

WASHINGTON STATE DEPARTMENT OF ECOLOGY  
CENTRAL REGIONAL OFFICE  
1250 WEST ALDER STREET  
UNION GAP, WASHINGTON 98903

IN THE MATTER OF THE COMPLIANCE BY ) AIR OPERATING PERMIT  
PUBLIC UTILITY DISTRICT NO. 1 OF KLICKITAT COUNTY ) No. 18AQ-C221  
H.W. Hill Landfill Gas Power Plant )  
with Section 70.94.161 RCW, Operating Permits for )  
Air Contaminant Sources, and the applicable rules and ) **DRAFT PERMIT**  
regulations of the Department of Ecology )

To: Jim Smith, General Manager  
Public Utility District No. 1 of Klickitat County  
1313 South Columbus Avenue  
Goldendale, Washington 98620

Issuance Date: DRAFT  
Effective Date: DRAFT  
Expiration Date: DRAFT

**Responsible Official:** Jim Smith, General Manager or Kevin Ricks, Generation Asset & Special Projects Manager

**Source Location:** 502 Roosevelt Grade Road, Roosevelt, Washington 99356

**Legal Authority:** This AIR OPERATING PERMIT is issued under the authority and provisions of the Federal Clean Air Act, (42 U.S.C. 7401, et seq.), the Washington Clean Air Act, Chapter 70.94 Revised Code of Washington and the Operating Permit Regulation, Chapter 173-401 Washington Administrative Code.

Hereinafter, Public Utility District No. 1 of Klickitat County is called the permittee. The permittee is required to comply with the provisions contained within this permit.

Prepared & Reviewed By:

Approved By:

DRAFT  
Lynnette A. Haller, PE  
Central Regional Air Quality Program  
Department of Ecology  
State of Washington

DRAFT  
Sanjay Barik  
Central Regional Air Quality Section Manager  
Department of Ecology  
State of Washington

**TABLE OF CONTENTS**

**LIST OF ABBREVIATIONS..... 3**

**EMISSION UNIT IDENTIFICATION..... 4**

1.1 PERMIT SHIELD ..... 4

1.2 SEVERABILITY ..... 4

1.3 PROPERTY RIGHTS ..... 5

1.4 EMISSIONS TRADING..... 5

1.5 ENFORCEABILITY ..... 5

1.6 GENERAL OBLIGATION ..... 5

1.7 REASONABLY AVAILABLE CONTROL TECHNOLOGY (RACT)..... 5

1.8 NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE..... 5

1.9 PERMIT ACTIONS ..... 5

1.10 PERMIT CONTINUATION ..... 5

1.11 PERMIT APPEALS ..... 6

1.12 DUTY TO COMPLY..... 6

1.13 INSPECTION AND ENTRY ..... 6

1.14 PERMIT FEES ..... 7

1.15 DUTY TO PROVIDE INFORMATION ..... 7

1.16 EXCESS EMISSIONS DUE TO AN EMERGENCY ..... 8

1.17 UNAVOIDABLE EXCESS EMISSIONS ..... 8

1.18 RECORD KEEPING ..... 9

1.19 REPORTING ..... 9

1.20 CERTIFICATION ..... 11

1.21 PERMIT RENEWAL AND EXPIRATION..... 12

1.22 DUTY TO SUPPLEMENT OR CORRECT APPLICATION ..... 12

1.23 ADMINISTRATIVE PERMIT AMENDMENTS ..... 12

1.24 REOPENING FOR CAUSE ..... 12

1.25 OFF-PERMIT CHANGES ..... 13

1.26 CHANGES NOT REQUIRING PERMIT REVISIONS ..... 13

1.27 NEW SOURCE REVIEW ..... 14

1.28 REPLACEMENT OR SUBSTANTIAL ALTERATION OF EMISSION CONTROL TECHNOLOGY ..... 14

1.29 FEDERAL CHLOROFLUOROCARBONS REQUIREMENTS – TITLE VI OF THE FCAA ..... 14

1.30 DEMOLITION AND RENOVATION (ASBESTOS) ..... 15

1.31 NONROAD ENGINES ..... 15

1.32 OPERATIONAL FLEXIBILITY ..... 15

1.33 COMPLIANCE SCHEDULES ..... 16

**2.0 APPLICABLE REQUIREMENTS ..... 17**

2.1 FACILITY-WIDE SOURCES..... 17

2.2 PROCESS #1, FIRE PUMP..... 27

2.3 PROCESS #2, EMERGENCY GENERATORS..... 28

2.4 PROCESS #3, POWER GENERATION – TURBINES ..... 29

2.5 PROCESS #4, ENCLOSED FLARE ..... 44

2.6 PROCESS #5, RENEWABLE NATURAL GAS PLANT ..... 47

**3.0 INAPPLICABLE REQUIREMENTS..... 50**

## LIST OF ABBREVIATIONS

AOP	Air Operating Permit
ASTM	American Society for Testing and Materials
CEMS	continuous emissions monitoring system
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
CO	carbon monoxide
CO <sub>2</sub> e	carbon monoxide equivalent
Ecology	Washington State Department of Ecology
ECT	emission control technology
EPA	United States Environmental Protection Agency
F	federally enforceable requirement
FCAA	federal clean air act
FDCP	fugitive dust control plan
GHG	greenhouse gas
gr/dscf	grains per dry standard cubic foot
HAP	hazardous air pollutant
HRSG	heat recovery steam generator
hr/yr	hour per year
IC	internal combustion
lb/hr	pound per hour
LFG	landfill gas
MMBtu	one million British thermal units
MVAC	motor vehicle air conditioner
MW	megawatt
NMOC	non-methane organic compound
NOC	notice of construction
NO <sub>x</sub>	oxides of nitrogen
NSPS	new source performance standard
O&M	operations and maintenance
PM	particulate matter
PM <sub>2.5</sub>	particulate matter with aerodynamic diameter ≤ 2.5 micrometers
PM <sub>10</sub>	particulate matter with aerodynamic diameter ≤ 10 micrometers
ppmdv	parts per million by dry volume
PSD	prevention of significant deterioration
QA/QC	quality assurance, quality control
RACT	reasonably available control technology
RNG	renewable natural gas
RCW	Revised Code of Washington
S	state only enforceable requirement
scfm	standard cubic foot per minute
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
tpy	tons per year
VOC	volatile organic compound
WAC	Washington Administrative Code

**EMISSION UNIT IDENTIFICATION**

The requirements identified in this permit apply to all air emissions from the H.W. Hill Landfill Gas Power Plant facility located at 502 Roosevelt Grade Road, Roosevelt, Washington. Specific requirements for the processes of the facility are listed in section six of this permit. The permitted emission processes are listed in the table below.

Source Description (Name, Permit Section)	Emission Points	Control Device (Name, Permit Section)	Process Description
Fire Pump (a.k.a. Process #1, see Table 2.2)	1 Stack	None	149 hp diesel fire pump engine, installed in approximately 2010.
Emergency Generators (a.k.a. Process #2, see Table 2.3)	2 Stacks	None	Two small (~40 hp) propane fired rich burn, spark ignited emergency generators, installed in approximately 2010.
Combustion Turbine Power Generation (a.k.a. Process #3, see Table 2.4)	4 Stacks	Landfill Gas Treatment System, including Enclosed Flare	Electrical generation using two 10.1-MW landfill gas-fired combustion turbines and two 4-MW unfired heat recovery steam generators (HRSG). Generates approximately 28.2 MW of electricity.
Enclosed Flare (a.k.a. Process #4, see Table 2.5)	1 Stack	None	Flare combusts up to 12,000 standard cubic feet of landfill gas per hour during periods when the Landfill Gas Treatment System is purged for media regeneration.
Renewable Natural Gas Plant (a.k.a. Process #5, see Table 2.6)	4 Stacks	Landfill Gas Treatment System, including Enclosed Flare	“Selexol” process utilizing a solvent mixture for CO2 removal. A catalytic process removes oxygen; an amine scrubber system removes additional CO2; a cryogenic process removes nitrogen. A screw compressor brings gas to pipeline pressure & a candle stick flare is used for startup and emergency venting. RNG injected into nearby natural gas pipeline for transport to market.

**1.0 STANDARD CONDITIONS**

All information required for submittal throughout this permit, is to be submitted to Ecology, the EPA Administrator, or both as specified by the applicable requirement, at the following addresses:

Air Quality Program  
c/o Air Quality Section Manager  
Department of Ecology  
1250 West Alder Street  
Union Gap, Washington 98903-0009

U.S. EPA Region 10 Administrator  
c/o Part 70 Permit Coordinator  
AWT-150  
1200 Sixth Avenue  
Seattle, Washington 98101

**1.1 Permit Shield**

1.1.1 Compliance with the terms and conditions of this permit shall be deemed compliance with those applicable requirements that are specifically included and identified in this permit as of the date of permit issuance.

1.1.2 The permit shield shall not apply to any insignificant emissions unit or activity designated under WAC 173-401-530.

[WAC 173-401-530(3), 9/16/02, 2/3/16 (S)], [WAC 173-401-640(1), 9/16/02, 2/3/16 (S)]

**1.2 Severability**

If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

[WAC 173-401-620(2)(h), 9/16/02, 2/3/16 (S)], [RCW 70.94.905, 2016 (S)]

### 1.3 **Property Rights**

This permit does not convey any property rights of any sort, or any exclusive privilege.

[WAC 173-401-620(2)(d), 9/16/02, 2/3/16 (S)]

### 1.4 **Emissions Trading**

No permit revision shall be required, under any approved economic incentives, marketable permits, emission trading, and other similar programs or processes for changes that are provided for in this permit.

[WAC 173-401-620(2)(g), 9/16/02, 2/3/16 (S)]

### 1.5 **Enforceability**

All terms and conditions of the permit are enforceable by the EPA and citizens unless specifically designated as state-only enforceable.

[WAC 173-401-625, 9/16/02, 2/3/16 (S)]

### 1.6 **General Obligation**

Nothing in this permit shall alter or affect the following:

1.6.1 The provisions of Section 303 of the FCAA (emergency orders), including the authority of EPA under that section.

1.6.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.

1.6.3 The applicable requirements of the acid rain program, consistent with Section 408(a) of the FCAA.

1.6.4 The ability of EPA to obtain information from a source pursuant to Section 114 of the FCAA.

1.6.5 The ability of Ecology to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in Chapter 252, Laws of 1993.

[WAC 173-401-640(4), 9/16/02, 2/3/16 (S)]

### 1.7 **Reasonably Available Control Technology (RACT)**

Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance or renewal shall be considered RACT for the purpose of permit issuance or renewal. RACT determinations under Section 8, Chapter 252, Laws of 1993 shall be incorporated into an operating permit as provided in WAC 173-401-730.

[WAC 173-401-605(3), 9/16/02, 2/3/16 (S)], [RCW 70.94.154, 2016 (S)]

### 1.8 **Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

[WAC 173-401-620(2)(b), 9/16/02, 2/3/16 (S)]

### 1.9 **Permit Actions**

This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and re-issuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[WAC 173-401-620(2)(c), 9/16/02, 2/3/16 (S)]

### 1.10 **Permit Continuation**

This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted.

An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted.

