STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL (EFSEC)

TITLE V AIR OPERATING PERMIT (AOP)

Issued to
Grays Harbor Energy, LLC
for
The Grays Harbor Energy Center

PERMIT #: EFSEC/25-01-AOP
ISSUED: <Date Final>
EXPIRATION: <Date Final + 5 years>

ENERGY FACILITY SITE EVALUATION COUNCIL
621 Woodland Square Loop
Lacey, WA 98503-3172
Telephone: (360) 664-1345

AIR OPERATING PERMIT #: **EFSEC/25-01-AOP**

ISSUED TO: Grays Harbor Energy LLC
401 Keys Road
Elma, WA 98541-9149

PLANT SITE:
Grays Harbor Energy Center
401 Keys Road
Elma, WA 98541-9149

ISSUED BY: Energy Facility Site Evaluation Council
621 Woodland Square Loop SE - PO Box 43172 Lacey,
WA 98503-3172

NATURE OF BUSINESS:	Electrical Generating Facility
SIC / NAICS:	4911 / 221112
ICIS NUMBER:	WAORC0005302701186
EFFECTIVE DATE:	<New Effective Date>
EXPIRATION DATE:	<New Expiration>
RENEWAL APPLICATION DUE:	<Renewal Due Date>

PERMIT ENGINEER:

_____ _____
Aaron Manley P.E. – ORCAA Date

REVIEWED BY:

_____ _____
Sonia E. Bumpus – EFSEC Executive Director Date

APPROVED BY:

_____ _____
Kurt Beckett – EFSEC Chair Date

ISSUED IN ACCORDANCE WITH:
40 CFR Part 70, Chapters 70A.15 and 80.50 RCW, and Chapters 463-78 and 173-401 WAC

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I. REGULATORY BASIS

This Air Operating Permit (AOP), issued to Grays Harbor Energy LLC, for the Grays Harbor Energy Center, is authorized under the procedures established in Chapter 173-401 WAC as adopted by EFSEC in Chapter 463-78 WAC, and Title V of the 1990 Federal Clean Air Act Amendments. The terms and conditions of this AOP describe the emissions limitations, operating requirements, monitoring requirements, recordkeeping requirements, and reporting requirements applying to the permitted facility.

AOP terms and conditions are divided into the following categories: Permit Administration Conditions (P#), General Terms and Conditions (G#), Applicable Requirements (AR#), Monitoring and Recordkeeping (M#), Reporting (R#), and Permit Shield (S#) Conditions. As used in this permit, there is no distinction between "terms" and "conditions." As such, "condition" means the same as "terms and conditions" as referred to in Title V of the 1990 Federal Clean Air Act Amendments.

All terms and conditions of this AOP, including any provisions designed to limit potential to emit, are enforceable under the Federal Clean Air Act (FCAA) unless specifically identified as “state” or “EFSEC” only in the "regulatory basis" description that follows each condition.

Conditions identified as "EFSEC only" are enforceable only by the Energy Facility Site Environmental Council (EFSEC). Conditions identified as "state/EFSEC only" are enforceable only by EFSEC and the State of Washington.

The conditions in this AOP contain abbreviated and, in some cases, paraphrased versions of the language of the applicable requirements from the underlying laws, regulations and regulatory orders. Any difference between the description of an applicable requirement in this AOP compared to the corresponding law, regulation or order is provided for purposes of clarifying the underlying requirement. The legal requirement remains the underlying applicable requirement cited in the “Applicable Requirement” column of the tables and the citations contained in brackets at the end of each requirement. Any perceived conflicts between this AOP and an underlying applicable requirement will be resolved by referring to the cited applicable requirement.

Definitions of key terms used in this AOP are provided in Attachment 2 and should be consistent with definitions provided from corresponding referenced regulations. If not defined in this AOP, the referenced regulation, Chapter 70A.15 RCW, WAC 173-401-200 or WAC 173-400-030, terms shall be defined consistent with the Merriam-Webster’s Collegiate Dictionary, Eleventh Edition copyright © 2003 by Merriam-Webster Inc.

The conditions required under this AOP were determined necessary to assure and provide for certification of compliance with applicable EFSEC, state, and federal air pollution regulations and standards. These requirements were determined applicable based on the equipment specifications and regulatory history of each emissions unit as described in the Technical Support Document for this AOP.

Conditions in this AOP originate from state, federal, and EFSEC regulations and standards and are generally referred to as “applicable requirements.” AOP conditions reflect the

versions of each applicable requirement in effect at the time the AOP renewal application was submitted to EFSEC. Certain applicable requirements may have had multiple versions in effect at the time the AOP renewal application was submitted due to either:

1. An amendment to the associated regulation/rule/standard that occurred after EFSEC adopted the regulation by reference; or,
2. An older version of the rule/regulation/or standard adopted by EFSEC in their State Implementation Plan (SIP).

In these instances, both versions of the applicable requirement apply and are reflected in the AOP condition.

The following tables clarify the "landmark" dates that establish the effective versions for each applicable requirement contained in this AOP. However, any disputes regarding the exact language of an applicable requirement covered in this AOP should be settled by consulting versions of the associated rules/regulations/standards based on the "landmark dates" shown in the following tables.

Table 1: Landmark Dates for Federal Regulation

Federal Regulations	Date Federal Regulation Adopted by EFSEC[a]	EFSEC Delegation Date[b]
40 CFR 60, Subpart A (§ 60.1 to § 60.19 except § 60.5 and § 60.6)	11/11/2019	Not Delegated
40 CFR 51, Subpart K	11/11/2019	Not Delegated
40 CFR 52, Subpart A	11/11/2019	Not Delegated
40 CFR 60, Subpart IIII	11/11/2019	Not Delegated
40 CFR 60, Subpart KKKK	11/11/2019	Not Delegated
40 CFR 60, Appendices	11/11/2019	Not Delegated
40 CFR 61, Subpart A	11/11/2019	Not Delegated
40 CFR 61, Subpart M	11/11/2019	Not Delegated
40 CFR 63, Subpart A	11/11/2019	Not Delegated
40 CFR 63, Subpart ZZZZ	11/11/2019	Not Delegated
40 CFR 63, Appendices	11/11/2019	Not Delegated
40 CFR 72	11/11/2019	Not Delegated
40 CFR 75	11/11/2019	Not Delegated
40 CFR 75, Appendices	11/11/2019	Not Delegated
40 CFR 82, Subpart B	11/11/2019	Not Delegated
40 CFR 82 Subpart F	11/11/2019	Not Delegated

a. The "Date Federal regulation Adopted by EFSEC" is set by the date established in WAC 463-78-005(1), which is the effective date of EFSECs adoption by reference for all federal and state regulations adopted by EFSEC. At the time the Permittee submitted their AOP renewal application, WAC 463-78-005(1) stated November 11, 2019, as the effected date for adoption by reference. Therefore, the versions of federal regulations cited in this permit are those that existed on 11/11/2019.
b. The "EFSEC Delegation Date" is the date EFSEC was granted delegation to enforce the specific federal regulation. EFSEC has not yet received federal rule delegation from EPA.

Table 2: Landmark Dates for State Regulations

State Regulations	SIP Regulation Version Effective Date[a]	Date State Regulation Adopted by EFSEC[b, c]
WAC 173-400-036	12/29/2012	11/11/2019
WAC 173-400-040(2)(a & b) - Visible Emissions	4/1/2011	11/11/2019
WAC 173-400-040(3) – Fallout	Not in SIP	11/11/2019
WAC 173-400-040(4)- Fugitive Emissions	9/16/2018	11/11/2019
WAC 173-400-040(5) - Odors	Not in SIP	11/11/2019
WAC 173-400-040(6) - Detrimental Emissions	9/16/2018	11/11/2019
WAC 173-400-040(7) - SO2 Emissions	9/16/2018	11/11/2019
WAC 173-400-040(8) - Concealment and Masking	9/16/2018	11/11/2019
WAC 173-400-040(9) - Fugitive Dust	9/16/2018	11/11/2019
WAC 173-400-050 (Except: 173–400–050(2), (4), (5), and (6).	9/16/2018	11/11/2019
WAC 173-400-060	9/16/2018	11/11/2019
WAC 173-400-105	11/25/2018	11/11/2019
WAC 173-400-108	Not in SIP	Not Adopted Effective version of rule is 12/11/2024
WAC 173-400-109	Not in SIP	Not Adopted Effective version of rule is 12/11/2024
WAC 173-400-110	12/29/2012	11/11/2019
WAC 173-400-114	Not in SIP	11/11/2019
WAC 173-400-230	Not in SIP	Not Adopted Effective version of rule is 12/11/2024
WAC 173-400-700	4/1/2011	11/11/2019
WAC 173-401	Not in SIP	11/11/2019
WAC 173-406	Not in SIP	11/11/2019
WAC 173-425	10/18/1990	11/11/2019
WAC 173-441	Not in SIP	11/11/2019
WAC 173-460	Not in SIP	11/11/2019
WAC 463-78-105 (Fees)	Not in SIP	EFSEC Rule No adoption required (Effective 8/27/2015).
WAC 463-78-115	Not in SIP	EFSEC Rule No adoption required

		(Effective 8/27/2015).
WAC 463-78-120 (Testing)	11/11/2004	11/11/2004

a. The "SIP Regulation Version Effective Date" is the effective date of the specific regulation listed in EFSEC's State Implementation Plan.
b. The "State Regulation Version Adoption Date" is set by the date established in WAC 463-78-005(1), which is the effective date of EFSECs adoption by reference for all federal and state regulations adopted by EFSEC. At the time the Permittee submitted their AOP renewal application, WAC 463-78-005(1) stated November 11, 2019, as the effected date for adoption by reference. Therefore, the versions of federal regulations cited in this permit are those that existed on 11/11/2019.
c. For those State regulations not adopted by EFSEC, the date the AOP renewal application was submitted sets the date of the effective version of the regulation.

