crane

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions. (2) Change oil and filter every 500 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.63 Discharge Point: WTP Construction Site Building T-14

WTP Construction Site Building T-14

Requirement Citation: NESHAP Subpart ZZZZ

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions (2) Change oil and filter every 1,000 hours of operation or annually, whichever comes first. (3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. (4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.64 Discharge Point: Light Towers Waste Transfer Corridor East

200 East Area, Tank Farm Waste Transfer Corridor East

Up to 8 diesel engines used to power light plants at the Waste Transfer Corridor East are allowed.

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr. (3) Particulate matter emission limit of 0.40 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Maintain no more than eight Waste Transfer Corridor East engines.
Periodic Monitoring:	Inventory of engines used to power the Waste Transfer Corridor East light plants. At a minimum; record the current and past engines in the Corridor with the date the engine was located in the Corridor and the date it was removed from the Corridor.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Engine inventory.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.65 Discharge Point: Light Towers Waste Transfer Corridor West

200 East Area, Tank Farm Waste Transfer Corridor East

Up to 8 diesel engines used to power light plants at the Waste Transfer Corridor East are allowed.

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr. (3) Particulate matter emission limit of 0.40 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Maintain no more than eight Waste Transfer Corridor East engines.
Periodic Monitoring:	Inventory of engines used to power the Waste Transfer Corridor East light plants. At a minimum; record the current and past engines in the Corridor with the date the engine was located in the Corridor and the date it was removed from the Corridor.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Engine inventory.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.66 Discharge Point: Light Towers C Farm Trailer Area

200 East Area, C Tank Farm Trailer Area

Up to 8 diesel engines used to power light plants at the C Farm Trailer Area are allowed.

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr. (3) Particulate matter emission limit of 0.40 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Maintain no more than eight C Farm Trailer Area engines.
Periodic Monitoring:	Inventory of engines used to power the C Farm Trailer Area light plants. At a minimum; record the current and past engines in the trailer area with the date the engine was located in the trailer area and the date it was removed from the trailer area.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Engine inventory.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.67 Discharge Point: Light Towers C Farm

200 East Area, C Tank Farm

Up to 8 diesel engines used to power light plants at the C Farm are allowed.

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr. (3) Particulate matter emission limit of 0.40 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Maintain no more than eight C Farm engines.
Periodic Monitoring:	Inventory of engines used to power the C Farm light plants. At a minimum; record the current and past engines in the trailer area with the date the engine was located in the C Farm and the date it was removed from the C Farm.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Engine inventory.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.68 Discharge Point: AY/AZ Farm DMI-LT Light Tower

200 East Area, AY/AZ Farm

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 4.7 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 5.0 g/KW-hr. (3) Particulate matter emission limit of 0.30 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.69 Discharge Point: C and AN Farm Compressors

200 East Area, C and AN Tank Farm

Up to 2 diesel engines used to power compressors at the C and AN Farms are allowed.

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 5.5 g/KW-hr. (3) Particulate matter emission limit of 0.30 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Maintain no more than two C and AN Farm Compressor engines.
Periodic Monitoring:	Inventory of engines used to power the C and AN Farm compressors. At a minimum; record the current and past engines used for the compressors with the date the engine was located in the C or AN Farm and the date it was removed from the C or AN Farm.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Engine inventory.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.70 Discharge Point: Light Towers AN Farm

200 East Area, AN Tank Farm

Up to 8 diesel engines used to power light plants at the AN Farm are allowed.

Requirement Citation: NSPS Subpart IIII

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 7.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr. (3) Particulate matter emission limit of 0.40 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b)
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Maintain no more than eight AN Farm engines.
Periodic Monitoring:	Inventory of engines used to power the AN Farm light plants. At a minimum; record the current and past engines in the trailer area with the date the engine was located in the AN Farm and the date it was removed from the AN Farm.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Engine inventory.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.71 Discharge Point: 200E Effluent Treatment Facility Engine

200 East Area,

Requirement Citation: NSPS Subpart IIII (Non-emergency diesel, Cylinder Displacement – 3.3 L, 74 horsepower (55 kW))

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 4.7 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 5.0 g/KW-hr. (3) Particulate matter emission limit of 0.30 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (a) and (b)
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.72 Discharge Point: 251W Substation Emergency Backup Engine