[WAC 173-401-620(2)(j), 9/16/02, 2/3/16 (S)]

### 1.11 Permit Appeals

You have a right to appeal this permit to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this permit. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do all of the following within 30 days of the date of receipt of this permit:

- File your appeal and a copy of this permit with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.
- Serve a copy of your appeal and this permit on Ecology in paper form - by mail or in person (see addresses below). E-mail is not accepted.

You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Address and Location Information:

Street Addresses

**Department of Ecology**  
Attn: Appeals Processing Desk  
300 Desmond Drive SE  
Lacey, WA 98503

**Pollution Control Hearings Board**  
1111 Israel Rd SW  
STE 301  
Tumwater, WA 98501

Mailing Addresses

**Department of Ecology**  
Attn: Appeals Processing Desk  
PO Box 47608  
Olympia, WA 98504-7608

**Pollution Control Hearings Board**  
PO Box 40903  
Olympia, WA 98504-0903

[RCW 70.94.221, 2016 (S)]

This provision for appeal in this section is separate from and additional to any federal rights to petition and review under Section 505(b) of the FCAA.

[WAC 173-401-620(2)(i), 9/16/02, 2/3/16 (S)]

### 1.12 Duty to Comply

1.12.1 The permittee must comply with all conditions of this permit.

1.12.2 Any permit noncompliance constitutes a violation of Chapter 70.94 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for: enforcement action; for permit termination, revocation and re-issuance, or modification; or for denial of a permit renewal application.

[WAC 173-401-620(2)(a), 9/16/02, 2/3/16 (S)]

### 1.13 Inspection and Entry

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow Ecology, or an authorized representative to perform the following:

- 1.13.1 Enter upon the permittee's premises where a Chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
- 1.13.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit.
- 1.13.3 Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

1.13.4 As authorized by WAC 173-400-105 and the FCCA, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.

[WAC 173-401-630(2), 9/16/02, 2/3/16 (S); RCW 70.94.200, 2016 (S); NOC Order No. 08AQ-C080, 4<sup>th</sup> Revision, 9/28/17, Conditions 4.10.9, 9.5]

1.13.4.1 Ecology may require the permittee to conduct stack testing and/or ambient air monitoring and report the results to Ecology.

[WAC 173-400-105(2), 9/13/16]

1.13.4.2 Ecology may conduct or require that a test be conducted using approved methods from 40 CFR Parts 51, 60, 61, and 63 (in effect on July 1, 2012), or Ecology's Source Test Manual – Procedures for Compliance Testing. The permittee shall be required to provide platform and sampling ports. Ecology shall be allowed to obtain a sample from any emissions unit. The permittee shall be given the opportunity to observe the sampling and to obtain a sample at the same time.

[WAC 173-400-105(4), 9/13/16]

1.13.4.3 Ecology may conduct source tests and require access to records, books, files, and other information specific to the control, recovery, or release of pollutants regulated under 40 CFR Parts 61, 62, 63, and 65, as applicable, in order to determine the status of compliance of sources of these contaminants and to carry out its enforcement responsibilities.

[WAC 173-400-075(2), 9/13/16 (S)]

1.13.5 No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties.

[RCW 70.94.200, 2016 (S)]

1.13.6 Nothing in this condition shall limit the ability of EPA to inspect or enter the premises of the permittee under Section 114 or other provisions of the FCAA.

[40 CFR §60.8(e), 07/01/15]

#### 1.14 **Permit Fees**

The permittee shall pay fees as a condition of this permit in accordance with Ecology's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in Chapter 70.94 RCW. Ecology may revoke this permit if the permit fees are not paid per WAC 173-401-930(3).

[WAC 173-401-620(2)(f), 930(3), 9/16/02, 2/3/16 (S)], [RCW 70.94.162(1), 2016 (S)]

#### 1.15 **Duty to Provide Information**

1.15.1 The permittee shall furnish to Ecology, within a reasonable time, any information that Ecology may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.

1.15.1.1 Upon request, the permittee shall also furnish to Ecology copies of records required to be kept by this permit.

1.15.1.2 For information claimed to be confidential, the permittee may furnish such records directly to Ecology along with a claim of confidentiality. Ecology shall maintain confidentiality of such information in accordance with RCW 70.94.205.

[WAC 173-401-620(2)(e), 9/16/02, 2/3/16 (S)]

1.15.2 No person shall render inaccurate any required monitoring device or method.

[WAC 173-400-105(8), 9/13/16]

#### 1.16 Excess Emissions Due to an Emergency

The permittee may seek to establish that noncompliance with a technology-based<sup>1</sup> emission limitation under this permit was due to an emergency.<sup>2</sup> To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

- 1.16.1 An emergency occurred and that the permittee can identify the cause(s) of the emergency.
- 1.16.2 The permitted facility was being properly operated at the time of the emergency.
- 1.16.3 During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit.
- 1.16.4 The permittee submitted notice of the emergency to Ecology within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[WAC 173-401-645, 9/16/02, 2/3/16 (S)]

#### 1.17 Unavoidable Excess Emissions

Excess emissions determined to be unavoidable under the procedures and criteria in WAC 173-400-107 shall be excused and not subject to penalty.

- 1.17.1 The permittee shall have the burden of proving to Ecology that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under **Conditions 1.17.2, 1.17.3, or 1.17.4**.
- 1.17.2 Excess emissions due to startup or shutdown conditions shall be considered unavoidable provided the source reports as required under **Condition 1.17.5** and adequately demonstrates that the excess emissions could not have been prevented through careful planning and design, and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.
- 1.17.3 Excess emissions due to scheduled maintenance shall be considered unavoidable if the source reports as required under **Condition 1.17.5** and adequately demonstrates that the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance, or through better operation and maintenance practices.
- 1.17.4 Excess emissions due to upsets shall be considered unavoidable provided the source reports as required under **Condition 1.17.5** and adequately demonstrates that:
  - 1.17.4.1 The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition.
  - 1.17.4.2 The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance.
  - 1.17.4.3 The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded.
- 1.17.5 Excess emissions which represent a potential threat to human health or safety or which the owner or operator of the source believes to be unavoidable shall be reported to Ecology as soon as possible. Other excess emissions shall be reported within 30 days after the end of the month during which the event occurred or as part of the routine emission monitoring reports. Upon request by Ecology, the owner or operator of the source shall submit a full written report

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<sup>1</sup> Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a new source performance standard) rather than those established to attain a health based air quality standard.

<sup>2</sup> An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.



including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

[WAC 173-400-107, 8/20/93, 9/13/16 (S); NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 9.10]

## 1.18 Record Keeping

1.18.1 The permittee shall keep records of required monitoring information that includes, where applicable, the following:

- 1.18.1.1 The date, place, and time of the sampling or measurements.
- 1.18.1.2 The date(s) analyses were performed.
- 1.18.1.3 The company or entity that performed the analysis.
- 1.18.1.4 The analytical techniques or methods used.
- 1.18.1.5 The results of such analyses.
- 1.18.1.6 The operating conditions as existing at the time of sampling or measurement.

[WAC 173-401-615(2)(a), 9/16/02, 2/3/16 (S)]

1.18.2 The permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

[WAC 173-401-615(2)(b), 9/16/02, 2/3/16 (S)]

1.18.3 The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings from continuous monitoring instrumentation, and copies of all reports required by this permit.

[WAC 173-401-615(2)(c), 9/16/02, 2/3/16 (S); NOC Order No. 08AQ-C080, 4<sup>th</sup> Revision, 9/28/17, Condition 6.4 ]

## 1.19 Reporting

### 1.19.1 Monthly Deviation Reports

1.19.1.1 The permittee shall report deviations from permit conditions, including those attributable to upset conditions as defined in this permit, and include the following information:

- 1.19.1.1.1 The time the deviation occurred.
- 1.19.1.1.2 The duration of the deviation.
- 1.19.1.1.3 The magnitude of the deviation in relation to the applicable limit.
- 1.19.1.1.4 The probable cause of the deviation.
- 1.19.1.1.5 Any corrective actions or preventive measures taken.

1.19.1.2 Such deviations shall be reported “promptly” to Ecology at the address included in this permit.

- 1.19.1.2.1 For deviations which represent a potential threat to human health or safety, “prompt” means as soon as possible, but in no case later than twelve (12) hours after the deviation is discovered.
- 1.19.1.2.2 For deviations which the source believes to be unavoidable, “prompt” means as soon as possible.
- 1.19.1.2.3 For deviations which represent a potential threat to human health or safety or which the source believes to be unavoidable, the initial report shall contain all available information regarding the deviation and may be submitted via e-mail or fax to the appropriate Ecology personnel. No later than thirty days after the end of each month, the permittee shall submit a report describing other deviations that were discovered that month or stating that no other deviations were discovered.

1.19.1.3 Upon request by Ecology, the permittee shall submit a full written report including further details regarding the known causes, the corrective actions taken, and the preventative measures to be taken to minimize or eliminate the chance of recurrence.

1.19.1.4 The source shall maintain a contemporaneous record of all deviations.

[WAC 173-401-615(3)(b), 9/16/02, 2/3/16 (S)], [WAC 173-400-107, 8/20/93, 9/13/16 (S)], [40 CFR §60.49b(h), 7/1/16], [WAC 173-401-630(1), 9/16/02, 2/3/16 (S)]

#### 1.19.2 **Semi-Annual Monitoring Reports**

1.19.2.1 The permittee shall submit semi-annual reports which include monitoring, recordkeeping, and/or reporting information that is required to be submitted every six months. Six-month periods shall be twice each calendar year from **January 1st** through **June 30th**, and from **July 1st** through **December 31st**.

1.19.2.2 Semi-annual monitoring reports shall be **due no later than forty-five days following the end of each six month period**.

1.19.2.3 All instances of deviations from permit requirements must be clearly identified in such reports.

1.19.2.4 All required reports must be certified by a responsible official consistent with **Condition 1.20**.

[WAC 173-401-615(3)(a), 9/16/02, 2/3/16 (S)]

#### 1.19.3 **Compliance Certifications**

1.19.3.1 The permittee shall submit a certification of compliance with permit terms and conditions (not including **Conditions 1.1 through 1.11**), at least once per calendar year.

1.19.3.2 Ecology may require that compliance certifications be submitted more frequently for those emission units not in compliance with permit terms and conditions, or where more frequent certification is specified in the applicable requirement.

1.19.3.3 All certifications shall be **submitted no later than forty-five days following the end of the certification period**.

[WAC 173-401-630(3), 9/16/02, 2/3/16 (S)]

1.19.3.4 The certification shall describe and include the following:

1.19.3.4.1 The permit term or condition that is the basis of the certification.

1.19.3.4.2 The current compliance status.

1.19.3.4.3 Whether compliance was continuous or intermittent.

1.19.3.4.4 The methods used for determining compliance, currently and over the reporting period, consistent with WAC 173-401-615(3)(a).

[WAC 173-401-630(3), 9/16/02, 2/3/16 (S)]

1.19.3.5 All compliance certifications shall be submitted to Ecology and the EPA Region 10 Administrator at the respective addresses included in this permit.

[WAC 173-401-630(5), 9/16/02, 2/3/16 (S)]

1.19.3.6 Where permit conditions do not require testing, monitoring, recordkeeping, and reporting for insignificant emission units or activities, the permittee may certify continuous compliance if there are not observed, documented, or known instances of noncompliance during the reporting period.