Table 3: Effective Dates for PSD and NSR Permits

Regulatory Orders/Permits	**Effective Dates**
Acid Rain Permit No. <ACID RAIN #>	<date acid rain permit issued>
PSD No. EFSEC/2001-01, AMENDMENT 5	1/28/2021
No. EFSEC NOC 17-01 (Cooling Tower Replacement)	4/18/2017

II. EMISSION UNIT (EU) IDENTIFICATION

The following table contains emission unit identifications. More detailed descriptions of each emission unit are included in the Technical Support Document (TSD) for this AOP.

TABLE 4: Emissions Units Covered Under AOP

EU #	Generating Equipment/Activity	Emission Control
EU-1	**Combined Cycle Gas Turbine 1 (CGT- 1)**: • Combustion Turbine 1 (CT-1) – General Electric 7FA natural gas turbine with a nominal design heat rate of 1,823 mmBtu/hr and an output of 234 MVA. • Duct Burner 1 (DB-1) – 505 mmBtu/hr natural gas duct burner	• CT-1 equipped with Dry-Low NOx Combustors • DB1 equipped with Low NOx Burners. • Exhaust from both CT-1 and DB-1 pass through Selective Catalytic Reduction (SCR) and CO catalyst systems
EU-2	**Combined Cycle Gas Turbine 2 (CGT- 2):** • Combustion turbine – General Electric 7FA natural gas turbine with a nominal design heat rate of 1,823 mmBtu/hr and an output of 234 MVA. • Duct Burner – 505 mmBtu/hr natural gas duct burner	• CT-2 equipped with Dry-Low NOx Combustors • DB-2 equipped with Low NOx Burners. • Exhaust from both CT-2 and DB-2 pass through Selective Catalytic Reduction (SCR) and CO catalyst systems
EU-3	**Auxiliary Boiler:** 29.3 mmBtu/hr natural gas fired boiler used to assist with start-ups.	• Low NO_X burners • Flue Gas Recirculation (FGR)
EU-4	**Cooling Tower:** Nine cell, 175,000 gal/min forced draft cooling tower	• Equipped with drift eliminators
EU-5	**Emergency Generator:** 400 kW (536 hp) emergency generator used to help power down equipment and maintain operation of lubricating oil pumps in the event of power outages.	None
EU-6	**Emergency Fire Water Pump:** 205 kW (275 hp) diesel-fired water pump to provide for fire suppression during electrical power outages.	None

Table Notes:

1. The information in Table 4 is for purposes of description only and is not intended as a limitation.

III. PERMIT ADMINISTRATION (P)

Conditions in this section govern administration of this AOP and include AOP administrative and other requirements that have no ongoing compliance monitoring requirements. The Permittee must comply with all AOP requirements including AOP administrative requirements and must certify compliance with all requirements annually.

P1. Permit Duration.
This AOP is issued for a fixed term of 5 years from date of issuance.

[Origin: WAC 173-401-610]
[Authority: WAC 173-401-600(1)(b)]

P2. Federally Enforceable Requirements.

a) All terms and conditions in this AOP, including any provision designed to limit potential to emit, are enforceable by the U.S. EPA Administrator (EPA) and citizens under the FCAA, except as indicated in b) below.

b) Notwithstanding subsection (a) of this condition, any terms and conditions included in this AOP that are not required under the FCAA or under any of its applicable requirements are specifically designated as "state," "EFSEC," or "state/EFSEC" only and are not federally enforceable under the FCAA. Terms and conditions so designated are not subject to review by EPA and affected states per the requirements of WAC 173-401-810 and 820.

[Origin WAC 173-401-625]
[Authority: WAC 173-401-600(1)(b)]

P3. Compliance Maintenance.
The Permittee must maintain compliance with all applicable requirements with which the source was in compliance as of the date of permit issuance. The Permittee must meet on a timely basis any applicable requirements that become effective during the permit term.

[Origin: WAC 173-401-630(3); WAC 173-401-510(2)(h)(iii)]
[Authority: WAC 173-401-600(1)(b)]

P4. Standard Conditions:

a) **Duty to comply.** The Permittee must comply with all conditions of this AOP. Any permit noncompliance constitutes a violation of Chapter 70.94 RCW, Chapter 80.50 RCW, and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for AOP termination, revocation and re-issuance, or modification; or for denial of an AOP renewal application. [Origin: WAC173-401-620(2)(a)]

b) **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for the 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 AOP. [Origin: WAC 173-401-620(2)(b)]

c) **Permit Actions.** This AOP 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, or termination, or of a notification of

planned changes or anticipated noncompliance does not stay any permit condition. [Origin: WAC 173-401- 620(2)(c)]

d) **Property Rights.** This AOP does not convey property rights of any sort, or any exclusive privilege. [Origin: WAC 173-401-620(2)(d)]

e) **Duty to Provide Information.** The Permittee must furnish to EFSEC, within a reasonable time, any information that EFSEC may request in writing to determine whether cause exists for modifying, revoking, and reissuing, or terminating the AOP, or to determine compliance with the AOP. Upon request, the Permittee must also furnish to EFSEC copies of records that the Permittee is required to keep by this AOP, or for information claimed to be confidential, the Permittee may furnish such records directly to EFSEC along with a claim of confidentiality per condition P16. Permitting authorities must maintain confidentiality of such information in accordance with RCW 70.94.205. [Origin: WAC 173-401-620(2)(e)]

f) **Fees.** The Permittee must pay costs as a condition of this AOP in accordance with EFSEC's fee schedule as provided under WAC 463-78-105. Failure to pay fees in a timely fashion may subject the Permittee to civil and criminal penalties as prescribed in Chapter 70.94 RCW. [Origin: WAC 173-401-620(2)(f) and WAC 463-78-105]

g) **Emission Trading.** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the AOP. [Origin: WAC 173-401- 620(2)(g)]

h) **Severability.** If any provision of this AOP is to be held invalid, all unaffected provisions of the AOP shall remain in effect and enforceable. [Origin: WAC 173-401-620(2)(h)]

i) **Permit Appeals.** This AOP or any conditions in it may be appealed in accordance with the provisions of WAC 463-78-140(3). This provision for appeal in this section is separate from and additional to any federal rights to petition and review under §505(b) of the FCAA. [Origin: WAC 173-401-620(2)(i)]

j) **Permit continuation.** This AOP 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. This protection shall cease to apply if, subsequent to a completeness determination, the applicant fails to submit by the deadline specified in writing by EFSEC any additional information identified as being needed to process the application. [Origin: WAC 173-401-620(2)(j); WAC 173-401-705(2)]

[Origins: as indicated by sub condition]
[Authority: WAC 173-401-620(2)]

P5. 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, must promptly submit such supplementary facts or corrected information. In addition, the Permittee must provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft AOP.

[Origin: WAC 173-401-500(6)]
[Authority: WAC 173-401-600(1)(b)]

P6. Misrepresentation and Tampering:

a) The Permittee must not make any false material statement, representation or certification in any form, notice, or report.

b) The Permittee must not render inaccurate any monitoring device or method required under Chapter 70.94 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

[Origin: WAC 173-400-105(6)&(8) (State Only)]
[Authority: WAC 173-401-600(1)(b)]

P7. Permit Renewal Application.

The Permittee must submit a complete renewal application to EFSEC at least six months, but no more than 18 months, prior to the expiration date of this AOP.

[Origin: WAC 173-401-710(1)]
[Authority: WAC 173-401-600(1)(b)]

P8. Transfer of Ownership or Operational Control.

A change in Permittee due to transfer of ownership or operational control of an affected source requires a request for administrative permit amendment as governed by WAC 173-401-720.

[Origin: WAC 173-401-720(1)(d)]
[Authority: WAC 173-401-600(1)(b)]

P9. Permit Expiration – Application Shield.

AOP expiration terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted consistent with condition P7. All terms and conditions of the AOP shall remain in effect after the AOP itself expires if a timely and complete permit application has been submitted. Operation under the terms and conditions of the expired AOP will be allowed until EFSEC takes final action on the renewal application.

[Origin: WAC 173-401-705(2) and WAC 173-401-710(3)]
[Authority: WAC 173-401-600(1)(b)]

P10. Permit Revocation.

EFSEC may revoke an AOP only upon the request of the Permittee or for cause. EFSEC shall provide at least thirty days written notice to the Permittee prior to revocation of the AOP or denial of a permit renewal application. Such notice shall include an explanation of the basis for the proposed action and afford the Permittee/applicant an opportunity to meet with EFSEC prior to the authority's Preliminary Draft decision. A revocation issued under this section may be issued conditionally with a future effective date and may specify that the revocation will not take effect if the Permittee satisfies the specified conditions before the effective date.

[Origin: WAC 173-401-710(4)]
[Authority: WAC 173-401-600(1)(b)]

P11. Reopening for Cause.
The AOP must be reopened and revised under any of the following circumstances:

- **a)** Additional requirements become applicable to the source with a remaining permit term of three or more years. Such a reopening must be completed not 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 date on which the AOP is due to expire, unless the original AOP or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j);
- **b)** Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the AOP;
- **c)** EFSEC or the Administrator determines that the AOP contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the AOP; or
- **d)** EFSEC or the Administrator determines that the AOP must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue this AOP shall follow the same procedures as apply to initial AOP issuance and shall affect only those parts of the AOP for which cause to reopen exists. Reopening under this section shall not be initiated before a notice of such intent is provided to the Permittee by EFSEC. Such notice shall be made at least 30 days in advance of the date that the AOP is to be reopened, except that EFSEC may provide a shorter time period in the case of an emergency.