Requirement Citation: NSPS Subpart JJJJ, 40 CFR 60.4231(c), Cummins GGHE-6194537, 6.8 L Cylinder Displacement, Engine Power 97.7 HP

Condition Approval

Condition:	(1) Hydrocarbons (HC) and nitrogen oxides (NO_X) emission limit of 13.4 g/kW-hr. (2) Carbon monoxide (CO) emission limit of 519 g/kW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed. (3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.73 WTP MHF South-40 Laydown Yard Laborers Tent

Requirement Citation: NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii), Engine Year 2002, Engine Power 15.5 HP

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions
	(2) Change oil and filter every 1,000 hours of operation or annually, whichever comes first.
	(3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
	(4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual.
	(2) Documentation of maintenance performed.
	(3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.
Calculation Model:	Not applicable.

1.4.74 WTP MHF South-40 Laydown Yard Warm-up/Cool-down Tent

Requirement Citation: NESHAP Subpart ZZZZ, 40 CFR 63.6590(a)(1)(ii), Engine Year 2004, Engine Power 12 HP

Condition Approval

Condition:	(1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions
	(2) Change oil and filter every 1,000 hours of operation or annually, whichever comes first.
	(3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
	(4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual.
	(2) Documentation of maintenance performed.
	(3) Hours of operation.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.75 400 Area Water Treatment System Engines

Requirement Citation: NESHAP Subpart IIII, 40 CFR 60, Engine Year 2008 or later, Compression Ignition – Diesel, Displacement < 10 L, non-emergency seasonal use

No more than 8 engines (Model Year 2008 or later) with power ratings between 8 ≤ kW ≥ 19 (11 ≤ HP ≤ 25 HP) or 19 ≤ kW ≥ 37 (25 ≤ HP ≤ 50), not to exceed an aggregate power rating of 142.7 HP, may be used. Engines will be used to power light plants and/or generators at the 400 Area Water Treatment System under seasonal use.

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 9.5 g/KW-hr.
	(2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr.
	(3) Particulate matter emission limit of 0.80 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engines in accordance with the manufacturer's recommendations or instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual.
	(2) Documentation of maintenance performed
	(3) Hour meter readings
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Maintain an engine inventory of 8 engines or less with any engine not to exceed 50 HP with a combined aggregate horsepower not to exceed 142.7 horsepower.
Periodic Monitoring:	Inventory of engines used seasonally to support the 400 Area WS operations. At a minimum; record the current and past engines used with the date and hour readings the engine was located in the 400 Area and the date it was removed from the 400 Area.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Engine inventory.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.76 CWC Facility Existing Light Plant Engines

Requirement Citation: NESHAP Subpart ZZZZ 40 CFR 63, Engine Year – Prior to 7/11/2005, Non-emergency Compression Ignition, Displacement <10 L, limited to two engines not to exceed an aggregate total of 20 horsepower

Condition Approval

Condition: (1) Operate and maintain the engine in accordance with Manufacturer's recommendations or instructions

(2) Change oil and filter every 500 hours of operation or annually, whichever comes first.

(3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.

(4) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Compliance Requirement: Compliance will be determined by operating and maintaining the engine and control device according to the manufacturer's written instructions.

Required Records: (1) Manufacturer's maintenance or operation manual.

(2) Documentation of maintenance performed.

(3) Hours of operation.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval

Condition: Use of fuel per 40 CFR 60.4207 (b).

Periodic Monitoring: Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).

Test Method: Not applicable.

Test Frequency: Not applicable.

Required Records: Vendor certification for diesel fuel sulfur content for all purchases.

State-Only: No.

Calculation Model: Not applicable.

Condition Approval

Condition:	Maintain an engine inventory of no more than two engines not to exceed an aggregate total of 20 horsepower.
Periodic Monitoring:	Inventory of engines used seasonally to support the CWC operations. At a minimum; record the current and past engines used with the date and hour readings the engine was located in the CWC Area and the date it was removed from the CWC Area.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Engine inventory.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.77 CWC Facility New Light Plant Engines

Requirement Citation: NESHAP Subpart IIII, 40 CFR 60, Engine Year 2005 or later, Displacement < 10 L, non-emergency compression ignition, Max Power output < 25 HP

No more than an aggregate of 122.7 horsepower, with a max power output of a single engine not to exceed 25 HP, may be used