1.19.3.7 Where permit conditions require testing, monitoring, recordkeeping or reporting for insignificant emission units or activities, the permittee may certify continuous compliance when the testing, monitoring, or recordkeeping required by the permit revealed no violations during the period, and there were no observed, documented, or known instances of noncompliance during the reporting period.

[WAC 173-401-530(2)(d), 9/16/02, 2/3/16 (S)]

1.19.3.8 All compliance certifications shall include certification by a responsible official in accordance with **Condition 1.20**.

- 1.19.3.9 For the purpose of submitting compliance certifications, or establishing whether-or-not a person has violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

[40 CFR §52.33(a), 7/1/16], [40 CFR §60.11(g), 7/1/16 (F)], [WAC 173-400-115, 9/13/16 (S)]

#### 1.19.4 Emissions Inventory

The permittee shall submit an inventory of actual emissions from the source for each calendar year. The inventory shall include segmented stack and fugitive emissions of particulate matter, PM<sub>10</sub>, PM<sub>2.5</sub>, sulfur dioxide, oxides of nitrogen, carbon monoxide, total reduced sulfur compounds (TRS), fluorides, lead, volatile organic compounds (VOCs), ammonia, and other contaminants. In addition, data elements listed in 40 CFR Part 51, Subpart A, Appendix A, Table 2a, must also be reported. The emissions inventory for each calendar year shall be submitted no later than **April 15<sup>th</sup>** of the following year. The permittee shall maintain records of information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards. Emission estimates used in the inventory may be based on the most recent published EPA emission factors for a source category, or other information available to the permittee, whichever is the better estimate.

Emissions inventories shall be reported to Ecology in the Washington Emissions Inventory Repository System, and a certification statement with supporting data shall be provided to Ecology at the address included in this permit unless or until Ecology specifies another system or format.

[WAC 173-400-105(1), 9/13/16; NOC Order No. 08AQ-C080, 4<sup>th</sup> Revision, 9/28/17, Condition 9.4]

#### 1.19.5 Greenhouse Gas Reporting

If the permittee emits 10,000 metric tons of greenhouse gases (GHG) or more per calendar year, GHG are required to be reported to Ecology. (Note: WAC 173-441-030(5) details reporting requirements for facilities which are subject to the requirements, but fall below reporting thresholds). All requests, notifications, and communications to Ecology regarding GHG, other than submittal of the annual GHG report, shall be submitted to: Greenhouse Gas Report, Air Quality Program, Department of Ecology, PO Box 47600, Olympia, WA 98504-7600. Annual GHG reports shall be submitted through Ecology's GHG Reporting page at:

[http://www.ecy.wa.gov/programs/air/permit\\_register/ghg/ghg.html](http://www.ecy.wa.gov/programs/air/permit_register/ghg/ghg.html)

Reports must meet the requirements of WAC 173-441-050 and include the annual emissions of the GHG listed in WAC 173-441-040 from source categories listed in WAC 173-441-120. The annual GHG report must be submitted electronically in accordance with WAC 173-441-050 and WAC 173-441-060, in a format specified by Ecology. The GHG report is due to Ecology by **October 31<sup>st</sup>** of each year for the previous calendar year, unless the facility is also required to submit a GHG report to EPA, then the GHG report is due to Ecology **March 31<sup>st</sup>** of each year for GHG emissions from the previous calendar year.

If the facility emits 10,000 metric tons of GHG or more per calendar year, the permittee must develop a written GHG monitoring plan. The plan shall be revised, as needed, to reflect changes in processes, monitoring instruction, and quality assurance procedures; or to improve procedures for the maintenance and repair of monitoring systems to reduce the frequency of monitoring equipment downtime.

[Chapter 173-441 WAC, 1/29/15 (S)]

#### 1.20 Certification

Reports, test data, monitoring data, notifications, certifications, and applications (including requests for renewal) shall be submitted to Ecology at the address included in this permit. Any document submitted to Ecology pursuant to this permit shall contain certification of truth, accuracy, and completeness by a responsible official. All certifications shall state that *“based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete”*. The permittee shall promptly, upon discovery, report to Ecology any material error or omission in these records, reports, plans, or other documents.

[WAC 173-401-520, 9/16/02, 2/3/16 (S)], [WAC 173-401-500(6), 9/16/02, 2/3/16 (S)]

### 1.21 Permit Renewal and Expiration

This permit is issued for a fixed term of 5 years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted. All terms and conditions of the permit shall remain in effect after the permit itself expires if a timely and complete permit application was submitted. This allowance shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit by the deadline specified in writing by Ecology, any additional information identified as being needed to process the application.

A renewal application is due **(1 ½ yrs before expire)**. A complete renewal application is due no later than **(1 yr before expire)**. The application shall be sent to Ecology at the address included in this permit.

[WAC 173-401-610, 710, 9/16/02, 2/3/16 (S)]

### 1.22 Duty to Supplement or Correct Application

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

[WAC 173-401-500(6), 9/16/02, 2/3/16 (S)]

### 1.23 Administrative Permit Amendments

1.23.1 An administrative permit amendment is a permit revision that:

- 1.23.1.1 Allows for a change in ownership or operational control of this source where the permitting authority has determined that no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to Ecology,
- 1.23.1.2 Corrects typographical errors within the permit,
- 1.23.1.3 Identifies a change in the name, address, or phone number of any person identified in the permit, or provides for a similar minor administrative change at the source,
- 1.23.1.4 Requires more frequent monitoring or reporting by the permittee, or
- 1.23.1.5 Incorporates into the permit the terms, conditions, and provisions from orders approving notice of construction applications processed under an EPA-approved program, provide that such a program meets procedural requirements substantially equivalent to the requirements of WAC 173-401-700, 173-401-725, and 173-401-800 that would be applicable to the change if it were subject to review as a permit modification and compliance requirements substantially equivalent to those contained in WAC 173-401-600 through 173-401-650.

1.23.2 The source may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request.

1.23.3 The permitting authority shall, upon taking final action granting a request for an administrative permit amendment, allow coverage by the permit shield in WAC 173-401-640 for administrative permit amendments made pursuant to **Condition 1.23.1.5**.

[WAC 173-401-720, 9/16/02, 2/3/16 (S)]

### 1.24 Reopening for Cause

1.24.1 Ecology will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

- 1.24.1.1 Additional requirements under the FCAA become applicable to a major source three or more years prior to the expiration date of this permit. Such a reopening shall be completed no later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).

1.24.1.2 Ecology or the Administrator determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

1.24.1.3 Ecology or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

1.24.2 Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

1.24.3 Reopenings shall not be initiated before a notice of intent to reopen is provided to the permittee by Ecology at least thirty days in advance of the date that this permit is to be reopened, except that Ecology may provide a shorter time period in the case of an emergency.

[WAC 173-401-730, 9/16/02, 2/3/16 (S)]

## 1.25 Off-Permit Changes

The permittee is allowed to make certain changes that are not specifically addressed or prohibited by this permit without a permit revision. All such changes must meet the following conditions:

1.25.1 The proposed changes shall not weaken the enforceability of any existing permit conditions.

1.25.2 Each such change shall meet all applicable requirements and shall not violate any existing permit term or condition.

1.25.3 Before or contemporaneously with making the permit change, the permittee must provide written notice to Ecology and EPA Region 10 at the respective addresses included in this permit. Such written notice shall describe each such change, including the date, any change in emissions or pollutants emitted, and any applicable requirements that would apply as a result of the change.

1.25.4 The change shall not qualify for the permit shield under **Condition 1.1**.

1.25.5 The permittee shall record all changes that result in emissions of any regulated air pollutant subject to any applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. The record shall reside at the permitted facility.

1.25.6 A source making a change under this section shall comply with the preconstruction review requirements established pursuant to **Condition 1.27**.

[WAC 173-401-724, 9/16/02, 2/3/16 (S)]

## 1.26 Changes Not Requiring Permit Revisions

1.26.1 *Section 502(b)(10) changes.* The permittee is authorized to make Section 502(b)(10) changes, as defined in WAC 173-401-200(28), without a permit revision, providing the conditions included below are met. The permit shield as described in **Condition 1.1** shall not apply to any change made pursuant to this paragraph.

1.26.1.1 The proposed changes are not Title I (FCAA) modifications;

1.26.1.2 The proposed changes do not result in emissions which exceed those allowable under the permit, whether expressed as a rate of emissions, or in total emissions;

1.26.1.3 The proposed changes do not alter permit terms that are necessary to enforce limitation on emissions from units covered by the permit;

1.26.1.4 The facility provides Ecology and EPA with written notification at least seven days prior to making the proposed changes except that written notification of a change made in response to an emergency shall be provided as soon as possible after the event;

1.26.1.4.1 The written notification shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

1.26.2 *Changes related to Emissions trading under an emissions cap.* Pursuant to **Condition 1.26.1**, the permittee is authorized to trade increases and decreases in emission in the permitted facility, where the Washington state implementation plan provides for such emissions trades without requiring a permit revision. This provision is

available in those cases where the permit does not already provide for such emissions trading. Such changes shall be subject to the following:

- 1.26.2.1 The written notification required under **Condition 1.26.1.4** shall include such information as may be required by the provision in the Washington SIP authorizing the emissions trade, including at a minimum: when the proposed change will occur, a description of each such change, any change in emissions, the permit requirements with which the source will comply using the emissions trading provisions of the Washington SIP, and the pollutants emitted subject to the emissions trade. The notice shall also refer to the provisions with which the source will comply in the applicable implementation plan and that provide for the emissions trade. The notification shall state how any increases or decreases in emissions will comply with the terms and conditions of the permit. (The permit shield described under **Condition 1.1** shall extend to terms and conditions that allow such increases and decreases.)
- 1.26.2.2 The permit shield described in **Condition 1.1** shall not extend to any change made under this paragraph. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the applicable implementation plan authorizing the emissions trade.
- 1.26.2.3 Upon the request of the permit applicant, Ecology shall issue permits that contain terms and conditions, including all terms required under WAC 173-401-600 through 173-401-630 to determine compliance, allowing for the trading of emissions increases and decreases in the Chapter 173-401 WAC source solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit independent of otherwise applicable requirements. The permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The emissions trading provision shall not be applied to any emissions units for which emission are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall also require compliance with all applicable requirements.
- 1.26.2.4 A source making a change under this section shall comply with applicable preconstruction review requirements established pursuant to **Condition 1.27**.
- 1.26.2.5 No permit revision shall be required, under any approved economic incentives, marketable permits, and other similar programs or processes for changes that are provided for in this permit such as emissions trading.

[WAC 173-401-722, 9/16/02, 2/3/16 (S)], [WAC 173-401-620(2)(g), 9/16/02, 2/3/16 (S)]

## 1.27 **New Source Review**

The permittee shall not construct new sources or make modifications required to be reviewed under WAC 173-400-110, WAC 173-400-113, WAC 173-400-560, WAC 173-400-720, WAC 173-400-820, or Chapter 173-460 WAC before the permittee obtains written final approval from Ecology in accordance with those regulations, pays the appropriate fees required by WAC 173-455-120, and pays the cost of public notice described in WAC 173-400-171.