[Origin: WAC 173-401-730]
[Authority: WAC 173-401-600(1)(b)]

P12. Changes not Requiring Permit Revision/Off Permit Changes.
The Permittee may make the changes described in WAC 173-401-722 and WAC 173-401-724 without revising this AOP, provided that the changes satisfy the criteria set forth in those sections, including the requirements to notify EFSEC and EPA.

[Origin: WAC 173-401-722; and, WAC 173-401-724]
[Authority: WAC 173-401-600(1)(b)]

P13. Administrative Permit Amendments.
The Permittee may request an "administrative permit amendment" for the following types of permit revisions:

- **a)** Correction of typographical errors;
- **b)** Change the name, address, or phone number of any person identified in the AOP, or provide a similar minor administrative change at the source;
- **c)** Require more frequent monitoring or reporting by the Permittee;
- **d)** Allow for a change in ownership or operational control of a source where EFSEC

determines that no other change in the AOP is necessary, 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 EFSEC; and,

e) Incorporate into the chapter 401 permit the terms, conditions, and provisions from orders approving NOC applications processed under an EPA-approved program.

Application and approval of administrative permit amendment applications shall conform to the procedures in WAC 173-401-720.

[Origin: WAC 173-401-720]
[Authority: WAC 173-401-600(1)(b)]

P14. Permit Modifications.
AOP permit revisions that cannot be accomplished using the provisions for administrative permit amendments shall be applied for and approved as a permit modification according to WAC 173-401-725.

[Origin: WAC 173-401-725]
[Authority: WAC 173-401-600(1)(b)]

P15. Greenhouse Gas Reporting Fee.
The Permittee must pay a greenhouse gas (GHG) reporting fee for each year they submit a GHG report to Washington Department of Ecology (Ecology). Fees will be paid according to Ecology's fee schedule. Fees must be paid within sixty days of receipt of Ecology's billing statement.

[Origin: WAC 173-441-110 (State Only)]
[Authority: WAC 173-401-600(1)(b)]

P16. Confidential Information.
The Permittee is responsible for certifying and clearly identifying any information considered proprietary and confidential. In the case where a Permittee has submitted information to EFSEC under a claim of confidentiality, EFSEC may also require the Permittee to submit a copy of such information directly to the administrator. The Permittee is responsible for clearly identifying information that is considered proprietary and confidential prior to submittal to EFSEC. In addition, all confidential information must be submitted according to EFSEC's Public Records and Confidentiality Procedures.

[Origin: WAC 173-401-500(5) and, WAC 173-401-620(2)(e)]
[Authority: WAC 173-401-600(1)(b)]

P17. Credible Evidence.
For purposes of certifying compliance or establishing whether or not the Permittee has violated or is in violation of this AOP, 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 the requirements if the appropriate performance or compliance test or procedure had been performed.

[Origin: 40 CFR 51.212; 40 CFR 52.12; 40 CFR 52.33; 40 CFR 60.11, and, 40 CFR 61.12]
[Authority: WAC 173-401-600(1)(a)]

P18. Unavoidable Excess Emissions.

a) Excess emissions determined to be unavoidable under the procedures and criteria in this section are violations of the applicable statute, rule, permit, or regulatory order.

b) EFSEC determines whether excess emissions are unavoidable based on the information supplied by the Permittee and the criteria in subsection (g) of this condition.

c) Excess emissions determined by EFSEC to be unavoidable are:

i) A violation subject to WAC 173-400-230 (3), (4), and (6); but

ii) Not subject to civil penalty under WAC 173-400-230(2).

d) The Permittee shall have the burden of proving to EFSEC in an enforcement action that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under subsection (g) of this section.

e) This condition (P18) does not apply to an exceedance of an emission standard in 40 C.F.R. Parts 60, 61, 62, 63, or 72, or EFSEC's adoption by reference of these federal standards.

f) Excess emissions that occur due to an upset or malfunction during a startup or shutdown event are treated as an upset or malfunction under subsection (g) of this section.

g) Excess emissions due to an upset or malfunction will be considered unavoidable provided the Permittee reports as required in condition R6, and adequately demonstrates to EFSEC that:

i) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;

ii) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;

iii) The Permittee took immediate and appropriate corrective action in a manner consistent with safety and good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, when the Permittee knew or should have known that an emission standard or other permit condition was being exceeded (Actions taken could include slowing or shutting down the emission unit as necessary to minimize emissions);

iv) If the emitting equipment could not be shut down during the malfunction or upset to prevent the loss of life, prevent personal injury or severe property damage, or to minimize overall emissions, repairs were made in an expeditious fashion;

v) All emission monitoring systems and pollution control systems were kept operating to the extent possible unless their shutdown was necessary to prevent loss of life, personal injury, or severe property damage;

vi) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent possible; and

vii) All practicable steps were taken to minimize the impact of the excess emissions on ambient air quality.

[Origin: WAC 173-400-109]
[Authority: WAC 173-401-600(1)(b)]

P19. Certification. All documents required to be submitted by this AOP must contain certification by a responsible official of truth, accuracy, and completeness. Documents include any application form, report, or compliance certification including but not limited to test plans and results, monitoring plans and results, applications, emissions inventory submittals, equipment malfunction reports or annual compliance certification. Such certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Provided, however, where a report is sent more frequently than once every six months, the responsible official's certification need only be submitted once every six months, covering all required reporting since the date of the last certification.

[Origin: WAC 173-401-520; WAC 173-401-615(3)(a); and, WAC 173-401-630(1)]
[Authority: WAC 173-401-600(1)(b)]

IV. GENERAL TERMS AND CONDITIONS (G)

G1. Inspection and Entry. Upon presentation of appropriate credentials, the Permittee must allow a representative from EFSEC or an authorized representative to perform the following:

- **a)** Enter upon the premises where a Chapter 173-401 WAC source is located or emissions related activity is conducted, or where records must be kept under the conditions of this AOP;
- **b)** Have access to and copy at reasonable times any records that must be kept under the conditions of this AOP;
- **c)** Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this AOP; and
- **d)** Sample or monitor, at reasonable times, substances, or parameters for the purpose of assuring compliance with the AOP or other applicable requirements.
- **e)** Nothing in this condition or AOP shall limit the ability of EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the FCAA.

[Origin: WAC 173-401-630(2) and WAC 173-400-105(3) &(4);
PSD No. EFSEC/2001-01, AMENDMENT 5, condition 27]
[Authority: WAC 173-401-600(1)(b)]

G2. Insignificant Emission Units. The following applies to emissionsunits determined insignificant based on actual emissions in accordance with WAC173-401-530(1)(a):

- **a)** Any emission unit or activity that qualifies as insignificant solely on the basis of provisions in WAC 173-401-530(1)(a) must not exceed the emission thresholds specified in WAC 173-401-530(4) until this AOP is modified.
- **b)** Upon request from EFSEC, the Permittee must provide sufficient documentation to enable EFSEC to determine that the emission unit or activity has been appropriately listed asinsignificant.
- **c)** Upon request from EFSEC, at any time during the term of the AOP,the Permittee must demonstrate to EFSEC that the actual emissions of any unit or activity claimed insignificant on the basis of actual emissions are below the emission thresholds listed in WAC 173-401-530(4).

[Origin: WAC 173-401-530]
[Authority: WAC 173-401-600(1)(b)]

G3. New Source Review. The Permittee must not construct or modify a sourcewhich is required to be reviewed under Chapters 173-400 or 173-460 WAC without first receiving an approval or permit. Portable sources may be exempt from the requirement to obtain a site- specific permit if they fulfill the criteria described in G5 - Temporary Sources. Replacing, relocating, or reconstructing a source is considered constructing a source.

[Origin: WAC 173-400-110; WAC 173-400-700; and, WAC 173-460-040 (State Only)]
[Authority: WAC 173-401-600(1)(b)]

G4. Replacement or Substantial Alteration of Emission Control Technology. A notice of construction application must be filed with EFSEC prior to replacing or substantially altering the emission control technology installed on an existing stationary source or emission unit. Replacement or substantial alteration of control technology does not include routine maintenance, repair, or similar parts replacement.

[Origin: WAC 173-400-114]
[Authority: WAC 173-401-600(1)(b)]

G5. Temporary Sources. A portable source with an order of approval from another Washington permitting authority may be authorized to operate at the facility without obtaining a site-specific permit from EFSEC if EFSEC approves the proposal on a case-by-case basis and all of the conditions of WAC 173-400-036(2) through (4) are met. Operation at any location under this provision is limited to one year or less.

[Origin: WAC 173-400-036 (State Only) and WAC 173-400-110(6)]
[Authority: WAC 173-401-600(1)(b)]

G6. Asbestos, Demolition and Renovation Projects. The Permittee must notify EPA Region 10 and EFSEC prior to commencing any renovation or demolition activities at the facility as defined in 40 CFR 61.141. The Permittee must conduct all renovation, demolition, and asbestos projects in accordance with applicable asbestos control standards and requirements in Subpart M of 40 CFR Part 61.