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 9.5 g/KW-hr.
	(2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr.
	(3) Particulate matter emission limit of 0.80 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engines in accordance with the manufacturer's recommendations or instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual.
	(2) Documentation of maintenance performed
	(3) Hour meter readings
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Maintain an engine inventory of 8 engines or less with any engine not to exceed 25 HP with a combined aggregate horsepower not to exceed 122.7 horsepower.
Periodic Monitoring:	Inventory of engines used seasonally to support the CWC operations. At a minimum; record the current and past engines used with the date and hour readings the engine was located in the CWC Area and the date it was removed from the CWC Area.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Engine inventory.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.78 200 W SWOC Administrative Offices Engines

Requirement Citation: NESHAP Subpart IIII, 40 CFR 60, Engine Year 2005 or later, Displacement < 10 L, non-emergency compression ignition, Max Power output < 25 HP

No more than an aggregate of 142.7 horsepower, with a max power output of a single engine not to exceed 25 HP, may be used.

Condition Approval

Condition:	(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_X) emission limit of 9.5 g/KW-hr. (2) Carbon monoxide (CO) emission limit of 6.6 g/KW-hr. (3) Particulate matter emission limit of 0.80 g/KW-hr.
Compliance Requirement:	Compliance will be determined by operating and maintaining the engines in accordance with the manufacturer's recommendations or instructions.
Required Records:	(1) Manufacturer's maintenance or operation manual. (2) Documentation of maintenance performed (3) Hour meter readings
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Use of fuel per 40 CFR 60.4207 (b).
Periodic Monitoring:	Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	Vendor certification for diesel fuel sulfur content for all purchases.
State-Only:	No.
Calculation Model:	Not applicable.

Condition Approval

Condition:	Maintain an inventory with no more than an aggregate of 142.7 horsepower, with a single engine not to exceed 25 horsepower may be used.
Periodic Monitoring:	Inventory of engines used seasonally to support the 200W SWOC Administrative office operations. At a minimum; record the current and past engines used with the date and hour readings the engine was located in the 200W SWOC Administrative office area and the date it was removed from the 200W SWOC Administrative office area.
Test Method:	Not applicable.
Test Frequency:	Not applicable.
Required Records:	(1) Engine inventory. (2) Hour meter readings
State-Only:	No.
Calculation Model:	Not applicable.

1.4.79 222S Engine for Direct Drive Ventilation

200 West Area Engine directly powering the 222S Facility exhaust

Requirement Citation (WAC or Order Citation):DE15NWP-001, Rev. 1 (9/08/2017)

Condition Approval 9/08/2017

Condition:	Total Emission Limits
	A. Emissions of nitrogen oxides (NO_X) will not exceed 18.1 tons per year
	B. Emissions of carbon monoxide (CO) will not exceed 1.16 tons per year
	C. Emissions of particulate matter (PM) will not exceed 0.193 tons per year.
	D. Emissions of total unburned hydrocarbons (HHC/VOC) will not exceed 0.257 tons per year
	E. Emissions of nitrogen oxide (NO_2) will not exceed ASIL limit of 470 µg/m^3
	F. Emissions of diesel engine particulate matter (DEP) will not exceed ASIL limit of 0.00333 µg/m^3.
Periodic Monitoring:	A. Install engine to meet emission limitations of 40 CFR Part 89 [40 CFR §60.4211(c)]
	B. Maintain in a current conditions all recommended operation and equipment maintenance 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 compression ignition internal combustion engines 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)]
Test Method:	Not specified.
Test Frequency:	Not applicable.
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 thirty-six months
State-Only:	NSR thresholds – No.
	ASILs - Yes.
Calculation Model:	Not applicable.

Condition Approval	**9/08/2017**
Condition:	Emissions Limit
	Emissions of sulfur dioxide (SO_2) will not exceed 0.386 tons per year.
Periodic Monitoring:	Recordkeeping.
Test Method:	Not specified.
Test Frequency:	Per fuel shipment.
Required Records:	Vendor documentation or fuel analysis showing sulfur content < 0.015%.
State-Only:	No.
Calculation Model:	Not applicable.