[RCW 70.94.152(1), 2016 (S)], [WAC 173-400-110, 9/13/16], [WAC 173-400-113, 9/13/16], [WAC 173-400-171, 9/13/16], [WAC 173-400-560, 9/13/16], [WAC 173-400-720, 9/13/16], [WAC 173-400-820, 9/13/16], [WAC 173-455-120, 11/30/12 (S)], [WAC 173-460, 5/20/09 (S)]

## 1.28 **Replacement or Substantial Alteration of Emission Control Technology**

Prior to replacing or substantially altering emission control technology subject to review under WAC 173-400-114, the permittee shall file for and obtain approval from Ecology and pay the appropriate fees required by WAC 173-455-100(4) prior to commencing construction.

[WAC 173-400-114, 9/13/16 (S)], [WAC 173-455-100(4), 11/30/12 (S)], [RCW 70.94.153, 2016 (S)]

## 1.29 **Federal Chlorofluorocarbons Requirements – Title VI of the FCAA**

1.29.1 The permittee shall comply with the following standards for recycling and emissions reductions pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B.

- 1.29.1.1 Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.

- 1.29.1.2 Equipment used during the maintenance, service, repair, or disposal must comply with the standards for recycling and recovery equipment pursuant to 40 CFR §82.158.
- 1.29.1.3 Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
- 1.29.1.4 Persons disposing of small appliances, motor vehicle air conditioners, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR §82.166. (“MVAC-like appliance” is defined at 40 CFR §82.152.)
- 1.29.1.5 Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156.
- 1.29.1.6 Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep servicing records documenting the date and type of service, as well as the quantity of refrigerant added. The owner/operator must keep records of refrigerant purchased and added to such appliances in cases where owners add their own refrigerant. Such records should indicate the date(s) when refrigerant is added pursuant to 40 CFR §82.166.
- 1.29.1.7 Persons conducting maintenance, service, repair, or disposal of appliances must follow the prohibitions pursuant to 40 CFR §82.154.
- 1.29.1.8 Persons performing maintenance, service, repair, or disposal of appliances must certify to the EPA that such person has acquired certified recovery of recycling equipment pursuant to 40 CFR §82.162.
- 1.29.2 If the permittee manufactures, transforms, imports, or exports a Class I or Class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A – Production and Consumption Controls.
- 1.29.3 If the permittee performs a service on motor (fleet) vehicles and when this service involves ozone depleting substance refrigerant in the MVAC, the permittee is subject to all applicable requirements as specified in 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.
- 1.29.4 The permittee shall be allowed to switch from any ozone depleting substance to any alternative that is listed in the Significant New Alternative Program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternative Policy Program.

[RCW 70.94.970, 2016 (S)], [40 CFR Part 82, 7/1/16]

### 1.30 Demolition and Renovation (Asbestos)

Prior to, during, and after conducting any activity to which 40 CFR Part 61, Subpart M – National Emission Standard for Asbestos applies, the permittee shall comply with the requirements of that rule. Such activities include demolition, renovation, asbestos stripping or removal, installing or reinstalling insulation, manufacturing of fabricating certain items, spraying of certain materials, constructing roadways of certain materials, or disposal.

[WAC 173-400-075(1), 9/13/16 (S)], [40 CFR Part 61, Subpart M, 7/1/16]

### 1.31 Nonroad Engines

Prior to installation or operation of a non-road engine, as defined in WAC 173-400-030(56), the permittee shall meet the requirements of WAC 173-400-035. If the nonroad engine(s) has a cumulative maximum rated brake horsepower greater than 500, a notification of intent to operate will be submitted to Ecology. If the nonroad engine(s) has a cumulative maximum rated break horsepower greater than 2,000, the permittee will not operate the engine(s) unless Ecology issues written approval to operate.

[WAC 173-400-035, 9/13/16 (S)]

### 1.32 Operational Flexibility

1.32.1 The RNG plant may not operate concurrently with either of the power plant combustion turbines, except during the RNG plant commissioning period. The RNG plant commissioning period shall not exceed 60 calendar days from the time landfill gas is first introduced into the RNG plant processing equipment. Following commissioning permittee will comply with Conditions specified in Table 6.4 or Table 6.8, at any one time.

[NOC Order No. 08AQ-C080, 4<sup>th</sup> Revision, 9/28/17, Condition 5.6]

1.32.2 In the event that an emission unit is not operated during a period equal to or greater than the monitoring period designated, no monitoring is required. Recordkeeping and reporting must note the reason why and length of time that the emission unit was not operated.

1.32.3 The permittee did not propose any further alternative operating scenarios.

[WAC 173-401-650, 9/16/02, 2/3/16 (S)]

1.33 **Compliance Schedules**

1.33.1 The permittee shall continue to comply with applicable requirements with which it is currently in compliance. The permittee shall meet applicable requirements on a timely basis that become effective during the permit term.

[WAC 173-401-510(2)(h)(iii)(A), 9/16/02, 2/3/16 (S)], [WAC 173-401-510(2)(h)(iii)(B), 9/16/02, 2/3/16 (S)]



**2.0 APPLICABLE REQUIREMENTS**

Until this permit expires, is modified, or revoked, this permittee is authorized to operate processes 1 through 5. These processes are subject to the requirements shown in the tables of sections 2.1 through 2.6 and the other terms and conditions specified in this permit.

2.1 Facility-Wide Sources. The following requirements apply SOURCE WIDE: including, but not limited to, the fire water pump, the emergency generators, the combustion turbines, the landfill gas treatment, the enclosed flare, and the renewable natural gas plant, unless an alternate requirement is specifically stated for a particular emissions unit. Since monitoring, recordkeeping, and reporting has not specifically been required by Ecology for insignificant emission units, per WAC 173-400-105(1st ¶), 9/13/16, there are no air operating permit monitoring, recordkeeping, or reporting requirements for the insignificant emission units under this Source Wide section, as allowed per WAC 173-401-530(2)(c), 9/16/02, 2/3/16 (S).

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.1.1	RCW 70.94.040, 2016	S	It is unlawful for any person to cause air pollution, or permit it to be caused, in violation of RCW 70.94, or of any ordinance, resolution, rule or regulation validly promulgated thereunder.	None specified.	No additional monitoring required.
2.1.2	WAC 173-400-040(1 <sup>st</sup> ¶), 3/1/11  WAC 173-400-040(2 <sup>nd</sup> ¶), 9/13/16; RCW 70.94.154, 2016	F  S	All emissions units are required to use RACT.	None specified.	No additional monitoring required. NOTE: Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance or renewal shall be considered RACT for purposes of permit issuance or renewal. RACT determinations under Section 8, Chapter 252, Laws of 1993, shall be incorporated into this permit as provided in WAC 173-401-730.
2.1.3	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 9.6	F	An emergency spill plan shall be in place during operation of the source, and all operations personnel shall be familiar with this plan. The plan shall be posted at the source.	None specified.	Any petroleum or chemical spill shall be reported immediately to the Department of Ecology, Central Regional Office, at (509) 575-2490. [NOC Order No. 08AQ-C080, 4 <sup>th</sup> Revision, 9/28/17, Condition 9.6]
2.1.4	WAC 173-400-040(4)(a), 3/1/11  WAC 173-400-040(4)(a), 9/13/16	F  S	Reasonable precautions shall be taken to prevent the release of air contaminants.	None specified.	Comply with 2.1.16 and 2.1.17. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.1.5	NOC Order No. 08AQ-C080 4th Revision, 9/28/17, Conditions 9.7, 9.9	F	Operation of equipment must be conducted in compliance with all data & specifications submitted as part of the applications for NOC Order No. 08AQ-C080 & subsequent revisions, unless otherwise approved by Ecology. Any activity undertaken by the permittee, or others, in a manner which is inconsistent with the applications or this Permit, shall be subject to Ecology enforcement under applicable regulations.	None specified.	<p>Legible copies of:</p> <ul style="list-style-type: none"> <li>• NOC Order No. 08AQ-C080 4th Revision, 9/28/17,</li> <li>• Fugitive Dust Control Plan(s), and</li> <li>• Required O&amp;M manuals</li> </ul> <p>shall be displayed on-site in a location known by and available to employees in direct operation of the described equipment, and shall be available to Ecology upon request. [NOC Order No. 08AQ-C080 4th Revision, 9/28/17, Condition 9.9]</p> <p>The data and specifications submitted as part of the applications for the NOC Orders shall also be kept on file. This Orders and the file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]</p>

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.1.6	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 7.1, 7.2, 7.3, 7.4, 7.5, 4.11.6	F	Permittee shall follow all recommended installation, configuration, operation, and maintenance provisions supplied by the permitted units' manufacturers. The equipment shall be properly operated and maintained in accordance with a site-specific operation and maintenance (O&M) manual, prepared by the permittee. Failure to follow the requirements of the O&M manual, or the adequacy of the O&M manual, may be considered proof that the permitted equipment was not properly operated and maintained.	<p>The manual shall reflect standard operating procedures to be followed by all equipment operators. The O&amp;M Manual shall at a minimum include:</p> <ul style="list-style-type: none"> <li>• Normal operating parameters for the emission units and on-line monitors,</li> <li>• A maintenance schedule for the emission units,</li> <li>• Monitoring and recordkeeping requirements, including but not limit to a record of all scheduled testing and maintenance activities performed on the flare(s) which result in the emission of uncontrolled gas to the atmosphere,</li> <li>• A description of the monitoring procedures, and</li> <li>• Actions for abnormal control system operation, including but not limited to requirements for reporting to Ecology any breakdown which results in the emission of raw landfill gas and for the undertaking immediate remedial measures to correct the problem and prevent further emissions into the atmosphere.</li> </ul> <p>[NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 7.2, 7.4]</p>	<p>In accordance with WAC 173-400-101, the permittee shall review and update the O&amp;M manual at least annually. O&amp;M records shall be available for inspection by Ecology, organized in a readily accessible manner, and retained for at least five (5) years. The O&amp;M manual shall be updated to reflect any modifications to the source or operating procedures. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 7.3]</p> <p>Records shall be kept of all periods of downtime of monitors. Permittee shall report to Ecology any equipment breakdown, or malfunction, that results in the emission of raw landfill gas, within 30 days of occurrence, including a description of immediate remedial measures undertaken by the source to correct the problem and prevent further uncontrolled emissions into the atmosphere. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.11.6, 7.5]</p>

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.1.7	NOC Order No. 08AQ-C080 4th Revision, 9/28/17, Condition 2.12.8	F	Nothing in NOC Order No. 08AQ-C080 4th Revision, 9/28/17, shall be construed so as to relieve the permittee of its obligations under any state, local, or federal laws or regulations.	None specified.	No additional monitoring required.