[Origin: 40 CFR Part 61, Subpart M]
[Authority: WAC 173-401-600(1)(a)]

G7. Chemical Accident Prevention. The Permittee must comply with the requirements of the Chemical Accident Prevention provisions of 40 CFR Part 68 no later than the following dates:

a) Three years after the date on which a regulated substance, present above the threshold quantity, is first listed under 40 CFR 68.130; or,

b) The date on which a regulated substance is first present above a threshold quantity in a process.

[Origin: 40 CFR Part 68]
[Authority: WAC 173-401-600(1)(a)]

G8. Protection of Stratospheric Ozone. The Permittee shall comply with the standards for recycling and emissions reduction as provided in 40 CFR Part 82, Subpart F.

[Origin: 40 CFR Part 82, Subpart F]
[Authority: WAC 173-401-600(1)(a)]

G9. Outdoor Burning. The Permittee is prohibited from conducting outdoor burning except as allowed by Chapter 173-425 WAC.

[Origin: WAC 173-425]

[Authority: WAC 173-401-600(1)(b)]

G10. Concealment and Masking Prohibited: No person shall cause or allow the installation or use of any device or use of any means, which conceals or masks an emission of an air contaminant, which would otherwise violate any provisions of chapter 173-400 WAC.

[Origin: WAC 173-400-040(8) (State Only)]
[Authority: WAC 173-401-600(1)(b)]

G11. Circumvention. The Permittee must not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[Origin: 40 CFR 60.12]
[Authority: WAC 173-401-600(1)(a)]

G12. General Emissions Testing Requirement. In addition to the testing requirements contained in this AOP, EFSEC or an authorized representative of EFSEC may require the Permittee to conduct stack and/or ambient air monitoring and report the results to EFSEC.

[Origin: WAC 463-78-120]
[Authority: WAC 173-401-600(1)(b)]

G13. Acid Rain Program - Duty to reapply. The designated representative must submit a complete acid rain permit application for each source with an affected unit along with the Title V permit renewal application required by condition P7. The original and three copies of all permit applications must be submitted to EFSEC.

[Origin: WAC 173-406-301(3)]
[Authority: WAC 173-401-600(1)(b)]

G14. Acid Rain Program – Designated Representative. Designated representative under the Acid Rain Program means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source or by the owners and operators of a combustion source or process source, as evidenced by a certificate of representation (see Acid Rain Permit under Attachment 1), to represent and legally bind each owner and operator, as a matter of Federal law, in matters pertaining to the Acid Rain Program. Whenever the term "responsible official" is used in this permit, it shall be deemed to refer to the "designated representative" with regard to all matters under the Acid Rain Program.

[Origin: WAC 173-406-101(40)]
[Authority: WAC 173-401-600(1)(b)]

G15. Prevention of Significant Deterioration (PSD). A PSD permit application must be filed by the Permittee and a PSD permit issued by EFSEC prior to beginning actual construction of any major stationary source or major modification as these terms are defined in WAC 173-400-720.

[Origin: WAC 173-400-720]
[Authority: WAC 173-401-600(1)(b)]

G16. Requirements for PSD Applicability Determinations. The Permittee must comply with the specific pre and post project monitoring, recordkeeping, and reporting requirements in WAC 173-400-720(4)(b)(iii), as applicable, to projects triggering a PSD applicability determination.

[Origin: WAC 173-400-720(4)(b)(iii)]
[Authority: WAC 173-401-600(1)(b)]

V. APPLICABLE REQUIREMENTS (AR)

TABLE 5: Applicable Requirements.

AR#	Requirements	Subject Units	Additional Monitoring & Records Requirements
General Plant-wide Emission Standards			
AR 1.1	**General Duty Requirements:** At all times, including periods of startup, shutdown, and malfunction, the Permittee must maintain and operate all emissions units and their associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. [Origin: 40 CFR 60.11(d); 40 CFR 60 Subpart KKKK, §60.4333; PSD No. EFSEC/2001-01, AMENDMENT 5, condition 26] [Authority: WAC 173-401-600(1)(a), and (b)]	Plant-wide	None
AR 1.2	**General Standards for Maximum Visual Emissions.** The Permittee must not cause or allow any emission of an air contaminant from any emissions unit which at the emission point, or within a reasonable distance of the emission point, exceeds twenty percent opacity for more than three minutes, in any one hour, as determined by Ecology method 9A. **Reference Test Method:** When stack testing is conducted for purposes of demonstrating compliance, Ecology Method 9A must be used. [Origin: WAC 173-400-040(2) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]	Plant-wide	M5 M6 M7
AR 1.3	**Fallout Prohibition.** The Permittee must not cause or allow the emission of particulate matter from any source to be deposited beyond the property under their direct control in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material is deposited. [Origin: WAC 173-400-040(3) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b)]	Plant-wide	None
AR 1.4	**Fugitive Emissions Control.** The owner or operator of any emission unit engaging in materials handling, construction, demolition, or any other operation	Plant-wide	M4

	which is a source of fugitive emissions must take reasonable precautions to prevent release of air contaminants from the operation. [Origin: WAC 173-400-040(4)(a) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b)]		
AR 1.5	**Odor Control.** The Permittee must use recognized good practice and procedures to reduce odors to a reasonable minimum. [Origin: WAC 173-400-040(5) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b)]	Plant-wide	M4
AR 1.6	**Emissions detrimental to persons or property.** The Permittee must not cause or allow the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. [Origin: WAC 173-400-040(6) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b)]	Plant-wide	M4
AR 1.7	**Sulfur Dioxide (SO_2).** The Permittee must not cause or allow the emission of a gas containing sulfur dioxide from any emissions unit in excess of one thousand ppm of sulfur dioxide on a dry basis, corrected to seven percent oxygen for combustion sources, and based on the average of any period of sixty consecutive minutes. **Compliance Demonstration Methods:** 1. For diesel fuel, records documenting a sulfur content of 15 ppm or 0.0015% sulfur by weight or less must be used. A fuel certification from the fuel supplier documenting the sulfur content of the diesel may be used to demonstrate compliance with this requirement. 2. SO2 emissions from combustion of natural gas are presumed to be in compliance with this limit. **Reference Test Method** – When stack testing is conducted for purposes of demonstrating compliance, EPA Method 6c from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: WAC 173-400-040(7) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]	Plant-wide	M1 M8

AR 1.8	**Fugitive Dust Control.** The Permittee must take reasonable precautions to prevent fugitive dust from becoming airborne and must maintain and operate the source to minimize emissions. [Origin: WAC 173-400-040(9)(a) (state/EFSEC only)] [Authority: WAC 173-401-600(1)(b)]	Plant-wide	M4
AR 1.9	**General Particulate Standards for Combustion Units.** The Permittee must not cause or allow emissions of particulate matter in excess of 0.23 gram per dry cubic meter at standard conditions (0.1 grain/dscf). **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, emissions must be measured using EPA Method 5 in Appendix A to 40 CFR Part 60 (in effect on February 14, 2005), or approved procedures in Source Test Manual – Procedures for Compliance Testing, state of Washington, Department of Ecology, as of September 20, 2004, on file at Ecology. Measured concentrations must be adjusted for volumes corrected to 7% oxygen, except when EFSEC determines that an alternate oxygen correction factor is more representative of normal operations such as the correction factor included in an applicable NSPS or NESHAP, actual operating conditions, or the manufacturer's specifications for the emission unit. [Origin: WAC 173-400-050(1)] [Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]	Plant-wide	M5 M6 M7
AR 1.10	**General Emission Standards for Process Units**. The Permittee must not cause or allow emissions of particulate matter from any general process unit (excluding combustion) in excess of 0.23 grams per dry cubic meter at standard conditions (0.1 grain/dscf) of exhaust gas. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, test methods (in effect on the date in WAC 173-400-025) from 40 CFR Parts 51, 60, 61, and 63 and any other approved test procedures in Ecology's "Source Test Manual - Procedures For Compliance Testing" as of September 20, 2004, must be used to determine compliance. [Origin: WAC 173-400-060]	Plant-wide	None

	[Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]		
AR 1.11	**Acid Rain.** The Permittee must hold SO_2 allowances not less than the total annual emissions of SO_2 for the previous calendar year (see Attachment 1 of this AOP - Acid Rain Permit). [Origin: Acid Rain Permit No. <ACID RAIN #>] [Authority: WAC 173-401-600(1)(b); and, WAC 173-401-605(1)]	CGT1 & CGT2	M1

AR 1.12	**Operating and Maintenance Manuals.** The Permittee must have on- site, and must follow, an Operating and Maintenance manual (O&M Manual) and Start-up, Shutdown, and Malfunction Procedures manual (SSM Manual). Both manuals must describe accepted operating procedures for minimizing emissions for all equipment that have the potential to affect emissions to the atmosphere. The following requirements apply: 1. Copies of both manuals must be available to EFSEC at the facility. 2. The manuals must be reviewed annually and updated as needed. 3. EFSEC must be notified whenever either manual is updated. 4. The O&M Manual should contain equipment-specific operating parameter and maintenance information. 5. The O&M Manual should specify acceptable ranges for: a. Fuel heat (MMBtu/dscf) and sulfur content (percent); b. Expected range of fuel rates for each unit (MMBtu/hr for turbines, duct burner and aux boiler) and mode of operation (startup, shutdown, operational); c. Expected range of power production (MW) for each turbine; d. Expected range of total power production (MW); e. CGT exhaust temperature and percent oxygen for each mode of operation; f. Ammonia flow for each mode of operation; g. SCR and CatOx catalyst temperatures for each mode of operation h. Mode 6 criteria 6. The SSM manual must contain information on the proper procedures, and sequencing of actions for plant operations staff to follow in order to safely, efficiently start and stop the various equipment at the station under all reasonably ascertainable normal and abnormal start-up and shut-down situations. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 17.1, 17.2 and 23] [Authority: WAC 173-401-600(1)(c)]	Plant-wide	M1
NSPS Requirements for CGT1 and CGT2 (including duct burners)			
AR 2.1	**CGT NSPS NO_X Limit.** Nitrogen oxide (NO_X) emissions from each CGT exhaust stack after duct burners –	CGT1 & CGT2	M5 M8