1.4.80 Effluent Management Facility

200 East Area Facility associated with the Waste Treatment Plant

Requirement Citation (WAC or Order Citation): DE16NWP-003 (2/17/2017)

Condition Approval 9/08/2017

Condition:	Visible emissions will not exceed five (5) % opacity. [WAC 173-400-040(2)]
Periodic Monitoring:	Compliance and monitoring shall be met by Tier 3 visible Emission Survey requirements of the Hanford AOP, Section 2. Should visible emissions be observed which are not solely attributable to water condensation, compliance shall be met by performing an opacity determination utilizing 40 CFR 60, Appendix A, Method 9, providing that such determination shall not place the visible emission observer in hazard greater than that identified for the general worker.
Test Method:	40 CFR 60, Appendix A, Method 9
Test Frequency:	Not specified except 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. 40 CFR 60, Appendix A, Method 9 results if conducted. Visible emission survey records shall be submitted to Ecology within thirty (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.
Calculation Model:	Not applicable.

Condition Approval 9/08/2017

Condition:	All TAPs, as submitted in the Permittee's NOC Application as Table 1 and subsequent follow-on informational email, shall be below their respective ASIL or approved through a Second Tier review.
Periodic Monitoring:	Emission unit sampling as described in 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 shall be the EPA, Occupational Safety and Health Administration (OSHA), or National Institute for Occupational Safety and Health (NIOSH) approved, or by approved equivalent method.
Test Frequency:	Annual
Required Records:	A. Permittee will develop and implement an annual sampling and analysis plan (SAP). The SAP shall 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 and elemental 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 which are examined for mercury or other TAPS.
	D. Emission monitoring results required in Section 3.0.
State-Only:	Yes
Calculation Model:	Not applicable.

Condition Approval 9/08/2017

Condition:	Total mercury emissions shall not exceed 5.30E-07 pounds per 24 hour period.
Periodic Monitoring:	Permittee will install a mercury monitor to measure emission unit emission values of total mercury. All measurements of mercury on the mercury monitor will be considered to be dimethyl mercury. This is to account for the fact that dimethyl mercury currently does not have a real-time monitoring device.
Test Method:	Mercury sampling and analysis will be in accord with the EPA approved procedures.
Test Frequency:	Minimum frequency of once every minute.
Required Records:	A. Supporting data and calculations to demonstrate compliance
	B. Emission monitoring results
State-Only:	Yes
Calculation Model:	Not applicable.

2.0 COMPLIANCE AND PERIODIC MONITORING PROVISIONS

Compliance and periodic monitoring provisions are provided in the following sections.

2.1 Visible Emission Surveys

Visible emission surveys must be conducted during daylight hours and during periods when the emission unit is operating. When any visible emission surveys are performed, a record will be established indicating if visible emissions were or were not observed.

Tier 1

This method 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. Visible emission surveys are to be conducted during daylight hours, after the unit has reached normal operating temperature and revolutions per minute, or 15 minutes after startup.

Part A – If the combustion unit is certified to meet EPA emission standards contained in 40 CFR Part 89.112, Table 1, then limited visible emission surveys may be performed if operation and maintenance in accordance with manufacturer directions are followed. It is important to note that the Tier reference in 40 CFR Part 89.112, Table 1 is not the Tier reference used in this section. A visible emission survey will be performed upon initial installation as described in Part B to document no visible emissions are observed during normal operations. If visible emissions are observed during normal operations, then a visible emission survey will be performed as described in Part B.

Part B – This method consists of operating personnel observing visible emissions from the emission unit according to the frequency identified in the specific discharge unit listed in Section 1.4. If the operator observes visible emissions for more than 10 consecutive minutes during the observation period, the cause(s) of the visible emissions will be determined and corrective actions taken as necessary, or a visible determination of opacity will be performed using EPA Method 9 of 40 CFR 60, Appendix A. Records of corrective actions taken to reduce opacity shall be maintained and available for Ecology inspection. Where no frequency is specified, visible emission surveys will be performed a minimum of once per quarter.

Provided the emissions observed during the EPA Method 9 of 40 CFR 60 tests are representative of normal operations and the Method 9 test shows the emission unit is compliant, no further observations are required until the next required periodic monitoring. Records of corrective actions taken to reduce opacity shall be maintained and available for Ecology inspection.

If after corrective actions have been taken and results from the EPA Method 9 of 40 CFR 60 tests indicate visible emissions in excess of the limit, a deviation report will be filed with Ecology as required by Section 5.16 of the Standards Terms and General Condition part of the Hanford AOP.