2.1.8	<p>WAC 173-400-040(2)(a), (b), 3/1/11</p> <hr/> <p>WAC 173-400-040(2)(a), (b), 9/13/16</p>	<p>F</p> <hr/> <p>S</p>	<p>Opacity shall not exceed 20% for more than three (3) minutes, in any one (1) hour.</p>	<p>Ecology Method 9A, "Source Test Manual - Procedures for Compliance Testing," State of Washington Department of Ecology, 7/12/90</p>	<p>1) The permittee shall conduct monthly visible emissions surveys of all emission units during daylight hours as follows: a) the survey shall be conducted from a location with a clear view of the emission unit and where the sun is not directly in the observer's eyes. The survey location shall be at least 15 feet but not more than 0.25 miles from the source; b) survey shall be conducted during operation; c) the observer will be educated in the general procedures for determining the presence of visible emissions (i.e. effects on the visibility of emissions caused by background contrast, position of the sun and amount of ambient lighting, and observer position relative to source and sun); d) the survey shall consist of a minimum 15-second visual observation of each emission unit to identify those emission units which exhibit visible emissions; e) in addition to the records required under condition 1.18, the observer shall record the wind direction, sky condition, sun location with respect to the source and the survey location, and the time duration of the survey.</p> <p>2) The permittee shall conduct Ecology Method 9A testing of an emission unit when visible emissions, other than uncombined water, are observed during a survey or are otherwise observed by the permittee. Testing shall be conducted as follows: a) testing shall be initiated as soon as possible, but not later than 24 hours after the requirement to conduct such testing is triggered; b) all testing shall be performed during periods when the subject emissions unit is operating; c) testing shall consist of certified opacity readings at 15-second intervals over a minimum period of six consecutive minutes (24 consecutive readings) unless any two readings are greater than 20% opacity in which case the testing period shall be 60 consecutive minutes or until a violation is documented. If a violation is documented, appropriate and timely action shall be taken (as soon as possible, but within 24 hours) to identify and correct the problem causing the opacity. The required recordkeeping shall include the name of the person recording the information, the name(s) of the person(s) taking the corrective action,</p>
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	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
					and the nature, time, date, and effectiveness of any corrective action taken in response to a violation. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.9	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 6.2	F	Visible emissions from the project shall not exceed zero (0) percent opacity at the property boundary.	EPA RM 9, 40 CFR 60, Appendix A, 7/1/05. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	Comply with 2.1.8, except that: 2) The permittee shall conduct RM 9 testing when visible emissions are observed during a survey or are otherwise observed by the permittee. Testing shall be conducted as follows: a) testing shall be initiated as soon as possible, but not later than 24 hours after the requirement to conduct such testing is triggered; b) all testing shall be performed during periods when the subject emissions unit is operating; c) testing shall consist of certified opacity readings at 15-second intervals over a minimum period of six consecutive minutes (24 consecutive readings). If a violation is documented, appropriate and timely action shall be taken (as soon as possible, but within 24 hours) to identify and correct the problem causing the opacity. The required recordkeeping shall include the name of the person recording the information, the name(s) of the person(s) taking the corrective action, and the nature, time, date, and effectiveness of any corrective action taken in response to a violation. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.10	WAC 173-400-040(3), 9/13/16	S	No person shall cause or permit the emission of PM from any source to be deposited beyond the property under direct control of the owner(s) or operator(s) of the source in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited.	None specified.	Comply with 2.1.16 and 2.1.17. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.1.11	WAC 173-400-040(5), 9/13/16	S	Odors which may unreasonably interfere with use and enjoyment of property are prohibited unless recognized good practice and procedures are employed to reduce odors to a reasonable minimum.	None specified.	Comply with 2.1.16. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.12	WAC 173-400-040(6), 3/1/11  WAC 173-400-040(6), 9/13/16	F  S	No emissions detrimental to persons or property.	None specified.	Comply with 2.1.16 and 2.1.17. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.13	WAC 173-400-040(8), 3/1/11  WAC 173-400-040(8), 9/13/16	F  S	No person shall cause or permit the installation or use of any means which conceals or masks an emission of an air contaminant.	None specified.	No additional monitoring required.
2.1.14	WAC 173-400-040(9)(a), 3/1/11  WAC 173-400-040(9)(a), 9/13/16	F  S	Permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and shall maintain and operate the source to minimize emissions.	None specified.	Comply with 2.1.17. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.15	WAC 173-400-200(2), 1/10/05  WAC 173-400-200(2), 9/13/16	F  S	No use of excess stack height or dispersion techniques shall be used to meet ambient air quality standards or PSD increments.	None specified.	No additional monitoring required.

Applicable Requirement (Facility-Wide Sources)		Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.1.16	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 6.3	F	Keep records of complaints as received from the public, Ecology, or any other entity.	None specified.	Keep records of complaints as received from the public, Ecology, or any other entity. Any complaints shall be promptly addressed and assessed. A record shall be maintained of permittee's action to investigate the validity of the complaint and what, if any, corrective action was taken in response to the complaint. Ecology shall be notified within three (3) days of receipt of any complaint. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 6.3]
2.1.17	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 8.1, 8.2, 8.3	F	Fugitive dust will be controlled in accordance with a FDCP.	FDCP shall at a minimum include: <ul style="list-style-type: none"> <li>Measures to ensure no vehicle trackout onto off-site roads, and</li> <li>Management of disturbed surfaces by paving, graveling, or re-vegetating.</li> </ul> [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 8.2, 8.3]	The FDCP shall be kept on file. This file shall be reviewed at least annually with records kept of the date of and personnel who performed such review. [WAC 173-401-615(1), 9/16/02, 8/10/14 (S)]
2.1.18	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 9.1	F	No outdoor burning shall be performed at the site.	None specified.	No additional monitoring required.
2.1.19	WAC 173-400-205, 2/19/91 <hr/> WAC 173-400-205, 9/13/16	F <hr/> S	No varying of emissions according to atmospheric conditions or ambient concentrations.	None specified.	No additional monitoring required.
2.1.20	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 9.3	F	It shall be grounds for rescission of NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, if operation of the facility is discontinued for a period of 18 months. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.	None specified.	No additional monitoring required.



Applicable Requirement (Facility-Wide Sources)		Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.1.21	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 2, 4.10.4, 6.1	F	Total NOx emissions from the project, including emissions during startup and shutdown of the turbines shall not exceed 249.0 tons per year, rolled monthly.	EPA Method 7E, 40 CFR part 60, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.10.4]	Comply with 1.19.4 and 2.4.9a. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.22	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 2, 4.10.4, 6.1	F	The proposed project shall not emit > 131.9 tpy of VOC annually, rolled monthly, including startup and shut-down emissions.	EPA Methods 25A or 18, 40 CFR part 60, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.10.4]	Comply with 1.19.4 and 2.4.10. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.23	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 2, 4.10.4, 6.1	F	The proposed project shall not emit > 13.4 tpy of SO2 annually, rolled monthly, including startup and shut-down emissions.	EPA Method 6C, 40 CFR part 60, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.10.4]	Comply with 1.19.4 and 2.4.11a. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.24	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 2, 4.10.4, 6.1	F	The proposed project shall not emit > 39.7 tpy of PM10 annually, rolled monthly, including startup and shut-down emissions.	EPA Method 5, 40 CFR 60, Appendix A and EPA Method 202, 40 CFR 51, Appendix M. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.10.4]	Comply with 1.19.4 and 2.4.7a. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.25	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 2, 4.10.4, 6.1	F	The proposed project shall not emit > 48.1 tpy of PM2.5 annually, rolled monthly, including startup and shut-down emissions.	EPA Method 5, 40 CFR 60, Appendix A and EPA Methods 201A and 202, 40 CFR 51, Appendix M. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	Comply with 1.19.4 and 2.4.7a. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.26	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 2, 4.10.4, 6.1	F	The proposed project shall not emit > 137.8 tpy of CO annually, rolled monthly, including startup and shut-down emissions.	EPA Method 10A, 40 CFR part 60, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.10.4]	Comply with 1.19.4 and 2.4.8. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]

	Applicable Requirement (Facility-Wide Sources)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.1.27	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 2, 4.10.4, 6.1	S	The proposed project shall not emit > the total PTE of each Toxic Air Pollutant listed in NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 2, rolled monthly, including startup and shut-down emissions.	None specified	Comply with 1.19.4 and 2.4.10. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.1.28	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 9.6	F	An emergency spill plan shall be in place during operation of the source, and all operations personnel shall be familiar with this plan.	The plan shall be posted at the source. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 9.6]	Any petroleum or chemical spills shall be reported immediately to the Department of Ecology, Central Regional Office, at (509) 575-2490. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 9.6]
2.1.29	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 9.3	F	It shall be grounds for rescission of approval to operate an emission unit if physical operation of that emission unit is discontinued for a period $\geq$ 18 months. Ecology may extend the 18-month period upon a satisfactory showing that an extension is justified.	None specified.	No additional monitoring required.

2.2 Process #1, Fire Pump. The following applicable requirements apply to the 149 hp diesel fire pump engine.

	Applicable Requirement (Process #1, Fire Pump)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.2.1	40 CFR 60, Subpart III, §60.4205(c), §60.4211(b)(3), 2017  WAC 173-400-115, 9/13/16	F  S	Fire pump engines with a displacement of less than 30 liters per cylinder must comply with the following emission standards: NMHC+NO <sub>x</sub> = 10.5 g/KW-hr; CO = 5.0 g/KW-hr; PM = 0.80 g/KW-hr.	40 CFR part 1065 – Engine-testing procedures.	Keep records of engine manufacturer data indicating compliance with the emission standards. [40 CFR 60, Subpart III, §60.4211(b)(3), 2017]
2.2.2	40 CFR 60, Subpart III, §60.4207(b), 2017  WAC 173-400-115, 9/13/16	F  S	Engine must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel	None specified.	Fuel records shall be kept. [WAC 173-401-615(1), 9/16/02, 8/10/14 (S)]
2.2.3	40 CFR 60, Subpart III, §60.4209, §60.4211(f), 2017  WAC 173-400-115, 9/13/16	F  S	No limit on use in emergency situations. Shall not exceed 100 hours per calendar year operating per §60.4211(f)(2). Shall not exceed 50 hours per calendar year operating per §60.4211(f)(3).	None specified.	Engine must have a non-resettable hour meter. [40 CFR 60, Subpart III, §60.4209, 2017]  An operating log shall be kept, specifying purpose and duration of all operation. [WAC 173-401-615(1), 9/16/02, 8/10/14 (S)]

2.3 Process #2, Emergency Generators. The following requirements apply to the two ~40 hp propane fired rich burn, spark ignited emergency generators.

	Applicable Requirement (Process #2, Emergency Generators)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.3.1	40 CFR 60, Subpart JJJJ, §60.4233(c), 2017 <hr/> WAC 173-400-115, 9/13/16	F <hr/> S	Comply with the emission standards in §60.4231(c) by meeting the Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines, and other requirements for new nonroad SI engines in 40 CFR part 90.	40 CFR part 1065 – Engine-testing procedures.	Keep records of engine manufacturer data indicating compliance with the emission standards. [WAC 173-401-615(1), 9/16/02, 8/10/14 (S)]
2.3.2	40 CFR 60, Subpart JJJJ, §60.4237, §60.4243(d), §60.4245(b), 2017 <hr/> WAC 173-400-115, 9/13/16	F <hr/> S	No limit on use in emergency situations. Shall not exceed 100 hours per calendar year operating per §60.4243(d)(2). Shall not exceed 50 hours per calendar year operating per §60.4243(d)(3).	None specified.	Engine must have a non-resettable hour meter. [40 CFR 60, Subpart JJJJ, §60.4237(c), 2017]  Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency. [40 CFR 60, Subpart JJJJ, §60.4245(b), 2017]

2.4 Process #3, Power Generation – Turbines. The following applicable requirements apply to the two combustion turbines and their associated exhausts.