	CGT1 and CGT2 – must not exceed the following limits: 1. 15 parts per million at 15 percent oxygen and on a dry basis when the turbine is operating. 2. 54 parts per million at 15 percent O2 when the duct burners are operating independent of the turbine, if applicable. **Monitoring:** The Permittee must install, certify, maintain, operate, and quality-assure a NOx-diluent continuous emission monitoring system (NOx-diluent CEMS) consisting of NO_X and O2 analyzers, an automated data acquisition and handling system (DAHS), and natural gas monitoring system for recording and reporting NOx emissions data according to conditions M5 and M8. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, test methods and procedures from 40 CFR 60, Subpart KKKK and EPA Method 20 must be used, except that the instrument span must be set between zero and 25 ppm. Performance testing must be conducted at any load condition within plus or minus 25 percent of 100 percent of peak load. Testing may be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. Three separate test runs for each performance test must be conducted and the minimum time per run is 20 minutes. [Origin: 40 CFR 60 Subpart KKKK: §60.4320(a); §60.43.40; and §60.4345; and, §60.4350] [Authority: WAC 173-401-600(1)(b)]		M9 M12 M13
AR 2.2	**CGT NSPS SO_2 Limit.** The CGTs (turbines and duct burners) must not burn any fuel containing total potential sulfur emissions in excess of 0.060 lb SO2 /MMBtu heat input. **Compliance Demonstration Required:** A demonstration of compliance with the NSPS SO2 standard must be conducted annually (no more than 14 calendar months between tests) using one or more of the following methods: 1. Calculate the potential sulfur emissions in units of lb SO2 /MMBtu heat input using a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content of the natural gas combusted in the CGTs;	CGT1 & CGT2	M8 M9 M12

	2. Stack testing according to the SO2 Reference Test Method below; or, 3. Calculate the potential sulfur emissions in units of lb SO2 /MMBtu heat input using natural gas composition data from required monthly monitoring as described below. **Monitoring:** On a monthly basis**,** the Permittee must monitor the natural gas burned in the CGTs by sampling and analyzing the natural gas delivered to the GHE facility according to condition M8 to determine: 1. The Gross Calorific Value (GCV) in terms of MMBtu/scf; 2. Sulfur concentration in terms of grains/hscf; and, 3. Potential sulfur emissions in terms of lb SO_2/MMBtu input. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 6, 6C, 8, or 20 in appendix A of 40 CFR Part 60 must be used. The American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide can be used instead of EPA Methods 6 or 20. Concurrently measure the natural gas heat input to each CGT using a fuel flowmeter (or flowmeters). Use EPA Method 19 in appendix A of 40 CFR 60 to calculate the SO2 emission rate in lb/MMBtu. [Origin: 40 CFR 60 Subpart KKKK: §60.4330(a)(2)] [Authority: WAC 173-401-600(1)(b)]		
PSD Permit Requirements for CGT1 and CGT2			
AR 2.3	**CGT Fuel Limit:** The CGTs (each consisting of a GE 7FA combustion turbine and its associated duct burner and HRSG) and auxiliary boiler are limited to the use of natural gas. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 2] [Authority: WAC 173-401-600(1)(c)]	CGTs	M8
AR 2.4	**CGT NO_X Limits:** Emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following, except during start-up and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: a) 21.7 pounds/hour (lb/hr), 1-hour (1-hr) average. b) 17.4 lb/hr, 24-hr rolling average.	CGTs	M5 M8 M9 M12 M13

	c) 2.5 parts per million by volume, dry (ppm), 1-hr average, corrected to 15 percent oxygen (O_2). d) 2.0 ppm, 24-hr rolling average, corrected to 15 percent O_2. **Monitoring:** Ongoing compliance must be monitored by a NOx-diluent CEMS. The NOx-diluent CEMS and flow measurement to determine NOx mass rates must meet the requirements of conditions M5 and M8 respectively. Emissions calculations must meet the requirements of condition M9. **Added Clarification:** For purposes of determining compliance with the 24-hr rolling average NOx limit, start-up, and shut-down emissions must not be included in the averaging and a full averaging period should be used in determining compliance. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 20 from 40 CFR Part 60 Appendix A must be used and testing must meet the requirements in §60.4405 of 40 CFR Part 60 Subpart KKKK, except that the instrument span must be set between zero and 25 ppm. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.1] [Authority: WAC 173-401-600(1)(c)]		
AR 2.5	**CGT CO Limits:** Carbon monoxide (CO) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following limits, except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: a) 2.0 ppm, corrected to 15 percent O_2, 1-hr average. b) 10.6 lb/hr, 1-hr average. **Monitoring:** Ongoing compliance must be monitored by a CO CEMS. The CO CEMS and flow measurement to determine CO mass rates must meet the requirements of conditions M5 and M8 respectively. Emissions calculations must meet the requirements of condition M9. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 10 from 40 CFR Part 60 Appendix A must	CGTs	M5 M8 M9 M12 M13

	be used, or an equivalent method agreed to in advance by EFSEC. The span and linearity calibration gas concentrations in Method 10 are to be modified as appropriate to the CO concentration limits specified in this condition. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.2] [Authority: WAC 173-401-600(1)(c)]		
AR 2.6	**CGT SO_2 Limits:** Sulfur dioxide (SO_2) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following, except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: a) 19.8 lb/hr, 1-hr average. b) 3.3 lb/hr, rolling annual average of emissions determined monthly when the CGTs operate. **Stack Testing:** Compliance with the 1-hr average limit must be determined for each CGT at 5-year intervals through stack testing according to the Reference Test Method. **Monitoring:** Ongoing compliance with both limits must be determined monthly according to condition M9 by calculating hourly average SO_2 emission rates from each CGT in pounds per hour for all hours of operation during the previous month and the average emission rate in lb/hr over the previous 12-consecutive month period. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 6c from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.3] [Authority: WAC 173-401-600(1)(c)]	CGTs	M8 M9 M12
AR 2.7	**CGT H_2SO_4 Limits:** Sulfuric acid mist (H_2SO_4) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed 2.17 lb H_2SO_4/hr, rolling annual average calculated monthly, except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14:	CGTs	M8 M9 M12

	Stack Testing: Hourly H2SO4 rates and the unit-specific ratios of H2SO4 to SO2 shall be determined for each CGT based on stack testing using EPA Reference Method 8, or an equivalent method approved by EFSEC. Stack testing shall be performed at each exhaust stack at 5-year intervals. Testing shall be performed between the months of November – March (unless otherwise approved by EFSEC) at representative maximum heat input rate. **Monitoring:** Ongoing compliance must be determined monthly according to condition M9 by calculating the average hourly H2SO4 emission rates from each CGT in pounds per hour for all hours of operation during the previous month and 12-consecutive month periods. The unit-specific ratio of H2SO4 to SO2 determined through stack testing must be used to convert the calculated potential SO2 emissions into sulfuric acid mist emissions and SO2 emissions. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 8 from 40 CFR Part 60 Appendix A or EPA Conditional Test Method 013(CTM-013) for SO2/sulfuric acid mist determination must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.4] [Authority: WAC 173-401-600(1)(c)]		
AR 2.8	**CGT VOC Limits:** Volatile organic compound (VOC) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following, except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14: a) 7.7 lb/hr, 1-hr average, reported as propane. b) 0.93 ppm, 1-hr average, reported as propane at 15 percent O2. **Stack Testing:** Each CGT stack must be tested at 5-year intervals. Testing must be performed between the months of November – March (unless otherwise approved by EFSEC) at representative maximum heat input rates and according to the Reference Test Methods.	CGTs	M8 M9 M12

	Monitoring: Ongoing compliance with the hourly rate limit of this condition must be monitored separately for each CGT by calculating hourly VOC emissions rates according to condition M9 using: a) The hours of operation; b) Fuel flow to each CGT according to condition M8; c) An emissions factor in lbs/MMBtu derived from the most recent reference method testing of the CGT; and, d) Emission calculations according to condition M9. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 19 and 25A, 25B or 18 from 40 CFR Part 60 Appendix A, or South Coast Air Quality Management District Method 25.3, must be used, or equivalent methods agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.5] [Authority: WAC 173-401-600(1)(c)]		
AR 2.9	**CGT Particulate Limits:** Particulate matter and particulate matter less than or equal to 10 micrometers (aerodynamic diameter) (PM10) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed 22.6 lb/hr of filterable plus condensable PM10 except during startup and shutdown (and CGT over-speed protection testing) when they must meet the requirements in conditions AR2.13 and AR2.14. **Stack Testing:** Each CGT stack must be tested at 5-year intervals. Testing will be performed between the months of November – March (unless otherwise approved by EFSEC) while operating at representative maximum heat input rate. **Monitoring:** Maintaining compliance with the opacity limit in condition 2.11 will serve as a means to determine when CGT maintenance actions, investigations or additional testing are needed to verify or assure compliance with the limit in this condition. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 19 and EPA Methods 5, 201, or 201A, plus EPA Reference Method 202 from 40 CFR Part 60 Appendix A must be used, or equivalent methods agreed to in advance by EFSEC. Use of EPA Reference Method 5 assumes all filterable particulate is PM10. Use of EPA	CGTs	None