Tier 2

Some emission units are unlikely sources of visible emissions and are not expected to exceed applicable opacity limits based on past operating experience and/or expected process behavior. These can include research and development laboratories, analytical laboratories, gas-fired boilers and engines, and some fossil-fueled combustion units. For these emission units, a visible emission survey will be conducted and the results recorded. If visible emissions from one of these emission units are observed for more than 10 consecutive minutes, an attempt to identify the cause(s) of the visible emissions will be made and those results recorded. The recorded entry also will identify any corrective actions taken and the likely frequency of a future recurrence. If the event is likely to recur, and cannot be demonstrated to consist of water vapor, a determination of opacity will be made using EPA Method 9. The frequency of the visible

emission surveys shall be as required in the specific discharge unit listed in Section 1.4 unless the following procedure has been completed satisfactorily. Where no frequency is specified, visible emission surveys will be performed a minimum of once per year.

The procedure for reducing visible emission survey frequencies is as follows:

If ten consecutive cold starts are negative, visible emission surveys will be performed only when visible emissions are observed, but must be conducted at least once per year. Visible emission surveys during these periods will be conducted for non-radionuclides-emitting stacks according to the process described in Tier 2.

If visible emissions from one of these emission units are observed for more than 10 consecutive minutes, the event is likely to recur, and cannot be demonstrated to consist of water vapor, the required frequency for visible emission surveys will revert back to original requirements.

Tier 3

Maintain abatement control technology as required in Attachment 2 of the Hanford AOP for that particular emission unit, unless specific requirements in Section 1.4 are listed.

2.2 General Standards Complaint Investigations

Complaints forwarded by Ecology shall be addressed promptly and assessed for corrective action. An initial informal response shall be made to Ecology within 30 working days of the Permittee receiving the complaint. This initial response shall document preliminary investigation results and any planned or completed corrective actions. Follow-up report(s) shall be provided as directed by Ecology. The Permittee shall maintain records of complaints forwarded by Ecology.

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 Reserved

2.5 Recordkeeping for Boilers

DOE and the contractor shall 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 Steam Generating Units Source Tests

All source tests for the boilers regulated by Notice of Construction 97NM-138 have been conducted using EPA and Ecology approved procedures with the test boilers operating at full capacity. Tests were conducted on a maximum of five boilers selected on the basis of boiler capacity and fuel type. The procedure for selecting the test boilers were agreed to by Ecology and DOE before conducting the tests. A procedure for selecting a representative subset of boilers for testing once every 5 years was developed before the initial 5 year follow-up test. The public was provided an opportunity for review of the procedure as part of an AOP modification.

The following list is an inventory of the larger boilers that were subject to testing (maximum of 5 boilers):

Distillate Oil-Fired Boilers	Number of Units
200 BHP	5
350 BHP	3
700 BHP	2

Natural Gas-Fired Boilers	Number of Units
200 BHP	2
300 BHP	4

In 2005, the U.S. Department of Energy Richland Office (DOE-RL) requested the removal of Air Operating Permit compliance testing for the energy-saving fossil fuel fired boilers operated by Johnson Controls, Inc (JCI) since 1998 at the Hanford Site. JCI conducted the initial air compliance test in 1998 and the first 5-year follow-up test in 2003. Both tests demonstrated that the emissions were within the limits stated in the Notice of Construction (NOC) and Air Operating Permit (AOP). It is obvious that the same compliance can be maintained by continuously using low sulfur fuel and implementing good combustion practices. Ecology approved the request of eliminating future 5-year compliance tests on June 15, 2005. The emissions will be within the NOC and AOP limits as long as JCI continues to use low sulfur fuel and maintain good combustion practice and maximum achievable control technology (MACT) standards.

2.7 SO_2 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 these emission units do not emit significant

levels of SO_2. The Permittee annually shall certify that the processes have not been modified to increase SO_2 emissions and no SO_2 monitoring is required.

2.8 Visible Emissions Enforceability

WAC 173-400-040(2)(a) and (2)(b) are federally enforceable sections. Soot blowing and grate cleaning are allowed if the operator can demonstrate that the emissions will not exceed 20% opacity for more than 15 minutes in any 8 consecutive hours.

2.9 SO_2 Enforceability

WAC 173-400-040(7) is federally enforceable.

3.0 RECORDKEEPING

The Permittee shall maintain records of all required monitoring data and support information. These records shall 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, nitrogen oxides, volatile organic compounds, 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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