2.4	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.4.1	<p>NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.1, 4.2, 4.8, 4.9, 4.11.1, 4.11.6</p> <hr/> <p>40 CFR part 60, Subpart KKKK, §60.4335(b)(2), §60.4335(b)(3), §60.4345(c), §60.4345(d), §60.4345(e), 4/6/16</p> <hr/> <p>WAC 173-400-115(1), 9/13/16</p>	<p>F</p> <hr/> <p>F</p> <hr/> <p>S</p>	<p>Project is limited to two landfill gas-fired combustion turbines each burning <math>\leq 4,000</math> cfm of landfill gas at site average conditions of 55 °F, and 551 Btu/cf (HHV) landfill gas containing 54.4% methane content. Landfill gas usage may increase to 4,078 cfm per turbine in cold weather periods (at -10 °F or lower). Turbine maximum estimated input rate and estimated power output is 264 MMBtu/hr and 20.2 MWe respectively; however, output is not limited to the estimated value, provided that no emission limit is exceeded. Turbines shall operate at a load no less than the minimum load demonstrated by prior Ecology-approved source tests to meet all of the conditions of this Order.</p>	<p>The flow rate, heat content (Btu), and methane content (expressed as percent by volume methane) of landfill gas fed to the combustion turbines shall be monitored by flow indicators, appropriate heat content and methane content monitors, and recorders, which must operate continuously. Continuously shall mean at least 95 percent of the monthly turbine operation, except for periods of monitoring system downtime, provided the permittee demonstrates that the down-time was not a result of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system(s) were conducted in a timely manner. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.1]</p> <p>Permittee shall install, calibrate, maintain, and operate according to manufacturer instructions a fuel flow meter (or flow meters) to continuously measure the heat input to the combustion turbines, and a watt meter (or meters) to continuously measure the gross electrical output of the units in megawatt-hours. [40 CFR part 60, Subpart KKKK, §60.4335(b)(2), §60.4335(b)(3), §60.4345(c), §60.4345(d), 4/6/16]</p>	<p>A daily log shall be kept of the hours of operation of the turbines in base load, peak load, and startup and shutdown, and the average ambient temperature during that mode of operation. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.5]</p> <p>Records shall be kept of all periods of downtime of the monitors. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.6]</p> <p>Permittee shall develop and keep on-site a quality assurance (QA) plan for the fuel flow and watt meters. [40 CFR part 60, Subpart KKKK, §60.4345(e), 4/6/16]</p>

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.4.2	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.1	F	Project is limited to eight-MW heat recovery systems. No landfill gas shall be combusted in the heat recovery systems.	None specified.	No additional monitoring required.
2.4.3	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.7	F	The exhaust stacks for the combustion turbines shall each extend at least 55.0 feet (16.8 meters) above plant grade. Internal stack dimensions and operating parameters shall be in accordance with plans and specifications submitted to Ecology as part of the Notice of Construction application.	None specified.	No additional monitoring required.
2.4.4	40 CFR part 60, Subpart KKKK, §60.4333(a), 4/6/16 <hr/> NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.9 <hr/> WAC 173-400-115(1), 9/13/16	F  F  S	Permittee shall operate and maintain each stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.	None specified.	Comply with 2.1.5 and 2.1.6. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.4.5	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.5, 4.6	F	All landfill gas combusted shall first be processed through the gas cleaning plant, to lower concentrations of organic compounds, sulfur compounds, and other impurities, from the landfill gas. No fuel other than pre-cleaned landfill gas shall be burned in the combustion turbines.	None specified.	A log shall be kept of operating hours of the landfill gas cleaning system. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.4.6	<p>40 CFR part 60, Subpart KKKK, §60.4330(a)(2), §60.4415(a)(1)(ii), 4/6/16</p> <hr/> <p>NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.9</p> <hr/> <p>WAC 173-400-115(1), 9/13/16</p>	<p>F</p> <hr/> <p>F</p> <hr/> <p>S</p>	<p>Permittee shall not burn in the subject stationary combustion turbines fuel which contains total potential sulfur emissions in excess of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input, <b>OR</b> comply with 6.4.12d.</p>	<p>For performance testing use ASTM D1072, or alternatively D6228, D4084, D4468, D6667.  [40 CFR part 60, Subpart KKKK, §60.4415(a)(1)(ii), 4/6/16]</p>	<p>Comply with 2.4.14. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]</p>
2.4.7a	<p>NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.4, 4.10.2, 4.10.3, 4.10.4, 4.10.5, 4.10.6, 4.10.7, 4.10.8</p>	<p>F</p>	<p>PM<sub>10</sub> ≤ 0.0343 pounds PM<sub>10</sub> per MMBtu heat input, PM<sub>10</sub> emissions from each turbine ≤ 4.5 lb/hr, except during periods of startup and shutdown.</p>	<p>EPA Methods 1 through 5, 40 CFR part 60, Appendix A, and Method 202, 40 CFR part 51, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.4]</p>	<p>Each turbine shall be performance tested at intervals ≤ five (5) years. If a PM emission limit has been exceeded during any of the previous three source tests, testing for PM shall be conducted annually. “Annually” shall mean no more than 12 calendar months following the previous performance test.</p>

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.4.7b	WAC 173-400-050(1), 9/13/16	F	PM emissions shall not exceed 0.1 grain/dscf.	Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology's approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate permanent and safe access to the test ports must be provided. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.5, 4.10.6, 4.10.7, 4.10.8]	[NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.2, 4.10.3]  Permittee shall keep records of all emission testing conducted on the permitted emission units. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.7]  Records shall be kept of all periods of monitor downtime [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 2.10.4]



<p>2.4.8</p>	<p>NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.3, 4.4, 4.10.2, 4.10.3, 4.10.4, 4.10.5, 4.10.6, 4.10.7, 4.10.8, 4.11.11</p>	<p>F</p>	<p>Except during periods of startup and shut down, CO emissions from each turbine shall not exceed:</p> <ul style="list-style-type: none"> <li>• 60 ppmvd at 15% oxygen, 1 hour average.</li> <li>• 15.6 lbs/hr.</li> </ul> <p>CO emissions shall be controlled by turbine design, good combustion practices, landfill gas cleaning.</p>	<p>For performance testing use EPA Method 10, 40 CFR part 60, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.10.4]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology's approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate permanent and safe access to the test ports must be provided. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.5, 4.10.6, 4.10.7, 4.10.8]</p> <p>CO shall be monitored with a portable CO analyzer or a CO CEMS, according to the Quality Assurance / Quality Control (QA/QC) plan,</p>	<p>Each turbine shall be performance tested at intervals <math>\leq</math> five (5) years. If a CO emission limit has been exceeded during any of the previous three source tests, testing for CO shall be conducted annually. "Annually" shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.2, 4.10.3]</p> <p>Permittee shall keep records of all emission testing conducted on the permitted emission units. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.7]</p> <p>If monitoring is performed with CO CEMS, CEMS reports shall be submitted at least monthly within 30 days of the end of each calendar month and in a format approved by Ecology. CEMS reports shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Process or control equipment operating parameters;</li> <li>• The daily maximum and average concentration, in the units of the standard(s), for each pollutant monitored;</li> <li>• The duration and nature of any monitor down-time;</li> <li>• Results of any monitor audits or accuracy checks;</li> <li>• Results of any required stack tests.</li> </ul> <p>For each occurrence of monitored emissions in excess of the standard (by CEMS or approved alternative methodology), the report shall include the following:</p> <ul style="list-style-type: none"> <li>• The time of occurrence;</li> <li>• Magnitude of the excess emission or process parameters;</li> <li>• The duration of the excess;</li> <li>• The probable cause;</li> <li>• Any corrective actions taken or planned;</li> <li>• Any other agency contacted.</li> </ul> <p>[NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.9]</p> <p>Records shall be kept of all periods of monitor downtime [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.6]</p>
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	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
				approved in writing by Ecology on 12/21/05. The actual CO emissions, including startup and shutdown emissions, shall be quantified monthly, using portable monitor data over the most recent 12-month period. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.11.3, 4.11.11; Ecology letter dated 12/21/05]	