	Reference Method 201 or 201A assumes that the mass of filterable PM is equal to the mass of filterable PM10. If EPA Method 201 or 201A is used, the mass of particulate retained in the cyclone must be determined and reported. Test runs must be a minimum of 3 hour each unless otherwise approved in advance by EFSEC. The results of the filterable and condensable particulate analyses must be reported as total particulate, filterable particulate, and condensable particulate. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.6] [Authority: WAC 173-401-600(1)(c)]		
AR 2.10	**CGT Ammonia Limits**: Ammonia (free NH3 and combined measured as NH3) emissions from each CGT exhaust stack – CGT1 and CGT2 – must not exceed the following, except during start up and shutdown (and CGT over-speed protection testing): a) 5.0 ppm, 24-hr average corrected to 15 percent O2. b) 16.1 lb/hr, 24-hr average. **Monitoring:** Ongoing compliance must be monitored by an Ammonia CEMS. The Ammonia CEMS and flow calculations to determine Ammonia mass rates must meet the requirements of conditions M5 and M8 respectively. Emissions calculations must meet the requirements of condition M9. **Added Clarification:** For purposes of determining compliance with the 24-hr average Ammonia limit, start-up and shut-down emissions should not be included in the averaging and a full averaging period should be used in determining compliance. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, Bay Area Air Quality Management District Source Test Procedure ST-1B, "Ammonia, Integrated Sampling" or EPA Conditional Test Method 027 must be used, or an equivalent method approved in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.7] [Authority: WAC 173-401-600(1)(c)]	CGTs	M5 M8 M9 M12 M13
AR 2.11	**CGT Opacity Limits**: Opacity at each CGT exhaust stack must not exceed a 6-minute average opacity of five percent, except during start- up and shutdown (and CGT over-speed protection testing) when they must	CGTs	M5d

	meet the requirements in conditions AR2.13 and AR2.14: **Monitoring:** a) A certified opacity reader must read and record the opacity of each operating CGT daily during daylight hours; or, b) Opacity must be monitored using a Continuous Opacity Monitoring System (COMS) on each CGT as an alternative to EPA Reference Method 9 readings. c) Any COMS must be installed and operated according to condition M5. d) If readings from daily monitoring are less than the opacity limit for the last calendar month, the manual opacity monitoring frequency is reduced to weekly. e) Any readings above the opacity limit will require daily manual opacity readings for at least 30 days. **Reference Test Method:** When stack testing is conducted for purposes of demonstrating compliance, EPA Reference Method 9 from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.8] [Authority: WAC 173-401-600(1)(c)]		
AR 2.12	**CGT Formaldehyde Limits:** Formaldehyde emissions from each CGT exhaust stack – CGT1 and CGT2 – during normal operation must not exceed 91 ppb, one-hr average corrected to 15 percent O_2. **Stack Testing:** a) The initial compliance test must be performed between the months of November – March, and then biennially (unless otherwise approved by EFSEC) after the initial test. b) The CT unit at a minimum (excluding duct burner) must be tested while operating at representative maximum heat input rate. c) If GHE demonstrated that the unit is not relying on CO catalyst to meet the Formaldehyde emission limit by testing at the inlet to the CO catalyst, GHE may perform compliance testing every 5 years instead of every 2 years. **Monitoring:** If compliance with the CGT formaldehyde limits relies on formaldehyde reduction by the CO	CGTs	None

	catalyst, maintaining performance of the CO catalyst will serve as the indirect means for assuring compliance with the limits between testing events. Otherwise, ongoing compliance assurance with these limits does not require any additional monitoring beyond the required stack testing. **Reference Test Method:** When stack testing is conducted for purposes of demonstrating compliance, EPA Test Method 320 from 40 CFR part 63, appendix A must be used, or an equivalent method approved in advance by EFSEC. As an alternative, ASTM D6348-12e1 may be used, provided that the test plan preparation and implementation provisions of Annexes A1 through A8 are followed and the %R (percent recovery) as determined in Annex A5 is equal or greater than 70% and less than or equal to 130%. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.9] [Authority: WAC 173-401-600(1)(c)]		
AR 2.13	**CGT Start-up/Shut-down Operational Limits.** The following definitions and limits apply during start-ups and shut-downs: a) **Start-up Defined:** A start-up begins when fuel is first fired in the combustion turbine, and ends when the earlier of one of these events occurs: i) The operating temperatures of the oxidation and SCR catalysts serving an operating CGT reach 500^{O}F and 525^{O}F, respectively and when the associated combustion turbine achieves operational Mode 6; or, ii) One of the following time limits has been reached, as applicable: 1) Three hundred minutes have elapsed since fuel was first introduced to the applicable turbine on a cold start-up. A cold start-up is any start-up occurring after the applicable turbine has not operated in Operational Mode 6 for 48 hours or more. 2) One hundred eighty minutes have elapsed since fuel was first introduced to the applicable turbine on a warm start-up. A warm start-up is any start-up occurring after the applicable turbine has not operated in Operational Mode 6 between 8 and 48 hours. 3) One hundred twenty minutes have elapsed since fuel was first introduced to the	CGTs	M1

	applicable turbine on a hot start-up. A hot start-up is any start-up occurring after the applicable turbine has not operated in Operational Mode 6 for 8 hours or less. b) **Shut-down Defined:** Shutdown is defined as the period beginning when the combustion turbine leaves operational Mode 6 and ends when fuel is no longer being introduced to any burner. c) **Operational Mode 6 Defined:** The turbine manufacturer defines operational Mode 6 as the low emission mode during which all six of the burner nozzles are burning a lean premixed gas at steady-state operation. d) **Water Wash Operations:** At least twice per year it is estimated each CGT will need to undergo an off-line water wash to remove combustion product buildup from the turbines to improve operational efficiency. The process requires CGT fired operation at Full Speed No Load (FSNL) for 5 minutes without attaining Operational Mode 6. e) **Over-speed Protection Testing:** Once per year it is estimated that each CGT will need to be tested to confirm that the over-speed protection is functioning properly (less than 90 minutes). Each test will account for one start-up. f) **Start-up/Shut-down Operational Limits:** i) Each CGT is limited to two start-ups per calendar day. ii) Duration of a planned shutdown period must not exceed 30 minutes per occurrence. iii) During start-up, ammonia injection must begin no later than when the SCR reaches an operating temperature of 525^{O}F. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 11.1 – 11.3] [Authority: WAC 173-401-600(1)(c)]		
AR 2.14	**CGT Start-up/Shut-down Emissions Limits**. During a start-up and associated shutdown (SU/SD) of a CGT, as defined in condition AR2.14, the combined emissions must not exceed the following limits in terms of pounds per turbine per SU/SD (lbs): a) 900 lbs NO_X b) 500 lbs CO c) 730 lbs VOC **Monitoring:** Ongoing compliance with the CGT SU/SD limits of this condition must be monitored by calculating	CGTs	M1 M8 M9 M11

	the pounds of NOx, CO, and VOC for each SU/SD event according to condition M9. **Reference Test Methods:** Not applicable. Compliance determined through emissions calculations using monitoring data. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 11.5] [Authority: WAC 173-401-600(1)(c)]		
AR 2.15	**CGT Annual Limits.** Annual emissions from each CGT, calculated as rolling 12-month averages in terms of tons, must not exceed the following limits, which apply to total emissions over each 12 consecutive month period and include emissions during start-up, shutdown and periods of malfunction: a) 121.7 NOx b) 71.6 CO c) 14.5 SO2 d) 9.5 H2S04 e) 99.0 PM/PM10 (PM and PM10 assumed to be equal) f) 45.8 VOC g) 70.5 NH3 The annual limits for NOx, CO, and VOC include emissions from the Diesel Generator and emergency fire pump engine. **Monitoring:** Annual 12-month total emissions from each CGT must be calculated and compared to the limits in this condition as follows: a) Emissions total must be calculated monthly according to condition M9. b) Total annual emissions must be based on the total monthly emissions summed for the preceding 12 months. c) CGT start-up emissions may be equally apportioned between the two turbines. d) For NOx, CO, and VOC, annual 12-month total emissions must include emissions from the Diesel Generator and emergency fire pump engine. To accomplish this, emissions from the Diesel Generator and emergency fire pump engine may be equally apportioned between the two CGTs. **Reference Methods:** Not applicable. Compliance determined through emissions calculations using fuel consumption and monitoring data.	CGTs	M5 M8 M9 M12 M13

	[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 10] [Authority: WAC 173-401-600(1)(c)]		
AR 2.16	**SCR Catalyst Maintenance:** The SCR catalyst system treating the exhaust from one CGT must be repaired, replaced, or have additional catalyst bed installed at the next scheduled outage, following a calendar month when the average ammonia slip cannot be maintained at or below 4.5 ppm, corrected to 15% oxygen, based on the actual operating hours of the CGT. No month with less than 200 hours of actual operation (excluding start-up and shutdown hours) shall be used for this evaluation. The outage to repair, replace, or install additional catalyst to the SCR system must be no later than 12 months after the month the ammonia slip exceeds the 4.5 ppm criteria given above in this condition. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 5.7.5] [Authority: WAC 173-401-600(1)(c)]	CGTs	M1
AR 2.17	**CGT Sampling Port Requirements:** a) Sampling ports and platforms must be provided on each CGT stack, after the final pollution control device. [PSD condition 15] b) The ports must meet the requirements of 40 CFR, Part 60, Appendix A, Method 20. [PSD condition 15] c) Adequate permanent and safe access to the test ports must be provided. Other arrangements may be acceptable if approved by EFSEC prior to installation. [PSD condition 16] [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, as indicated] [Authority: WAC 173-401-600(1)(c)]	CGTs	None
PSD Permit Requirements for the Auxiliary Boiler			
AR 3.1	**Aux. Boiler NO_X Limit**: NO_X emissions from the Auxiliary boiler exhaust stack are not to exceed the following: a) 1.03 lb/hr, 1-hr average. b) 30 ppm at three percent O2, 1-hr average. **Stack Testing:** Compliance with these limits must be determined at 5-year intervals through stack testing according to the Reference Test Methods. **Monitoring:** No ongoing monitoring beyond the required stack testing is required for assuring	Aux. Boiler	None

	compliance with the limits of this condition. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 7E and 19 from 40 CFR Part 60 Appendix A must be used. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.1] [Authority: WAC 173-401-600(1)(c)]		
AR 3.2	**Aux. Boiler CO Limit**: CO emissions from the Auxiliary boiler exhaust stack are not to exceed the following: a) 50.0 ppm, corrected to three percent O_2, 1-hr average. b) 1.07 lb/hr, 1-hr average. **Stack Testing:** Compliance with these limits must be determined at 5-year intervals through stack testing according to the Reference Test Methods. **Monitoring:** No ongoing monitoring beyond the required stack testing is required for assuring compliance with the limits of this condition. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 10 and 19 from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. The span and linearity calibration gas concentrations in EPA Method 10 must be appropriate to the CO concentration limits specified in this condition. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.2] [Authority: WAC 173-401-600(1)(c)]	Aux. Boiler	None
AR 3.3	**Aux. Boiler SO_2 Limit**: SO_2 emissions from the Auxiliary boiler exhaust stack are not to exceed the following: a) 0.07 lb/hr annual average, calculated monthly. b) One ppm at three percent O_2, 1-hr average. **Monitoring:** Ongoing compliance with the hourly rate limit in AR 3.3a) must be determined monthly by mass-balance calculations utilizing the: a) Monthly Fuel consumption records for the auxiliary boiler according to condition M8, b) Sulfur content of the natural gas per condition M8; and, c) SO_2 emissions must be calculated according to condition M10.	Aux. Boiler	M8 M10

	Reference Test Method: When stack testing is conducted for purposes of demonstrating compliance, EPA Method 8 from 40 CFR Part 60 Appendix A or an equivalent method agreed to in advance by EFSEC must be used. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.3] [Authority: WAC 173-401-600(1)(c)]		
AR 3.4	**Aux. Boiler VOC Limit**: VOC emissions from the Auxiliary boiler exhaust stack are not to exceed 0.20 lb/hr, 1-hr average, reported as propane. **Stack Testing:** Compliance with this limit must be determined at 5-year intervals through stack testing according to the Reference Test Methods. **Monitoring:** No ongoing monitoring beyond the required stack testing is required for assuring compliance with the limit of this condition. **Reference Test Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Methods 19 and 25A or 25B from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.4] [Authority: WAC 173-401-600(1)(c)]	Aux. Boiler	None
AR 3.5	**Aux. Boiler Particulate Limit**: PM10 emissions from the Auxiliary boiler exhaust stack are not to exceed the following: a) 0.292 lb/hr, hourly average (front & back half). b) 0.005 gr/dscf, 1-hr average, at three percent O2. **Stack Testing:** Compliance with this limit must be determined at 5-year intervals through stack testing according to the Reference Test Methods. **Monitoring:** Maintaining compliance with the opacity limit in condition AR 3.6 will serve as an indicator of when Aux Boiler maintenance actions, investigations or additional testing is needed to verify or assure compliance with the limits in this condition. **Reference Test Methods:** When stack testing is	Aux. Boiler	None

	conducted for purposes of demonstrating compliance, EPA Methods 19, 202 and either 5, 201, or 201A must be used, or an equivalent method agreed to in advance by EFSEC. Use of EPA Reference Method 5 assumes all particulate has an aerodynamic diameter less than 10 microns. Use of EPA Reference Method 201 or 201A assumes that the mass of filterable PM is equal to the mass of filterable PM10. The results of the filterable and condensable particulate analyses must be reported as total particulate, filterable particulate, and condensable particulate. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.5] [Authority: WAC 173-401-600(1)(c)]		
AR 3.6	**Aux. Boiler Opacity Limit**: Opacity at the auxiliary boiler stack is not allowed to exceed a 6-minute average opacity of five percent. **Monitoring:** A certified opacity reader must survey the boiler stack daily during daylight hours to determine if any opacity is present. If opacity is not observed over the course of a week, the frequency for surveying the boiler stack may change to monthly, or another frequency as approved by EFSEC. If the survey detects visible emissions, then the company must investigate the cause of the emissions and repair the problem or take EPA Method 9 observations for determining compliance. **Reference Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Method 9 from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.6] [Authority: WAC 173-401-600(1)(c)]	Aux. Boiler	M6
AR 3.7	**Aux. Boiler Annual Limits**: Annual total emissions from the Auxiliary Boiler over each 12 consecutive month period and including emissions during start-up, shutdown, and periods of malfunction, must not exceed the following limits in tons per year: a) 1.3 NO_X b) 1.3 CO c) 0.088 SO_2 d) 0.4 PM/PM10 (PM and PM10 assumed to be equal)	Aux. Boiler	M12

	e) 0.73 VOC **Monitoring:** Total emissions of each pollutant over the preceding 12- months must be calculated monthly based on the actual amount of natural gas combusted over the 12-month period and emissions factors in terms of pounds per million Btu of fuel combustion. For NOx, CO, PM/PM10, and VOC, Aux. Boiler emissions factors must be based on the most recent results from stack testing. The SO2 emission factor for the Aux. Boiler must be based on the most recent fuel analysis. Unless a specific emission factor is developed representing startup or shut down of the boiler, steady state emissions factors must be used to represent all operations of the Aux. Boiler. **Reference Methods –** Not applicable: Compliance determined through emissions calculations. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 10] [Authority: WAC 173-401-600(1)(c)]		
AR 3.8	**Aux. Boiler Sampling Port Requirements:** a) Adequate permanent and safe access to the test ports must be provided. Providing a man-lift to assure safe access to the test ports meets this condition. b) Other arrangements may be acceptable if approved by EFSEC prior to installation. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, PSD condition 16] [Authority: WAC 173-401-600(1)(c)]	Aux. Boiler	None
	Requirements for Emergency Diesel Engines		
AR 4.1	**Nonroad, Temporary Replacement Engines.** Compression Ignition, Internal Combustion Engines (CI ICE) used as temporary replacement units are allowed provided: a) They are located at the facility for less than 1 year; and, b) Meet the nonroad engine requirements of WAC 173-400-035. [Origin: WAC 173-400-030] [Authority: WAC 173-401-600(1)(b)]	Nonroad, Temporary Engines	None
AR 4.2	**Emergency Engine Requirements.** Compression ignition, reciprocating internal combustion engines used for emergency purposes (Emergency Engines) are subject to the following requirements from 40 CFR Part 63, Subpart ZZZZ:	Emergency Engines	M1 M3

	a) Operate and maintain Emergency Engines according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions. [Origin: 40 CFR 63 Subpart ZZZZ, §63.6625 (e)] b) Each Emergency Engine must be equipped with a non-resettable hour meter. [Origin: 40 CFR 63 Subpart ZZZZ, §63.6625 (f); PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 7.4 and 8.4] c) Minimize time engines are spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [Origin: 40 CFR 63 Subpart ZZZZ, §63.6625 (h)] d) There is no time limit on the use of the Emergency Engines in emergency situations. Emergency situations include periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [Origin: 40 CFR 63 Subpart ZZZZ, §63.6640 (f)] e) Required maintenance [Origin: 40 CFR 63 Subpart ZZZZ, Table 2d, Item 4]: i) Change oil and filter every 500 hours of operation or annually, whichever comes first; ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. f) If an Emergency Engine is operating during an emergency and it is not possible to shut down the engine in order to perform the scheduled required maintenance, or if performing the scheduled maintenance would otherwise pose an unacceptable risk, the required maintenance can be delayed until the emergency is over, or the unacceptable risk has abated. The scheduled maintenance should be performed as soon as practicable after the emergency has ended or the unacceptable risk has abated. [Origin: 40 CFR 63 Subpart ZZZZ, Table 2d, Item 4] [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 7 and 8, and 40 CFR 63, Subpart ZZZZ as listed in each sub-condition]		