<p>2.4.9a</p>	<p>NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.3, 4.4, 4.10.1, 4.10.2, 4.10.3, 4.10.4, 4.10.5, 4.10.6, 4.10.7, 4.10.8, 4.11.8, 4.11.9, 4.11.10, 4.11.11</p> <hr/> <p>40 CFR part 60, Subpart KKKK, §60.8(d), §60.4335(b)(1), §60.4345(a), §60.4345(b), §60.4345(e), §60.4350, §60.4375(a), §60.4375(b), §60.4380, §60.4395, §60.4400(a), §60.4400(a)(1)(i), §60.4400(b), 4/6/16</p> <hr/> <p>WAC 173-400-115(1), 9/13/16</p>	<p>F</p> <hr/> <p>F</p> <hr/> <p>S</p>	<p>Except during periods of startup and shut down, NO<sub>x</sub> emissions from each turbine shall not exceed:</p> <ul style="list-style-type: none"> <li>• 60 ppmvd, at 15% oxygen, 3-hour average, when the methane content in the landfill gas fuel, averaged over the previous three (3) hours, is 50% methane by volume, or less.</li> <li>• A linear progression from 60 to 74 ppmvd at 15% oxygen, 3-hour average, for methane content in the landfill gas fuel, averaged over the previous 3 hours, varying between 50% and 55% methane by volume.</li> <li>• 74 ppmvd at 15% oxygen, 3-hour average, when the methane content in the landfill gas fuel, averaged over the previous 3 hours, is higher than 55% methane by volume.</li> <li>• 41.9 lbs/hr, from each stack.</li> </ul> <p>Emissions shall be controlled by turbine design, good combustion practices, supplemental use of water injection, and landfill gas cleaning.</p>	<p>For performance tests use EPA Method 7E, or Method 20, 40 CFR part 60, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.10.4; CFR part 60, Subpart KKKK, §60.4400(a)(1)(i), 4/6/16]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.5, 4.10.6; 40 CFR part 60, Subpart KKKK, §60.4400(b), 4/6/16]</p> <p>A test plan, including a description of the methods proposed, shall be submitted for Ecology's approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate permanent and safe access to the test ports must be provided. [NOC Order</p>	<p>Performance testing for NO<sub>x</sub> from each turbine shall be conducted annually. The ambient temperature must be greater than 0°F during each performance test. “Annually” shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.1, 4.10.2; 40 CFR part 60, Subpart KKKK, §60.4400(a), 4/6/16]</p> <p>Permittee shall submit a written report of the results of each performance test to EPA before the close of business on the 60th day following the completion of the performance test. [40 CFR part 60, Subpart KKKK, §60.4375(b), 4/6/16]</p> <p>CEMS reports shall be submitted at least monthly within 30 days of the end of each calendar month and in a format approved by Ecology. CEMS reports shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> <li>• Process or control equipment operating parameters;</li> <li>• The daily maximum and average concentration, in the units of the standard(s), for each pollutant monitored;</li> <li>• The duration and nature of any monitor down-time;</li> <li>• Results of any monitor audits or accuracy checks;</li> <li>• Results of any required stack tests.</li> </ul> <p>For each occurrence of monitored emissions in excess of the standard (by CEMS or approved alternative methodology), the report shall include the following:</p> <ul style="list-style-type: none"> <li>• The time of occurrence;</li> <li>• Magnitude of the excess emission or process parameters;</li> <li>• The duration of the excess;</li> <li>• The probable cause;</li> <li>• Any corrective actions taken or planned;</li> <li>• Any other agency contacted.</li> </ul> <p>[NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.9]</p> <p>Permittee shall develop and keep on-site a quality assurance (QA) plan for the CEMS equipment. [40 CFR part 60, Subpart KKKK, §60.4345(e), 4/6/16]</p>
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				<p>No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.7, 4.10.8]</p> <p>Permittee shall also provide notice, in accordance with 40 CFR §60.8(d), to the EPA of any scheduled or rescheduled performance test. A written report of the results of each performance test shall be submitted to the EPA before the close of business on the 60th day following the completion of the performance test. [40 CFR part 60, Subpart KKKK, §60.8(d), §60.4375(b), 4/6/16]</p> <p>The permittee shall install, calibrate, maintain, and operate Continuous Emission Monitoring Systems (CEMS) for NO<sub>x</sub> and O<sub>2</sub>, with an automated data acquisition and handling system that complies with 40 CFR part 60, Appendix B, Performance Specifications, and 40 CFR part 60, Appendix F, Quality Assurance Procedures. The actual NO<sub>x</sub> emissions, including startup and shutdown emissions, from the turbines, shall be quantified monthly, using CEMS over the most recent 12-month period. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.11.2, 4.11.11; 40 CFR part 60, Subpart KKKK, §60.4335(b)(1), §60.4345(a), 4/6/16]</p> <p>During each full unit operating hour, both the NO<sub>x</sub> monitor and the O<sub>2</sub> monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour,</p>	<p>CEMS data shall be processed according to §60.4350 to determine excess emissions, as defined in §60.4380. Submit reports of excess emissions (above and beyond those required by Section 3.7) and monitor downtime to EPA in accordance with 40 CFR §60.7(c), §60.7(d), and §60.7(g). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period. [40 CFR part 60, Subpart KKKK, §60.4350, §60.4375(a), §60.4380, §60.4395, 4/6/16]</p> <p>Records shall be kept of all periods of monitor downtime. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.6]</p>
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	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
				to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NO <sub>x</sub> emission rate for the hour. [40 CFR part 60, Subpart KKKK, §60.4345(b), 4/6/16]	
2.4.9b	40 CFR part 60, Subpart KKKK, §60.4320(a), 4/6/16  WAC 173-400-115(1), 9/13/16	F  S	NO <sub>x</sub> emissions from each turbine ≤ 74 ppm at 15 percent O <sub>2</sub> or 460 ng/J of useful output (3.6 lb/MWh).	See 2.4.9a.	Comply with 2.4.9a. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under ‘applicable requirement’)	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.4.10	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.4, 4.10.2, 4.10.3, 4.10.4, 4.10.5, 4.10.6, 4.10.7, 4.10.8	F	<p>Except during periods of startup and shut down, VOC emissions from each turbine shall not exceed:</p> <ul style="list-style-type: none"> <li>• 0.110 lb VOC/MMBtu heat input.</li> <li>• 20 ppmvd outlet concentration, as hexane at three percent (3%), or a control efficiency of VOCs entering the turbines <math>\geq</math> 90.0 w% oxygen.</li> <li>• 14.6 lbs/hr.</li> </ul>	<p>EPA Methods 25A or 18, 40 CFR part 60, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.4]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology’s approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate permanent and safe access to the test ports must be provided. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.5, 4.10.6, 4.10.7, 4.10.8]</p>	<p>Each turbine shall be performance tested at intervals <math>\leq</math> five (5) years. If a VOC emission limit has been exceeded during any of the previous three source tests, testing for VOCs shall be conducted annually. “Annually” shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.2, 4.10.3]</p> <p>Permittee shall keep records of all emission testing conducted on the permitted emission units. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.7]</p>

<p>2.4.11a</p>	<p>NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.4, 4.10.1, 4.10.3, 4.10.5, 4.10.6, 4.10.7, 4.10.84.11.8, 4.11.10</p> <hr/> <p>40 CFR part 60, Subpart KKKK, §60.8(d), §60.4375(a), §60.4375(b), §60.4395, 4/6/16</p> <hr/> <p>WAC 173-400-115(1), 9/13/16</p>	<p>F</p> <hr/> <p>F</p> <hr/> <p>S</p>	<p>Except during periods of startup and shut down, SO<sub>2</sub> emissions from each turbine shall not exceed:</p> <ul style="list-style-type: none"> <li>• 60 ppmvd at 15% oxygen, 1 hour average.</li> <li>• 0.014 lb SO<sub>2</sub> per million British thermal units (lb/MMBtu) heat input.</li> <li>• 1.5 lb/hr, except during periods of startup and shutdown.</li> </ul>	<p>For performance testing use EPA Method 6C, 40 CFR part 60, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.10.4]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology's approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. Sampling ports and platforms for performance testing must be provided by Klickitat PUD. The test ports must meet the requirements of Method 1, 40 CFR, part 60, Appendix A. Adequate permanent and safe access to the test ports must be provided. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.5, 4.10.6, 4.10.7, 4.10.8]</p> <p>Permittee shall also provide notice, in accordance with 40 CFR §60.8(d), to the EPA of any scheduled or rescheduled performance test. A</p>	<p>Performance testing for and SO<sub>2</sub> from each turbine shall be conducted annually. The ambient temperature must be greater than 0°F during each performance test. "Annually" shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.1, 4.10.3]</p> <p>Permittee shall keep records of all emission testing conducted on the permitted emission units. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.7]</p> <p>Permittee shall submit a written report of the results of each performance test to EPA before the close of business on the 60th day following the completion of the performance test. [40 CFR part 60, Subpart KKKK, § 60.4375(b), 4/6/16]</p>
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	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
				written report of the results of each performance test shall be submitted to the EPA before the close of business on the 60th day following the completion of the performance test. [40 CFR part 60, Subpart KKKK, §60.8(d), §60.4375(b), 4/6/16]	
2.4.11b	WAC 173-400-040(6) (1st ¶), 3/1/11  WAC 173-400-040(6) (1st ¶), 9/13/16	F  S	SO <sub>2</sub> ≤ 1000 ppmdv (corrected to 7% O <sub>2</sub> ), average of 60 consecutive minutes.	See 2.4.11a.	Comply with 2.4.11a. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.4.11c	40 CFR part 60, Subpart KKKK, §60.4330(a)(3), §60.4345(e), §60.4375, §60.4395, 4/6/16  WAC 173-400-115(1), 9/13/16	F  S	SO <sub>2</sub> emissions from each turbine ≤ 65 ng/J (0.15 lb/MWh) heat input, <b>OR</b> comply with 6.4.7.	See 2.4.11a.	Comply with 2.4.11a. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]



2.4.12	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.4, 4.10.2, 4.10.3, 4.10.4, 4.10.5, 4.10.6, 4.10.7	F	The visible emissions and opacity of each turbine's exhaust shall not exceed 10%, except during periods of startup and shutdown.	<p>EPA Method 9, 40 CFR part 60, Appendix A. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.10.4]</p> <p>Performance testing of the turbines shall be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. All performance testing shall be performed by an independent testing firm. Each performance test shall consist of three separate runs. The minimum length of each run is 20 minutes. A test plan, including a description of the methods proposed, shall be submitted for Ecology's approval at least 30 days prior to any performance testing. A written report shall be submitted to Ecology within 30 days after performance testing is conducted. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.5, 4.10.6, 4.10.7]</p>	<p>Each turbine shall be performance tested at intervals <math>\leq</math> five (5) years. If the visible emissions or opacity limit has been exceeded during any of the previous three source tests, testing for visible emissions or opacity shall be conducted annually. "Annually" shall mean no more than 12 calendar months following the previous performance test. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.10.2, 4.10.3]</p> <p>Permittee shall keep records of all emission testing conducted on the permitted emission units. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.7]</p> <p>1) The permittee shall conduct monthly visible emissions surveys of all exhaust stacks during daylight hours as follows: a) the survey shall be conducted from a location with a clear view of the emission unit and where the sun is not directly in the observer's eyes. The survey location shall be at least 15 feet but not more than 0.25 miles from the source; b) survey shall be conducted during operation; c) the observer will be educated in the general procedures for determining the presence of visible emissions (i.e. effects on the visibility of emissions caused by background contrast, position of the sun and amount of ambient lighting, and observer position relative to source and sun); d) the survey shall consist of a minimum 15-second visual observation of each emission unit to identify those emission units which exhibit visible emissions; e) in addition to the records required under condition 2.15, the observer shall record the wind direction, sky condition, sun location with respect to the source and the survey location, and the time duration of the survey.</p> <p>2) The permittee shall conduct Ecology Method 9A testing of an emission unit when visible emissions, other than uncombined water, are observed during a survey or are otherwise observed by the permittee. Testing shall be conducted as follows: a) testing shall be initiated as soon as possible, but not later than 24 hours after the requirement to conduct such testing is triggered; b) all testing shall be performed during</p>
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	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
					<p>periods when the subject emissions unit is operating;  c) testing shall consist of certified opacity readings at 15-second intervals over a minimum period of six consecutive minutes (24 consecutive readings) unless any two readings are greater than 20% opacity in which case the testing period shall be 60 consecutive minutes or until a violation is documented. If a violation is documented, appropriate and timely action shall be taken (as soon as possible, but within 24 hours) to identify and correct the problem causing the opacity. The required recordkeeping shall include the name of the person recording the information, the name(s) of the person(s) taking the corrective action, and the nature, time, date, and effectiveness of any corrective action taken in response to a violation.  [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]</p>

	Applicable Requirement (Process #3, Power Generation – Turbines)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.4.13	<p>NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 4.6, 4.11.4, 4.11.8, 4.11.10</p> <hr/> <p>40 CFR part 60, Subpart KKKK, §60.4365, §60.4370(b), §60.4370(c), §60.4415(a)(1)(ii), 4/6/16</p> <hr/> <p>WAC 173-400-115(1), 9/13/16</p>	<p>F</p> <hr/> <p>F</p> <hr/> <p>S</p>	<p>Fuel cleaning to reduce sulfur compounds in the fuel to below 20 ppm by weight (ppmw) of sulfur, as hydrogen sulfide.</p>	<p>For performance testing use ASTM D1072, or alternatively D6228, D4084, D4468, D6667. [40 CFR part 60, Subpart KKKK, §60.4415(a)(1)(ii), 4/6/16]</p> <p>Cleaning of landfill gas shall be achieved by maintaining a landfill gas cleaning system designed to lower concentrations of organic compounds, sulfur compounds, and other impurities, from the landfill gas to be burned. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.6]</p> <p>Permittee may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. To make the required demonstration, use representative fuel sampling data which shows that the sulfur content of the fuel does not exceed 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFT Part 75 of is required. [40 CFR part 60, Subpart KKKK, §60.4365, 4/6/16]</p>	<p>Permittee shall monitor sulfur content of the fuel being fired in the turbines. Records shall be kept of all periods of monitor downtime. This requirement will be satisfied by:</p> <ul style="list-style-type: none"> <li>• Daily monitoring of sulfur content with an onsite total sulfur analyzer; or</li> <li>• Daily monitoring of sulfur content with an onsite H<sub>2</sub>S analyzer, provided sulfur compounds in the fuel are less than 10 ppm by weight (ppmw) of sulfur, as hydrogen sulfide, or total SO<sub>2</sub> emissions from any combustion turbine is less than 0.007 lb SO<sub>2</sub> per million British thermal units (lb/MMBtu) heat input, as measured during the most recent performance test; or</li> <li>• Daily monitoring of sulfur content with an onsite H<sub>2</sub>S analyzer, provided H<sub>2</sub>S comprises 95% or more of the total sulfur content of the fuel, as measured during the most recent performance test.</li> </ul> <p>[NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 4.11.4]</p> <p>The sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day. The Permittee may develop custom schedules for determination of the landfill gas total sulfur content, based on the design and operation of the facility and the characteristics of the landfill gas. Custom schedules may require EPA approval and data substantiation. [40 CFR part 60, Subpart KKKK, §60.4370(b), §60.4370(c), 4/6/16]</p>

2.5 Process #4, Enclosed Flare (Gas Cleaning Plant). The following applicable requirements apply to the enclosed flare and its associated exhausts.

	Applicable Requirement (Process #5, Enclosed Flare)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.5.1	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 3.1, 3.4	F	Project is limited to one standard enclosed flare operated at a maximum flow rate of 12,000 standard cubic feet (scf) of landfill gas per hour and a maximum heat input rate of 6.0 MMBtu/hr.	None specified.	The landfill gas flow rate and heat input (Btu) to the enclosed flare shall be monitored and recorded at least quarterly. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.4]  A log shall be kept of operating hours, gas flow rate and heat input for the enclosed flare. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.5]
2.5.2	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.9	F	The release height for the enclosed flare shall be at least 30 feet (9.1 meters) above plant grade. Internal stack dimensions and operating parameters shall be in accordance with plans and specifications submitted to Ecology as part of the Notice of Construction application.	None specified.	No additional monitoring required.
2.5.3a	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.3	F	PM emissions controlled by pre-cleaning or filtering of landfill gas, and proper operation and maintenance to keep PM <sub>10</sub> emissions from the flare ≤ 0.020 lb/MMBtu heat input.	EPA Method 5, 40 CFR 60, Appendix A and EPA Method 202, 40 CFR 51, Appendix M. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.
2.5.3b	WAC 173-400-050(1), 9/13/16	F	PM emissions shall not exceed 0.1 grain/dscf.		
2.5.4	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.3	F	CO emissions ≤ 0.033 lb/MMBtu heat input.	EPA Method 10A, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.
2.5.5	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.3	F	NO <sub>x</sub> emissions ≤ 0.053 lb/MMBtu heat input.	EPA Method 7E, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.

	Applicable Requirement (Process #5, Enclosed Flare)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.5.6	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.3	F	NMOC emissions $\leq 0.227$ lb/MMBtu heat input, or, $\geq 98.0\%$ destruction efficiency.	RM 25C OR RM 18. If using RM 18, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:  Destruction Efficiency = $\frac{(NMOC_{in} - NMOC_{out})}{NMOC_{in}}$ Where, NMOC <sub>in</sub> = mass of NMOC entering control device. NMOC <sub>out</sub> = mass of NMOC exiting control device.  [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.
2.5.7a	WAC 173-400-040(6) (1st ¶), 3/1/11  WAC 173-400-040(6) (1st ¶), 9/13/16	F  S	SO <sub>2</sub> $\leq 1000$ ppmdv (corrected to 7% O <sub>2</sub> ), average of 60 consecutive minutes.	EPA Method 6C, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.
2.5.7b	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.3	F	SO <sub>2</sub> emissions $\leq 0.015$ lb/MMBtu heat input.		

	Applicable Requirement (Process #5, Enclosed Flare)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.5.8	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Conditions 3.1, 3.6, 3.7	F	An interlock or another failsafe device shall prevent landfill gas from entering the flare if the temperature in the combustion chamber is < 1,600°F, except during the first 15 minutes following startup of the flare.	The flare shall be equipped with a temperature indicator and recorder which measures and records the gas temperature in the flare stack. The temperature indicator shall be located above the flame zone, at least three (3) feet below the top of the flare shroud and at least 0.6 seconds downstream of the burner. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.6]	The temperature indicator and recorder must operate continuously. Continuously shall mean at least 95 percent of the monthly engine-generator set operation, except for periods of monitoring system down-time provided that the permittee demonstrates that the down-time was not a result of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system were conducted in a timely manner. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.6]
2.5.9	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.8	F	The flare shall be equipped with a landfill gas supply shut-off safety system, which in the event of emergency, automatically isolates the flare from the landfill gas supply line, shuts off the blower, and triggers a failure alarm to notify a responsible party of the shutdown.	Tests may be conducted electronically, without an actual flare shutdown. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.8]	The safety system shall be tested monthly to ensure it is working properly and the results recorded. [NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 3.8]

2.6 Process #5, Renewable Natural Gas Plant. The following applicable requirements apply equally to the renewable natural gas plant.

	Applicable Requirement (Renewable Natural Gas Plant)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.6.1	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.1	F	RNG plant shall consist of: <ul style="list-style-type: none"> <li>• “Selexol” process.</li> <li>• 11.5 MMBtu/hr (3,116 scfm) thermal oxidizer w/ 4.0 MMBtu/hr NG burner.</li> <li>• 2.7 MMBtu/hr (288 scfm) thermal oxidizer.</li> <li>• Catalytic oxygen removal.</li> <li>• Amine scrubber.</li> <li>• Cryogenic nitrogen removal.</li> <li>• Screw compressors.</li> <li>• 252 MMBtu/hr (5,000 scfm) candlestick flare.</li> </ul>	None specified.	No additional monitoring required.
2.6.2	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.6	F	RNG plant may not operate concurrently with either of the power plant combustion turbines, except during the RNG plant commissioning period.	None specified.	No additional monitoring required.
2.6.3	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.5	F	All LFG processed through the RNG plant shall first be processed through the gas cleaning plant, except that processing of LFG through the siloxane removal portion of the gas cleaning plant is optional and not required.	None specified.	No additional monitoring required.
2.6.4	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.3	F	The thermal oxidizers shall operate at a minimum temperature and VOC destruction efficiency of 1500°F and 99%, respectively.	Permittee shall install, calibrate, maintain, and operate according to manufacturer instructions thermocouples to continuously measure the temperature of the thermal oxidizers. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	The thermal oxidizer operating temperatures shall be monitored continuously. Records shall be kept of all instances of a thermal oxidizer operating below 1500°F. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]

	Applicable Requirement (Renewable Natural Gas Plant)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.6.5	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.4	F	Candlestick flare operation shall not exceed 500 hr/yr. The flare shall be operated for startup and emergency purposes only.	None specified.	A log shall be kept of the hours of operation of the candlestick flare, and the purpose of each operation. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]
2.6.6	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.2	F	NO <sub>x</sub> emissions shall not exceed: <ul style="list-style-type: none"> <li>• 0.06 lb/MMBtu &amp; 0.69 lb/hr, from the CO<sub>2</sub> vent thermal oxidizer.</li> <li>• lb/MMBtu &amp; 0.27 lb/hr, from the VOC vent thermal oxidizer.</li> <li>• 0.068 lb/MMBtu &amp; 17.1 lb/hr, from the candlestick flare.</li> </ul>	EPA Method 7E, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.
2.6.7	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.2	F	CO emissions shall not exceed: <ul style="list-style-type: none"> <li>• 0.2 lb/MMBtu &amp; 2.30 lb/hr, from the CO<sub>2</sub> vent thermal oxidizer.</li> <li>• 0.08 lb/MMBtu &amp; 0.22 lb/hr, from the VOC vent thermal oxidizer.</li> <li>• 0.31 lb/MMBtu/hr &amp; 78.0 lb/hr, from the candlestick flare.</li> </ul>	EPA Method 10 or 10A, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.



	Applicable Requirement (Renewable Natural Gas Plant)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.6.8	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.2	F	VOC emissions shall not exceed: <ul style="list-style-type: none"> <li>• 0.34 lb/hr, from the CO<sub>2</sub> vent thermal oxidizer.</li> <li>• 0.06 lb/hr, from the VOC vent thermal oxidizer.</li> <li>• 0.25 lb/hr, from the nitrogen vent.</li> <li>• 2.1 lb/hr, from the candlestick flare.</li> </ul>	EPA Method 18 or 25A, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.
2.6.9	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.2	F	Particulate matter emissions shall not exceed: <ul style="list-style-type: none"> <li>• 2.8 lb/hr, from the CO<sub>2</sub> vent thermal oxidizer.</li> <li>• 0.43 lb/hr, from the VOC vent thermal oxidizer.</li> <li>• 0.015 lb/MMBtu &amp; 3.7 lb/hr, from the candlestick flare.</li> </ul>	EPA Method 5, 40 CFR part 60, Appendix A, and Method 202, 40 CFR part 51, Appendix A. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.
2.6.10	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 5.2	F	SO <sub>x</sub> emissions shall not exceed: <ul style="list-style-type: none"> <li>• 0.21 lb/hr, from the CO<sub>2</sub> vent thermal oxidizer.</li> <li>• 0.11 lb/hr, from the VOC vent thermal oxidizer.</li> <li>• 0.014 lb/MMBtu &amp; 3.5 lb/hr, from the candlestick flare.</li> </ul>	EPA Method 6C, 40 CFR part 60, Appendix A. [WAC 173-401-615(1), 9/16/02, 2/3/16 (S)]	No additional monitoring required.

	Applicable Requirement (Renewable Natural Gas Plant)	Enforceability (Federal = F, State = S)	Description (for clarification purposes only, enforceable as listed under 'applicable requirement')	Monitoring and Analysis Procedure or Test Method	Monitoring, Recordkeeping, and Reporting to be Performed by Permittee
2.6.11	NOC Order No. 08AQ-C080, 4th Revision, 9/28/17, Condition 9.2	F	Permission to construct & operate the RNG shall become invalid if construction discontinued for a period of 18 months or more, or if construction is not complete within a reasonable time.	None specified.	No additional monitoring required.

**3.0 INAPPLICABLE REQUIREMENTS**

Ecology has determined that the entire source, including all emission units, are not subject to the following requirements at the time of permit issuance. Some of the requirements listed below may become applicable during the permit term due to an invoking event, even though the requirement is deemed inapplicable at the time of permit issuance. Such requirements shall be met on a timely basis by the permittee by submittal of a compliance schedule therefor, per WAC 173-401-510(2)(h)(iii)(B).

Inapplicable Requirement	Title	Explanation
40 CFR 60 Subparts GG, Da, Db, Dc	Standards of Performance for New Stationary Sources	Source is subject to subpart KKKK , which exempts subject stationary combustion turbines and heat recover steam generators from these subparts.
40 CFR 68	Accidental Release Program	Source does not store chemicals in quantities that trigger applicability.
40 CFR 72	Acid Rain Program	Source does not combust fossil fuel.
Chapter 173-470 WAC	Ambient Air Quality Standards for Particulate Matter	Applicable if triggered.
Chapter 173-474 WAC	Ambient Air Quality Standards for Sulfur Oxides	Applicable if triggered.
Chapter 173-475 WAC	Ambient Air Quality Standards for Carbon Monoxide, Ozone, and Nitrogen Dioxide	Applicable if triggered.
Chapter 173-480 WAC	Ambient Air Quality Standards and Emission Limits for Radionuclides	Source does not emit this regulated pollutant.
Chapter 173-481 WAC	Ambient Air Quality and Environmental Standards for Fluorides	Source does not emit this regulated pollutant.