	[Authority: WAC 173-401-600(1)(b)]		
AR 4.3	**Emergency Generator Engine Operating Requirements:** The Emergency Generator engine must: a) Burn only on-road specification diesel oil with 500 ppm or less, biodiesel, or a mixture of both. In any case, the fuel used must have a maximum sulfur content that does not exceed 500 ppm by weight. A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 3.1 and 7.3] b) Not exceed 500 hours per any 12 consecutive months of operating time. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 3.2] c) Be operated only during routine maintenance, testing, and periods when electricity is not available from the power grid. Maintenance and testing must not exceed 50 hours per consecutive 12-month period. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.2] d) The facility must maintain engine operation and maintenance records verifying the engine has been operated, maintained, and repaired in a manner consistent with the manufacturer's emission-related specifications. A copy of the manufacturer's recommendations for maintaining the engine must be kept on-site and made available upon request. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.1.1] [Origins indicated for each sub-condition] [Authority: WAC 173-401-600(1)(b) and WAC 173-401-600(1)(c)]	Emergency Generator Engine	M1 M3
AR 4.4	**Emergency Fire Water Pump Engine Operating Requirements:** The Emergency Fire Water Pump engine must: a) Burn only on-road specification diesel oil with 500 ppm or less sulfur content, biodiesel, or a mixture of both. In any case, the fuel used must have a maximum sulfur content that does not exceed 500 ppm by weight. A fuel certification from the fuel supplier shall be used to demonstrate compliance with this requirement (An alternative would be testing of the fuel in the storage tank with prior approval). [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 4 and 8.3] b) Be operated only during routine maintenance, testing, and periods when electricity is not available from the power grid. Maintenance and testing must	Emergency Fire Water Pump Engine	M1 M3

	not exceed 50 hours per consecutive 12-month period. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 8.2] c) The facility must maintain engine operation and maintenance records verifying the engine has been operated, maintained, and repaired in a manner consistent with the manufacturer's emission-related specifications. A copy of the manufacturer's recommendations for maintaining the engine must be kept on-site and made available upon request. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 8.1.1] [Origins for each sub-condition] [Authority: WAC 173-401-600(1)(b) and WAC 173-401-600(1)(c)]		
AR 4.5	**BACT Opacity Limit (Emergency Generator Engine only).** Visible emissions from the engine must not exceed an average of ten percent (10%) opacity during any 6-minute period except cold start-up, as determined in accordance with EPA Method 9 (Title 40 CFR, Part 60, Appendix A Method 9). Unless defined by the engine manufacturer, "cold start" as used in this condition shall be defined as the period beginning when the engine is started and ending when the temperature of the engine coolant reaches 150°F. **Monitoring:** During weekly testing of the engine, a certified opacity reader must survey and record if opacity is present after the engine achieves normal operating temperature according to condition M8. If opacity is observed, then Method 9 readings must be performed the next time the engine is operated for testing. The Survey frequency can be reduced to monthly once four readings without opacity are observed. **Reference Methods:** When stack testing is conducted for purposes of demonstrating compliance, EPA Reference Method 9 from 40 CFR Part 60 Appendix A must be used, or an equivalent method agreed to in advance by EFSEC. [Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.5] [Authority: WAC 173-401-600(1)(c)]	Emergency Generator Engine	M7
AR 4.6	**Excess Opacity Triggers Action (Emergency Generator Engine only):** Visible emissions of ten percent (10%) opacity or more from the Emergency Generator Engine must trigger prompt (within a week) action to initiate	Emergency Generator Engine	M1 M7

	maintenance and/or repair the engine and eliminate opacity exceeding this standard. Maintenance and repair actions must be documented and available for inspection. [Origin: For Emergency Generator Engine, PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.6] [Authority: WAC 173-401-600(1)(c)]		
PSD & NOC Permit Requirements for Cooling Tower			
AR 5.1	**Cooling Tower Particulate Limit**: PM10 emissions from the Cooling Tower are not to exceed: a) 24.5 lb/day PM10, annual average. b) 4.5 tpy PM10, rolling total, calculated monthly. **Monitoring:** a) Continuously monitor recirculating water flow rate in gallons per minute. In lieu of monitoring the recirculating water flow rate, the design rate may be used for compliance monitoring purposes. b) Total dissolved solids content of the cooling water must be measured monthly. c) On a monthly basis: i) Calculate the monthly average lbs/day PM10 emissions from the cooling tower using the Reference Formula below and actual operating data from monitoring. ii) Calculate the annual average lbs/day PM10 emissions from the cooling tower over the previous 12 consecutive months. **Reference Formula:** PM10 emissions from the Cooling Tower must be calculated according to the following equation and actual operating data: Q x C x DL x 60 x 8.34/ 1000000 = D Where: Q = Monthly average or design recirculation rate in gallons per minute C = Monthly average total dissolved solids concentration in parts per million by weight (ppmw) D = PM10 emission rate in lb/hr. DL = the design drift loss rate in gallon lost/gallon of recirculating cooling water = 1.0 E^{-5} [Origin: NOC No. EFSEC/2017-01, conditions 1, 3 and 4; PSD No. EFSEC/2001-01, AMENDMENT 5, condition 9 & 10]	Cooling Tower	None

	[Authority: WAC 173-401-600(1)(c)]		
AR 5.2	**Cooling Tower O&M Plan**: GHE must implement a plan for maintaining cooling tower water quality. The plan must include procedures for cooling tower chemical use, operating limits for free chlorine levels, schedule for testing free chlorine levels, and test methods. [Origin: NOC No. EFSEC/2017-01, condition 6] [Authority: WAC 173-401-600(1)(c)]	Cooling Tower	None

VI. MONITORING AND RECORDKEEPING (M)

M1. General Recordkeeping Requirements:

a) **Retention.** All records required by this Permit must be retained and made available when requested for no less than five years, unless specified otherwise (e.g. Acid Rain, GHG) from the date they were generated. [Authority: WAC 173-401-615(2)(c)]

b) **Monitoring Records.** Records for required monitoring must include, as applicable:

- **i)** The required monitoring data in units and averaging times that can be compared to the associated emissions limit or required operating standard;
- **ii)** Except for data recorded by an automated system, the date and name of the person making the record entry;
- **iii)** The date, place as defined in the permit, and time of sampling or measurements;
- **iv)** The date(s) any analyses was performed;
- **v)** The company or entity that performed the analyses;
- **vi)** The analytical techniques or methods used;
- **vii)** The results of such analyses;
- **viii)** The operating conditions existing at the time of sampling or measurement; and,
- **ix)** Support information for continuous monitoring systems (CMS) and continuous emissions monitoring systems (CEMS) including all quality assurance and quality control (QAQC) records, maintenance records, certification records, and copies of all associated CEMS or CMS reports required by this Permit. [Authority: WAC 173-401-615(2)(a)]

c) **Records Supporting Non-Operation.** A contemporaneous record verifying an emissions unit did not combust fuel is required to support the absence of required monitoring records during the specific time period the emissions unit did not operate. [Origin: N/A - gap filling monitoring]

d) **Record of Changes.** A record describing changes made at the source is required for any changes that resulted 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. [Origin: WAC 173-401-615 (2)(b), and WAC 173-401-724(5)]

e) **Startup, Shutdown, Malfunction Records.** The Permittee must maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the CGTs; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device was inoperative. [Origin: 40 CFR 60.7 (b)]

f) **Excess Emissions Records.** For an excess emission event the Permittee intends to claim as unavoidable per conditions P18, the following records must be maintained:

- **i)** Properly signed contemporaneous records or other relevant evidence documenting the Permittee's actions in response to the excess emissions event;
- **ii)** Records documenting whether installed emission monitoring and

pollution control systems were operating at the time of the exceedance. If either or both systems were not operating, information on the cause and duration of the outage; and

iii) Any additional information supporting the claim that the excess emissions were unavoidable. [Origin: WAC 173-400-108]

g) MACT Applicability Records. For each relevant standard or other applicable requirement under 40 CFR Part 63, which the Permittee determines inapplicable, the Permittee must keep record of the applicability determination on site for 5 years after the determination, or until the facility changes its operations to become an affected source, whichever comes first. For the purposes of this condition, a relevant standard is defined as any standard for which:

i) The facility emits or has the potential to emit (without considering controls) one or more hazardous air pollutants regulated by the standard; and,

ii) The facility belongs to the source category regulated by the standard.

iii) The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) demonstrating why the Permittee believes the facility is not subject to the MACT. The analysis (or other information) must be sufficiently detailed to allow EFSEC to make an independent applicability determination for the MACT. If required, the analysis must be performed in accordance with requirements established in the relevant MACT, and the analysis must be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any. [Origin: 40 CFR 63.1(b)(3); 40 CFR 63.10(b)(3)]

h) Acid Rain Program Records. Unless otherwise provided, the owners and operators of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center must keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certification of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents must be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period applies;

iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and

iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program. [Origin: Acid Rain Permit No. <ACID RAIN #>]

i) Required Manuals and Plans. The Permittee must maintain written copies of the

following manuals:

i) Operating and Maintenance manual (O&M manual) required by condition AR 1.12
ii) Start-up, Shutdown, and Malfunction Procedures manual (SSM manual) required by condition AR1.12;
iii) NOx-diluent CEMS Monitoring Plan according to § 75.53 of 40 CFR Part 75, Subpart F;
iv) CO CEMS Quality Assurance Quality Control (QA/QC) program according to 40 CFR Part 60, Appendix F;
v) NH3 CEMS Quality Assurance Quality Control (QA/QC) program according to 40 CFR Part 60, Appendix F; and,
vi) GHG monitoring plan in accordance with WAC 173-441-050(6)(e).

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5]

j) General Fuel Records. The Permittee must keep Safety Data Sheets (SDS) or equivalent monitoring records verifying the calorific value and sulfur content of the diesel and natural gas combusted at the facility. [Origin: N/A - gap filling monitoring]

k) Pollution control Equipment Maintenance Records. The Permittee must monitor and keep a running log of actions taken to keep the SCR and oxidation catalyst units serving the CGTs in good operating condition and repair.

[Origin: "Gap-filling" monitoring]
[Authority: WAC 173-401-615]

M2. Monitoring and Records Required for Greenhouse Gas (GHG) Reporting. The Permittee must monitor Facility operations, fuel rates and composition of fuels as necessary to report GHG emissions to Ecology in accordance with Chapter 173-441 WAC. The following is required:

a) GHG Monitoring Plan. The Permittee must develop a written GHG monitoring plan in accordance with WAC 173-441-050(6)(e). The Permittee must revise the GHG monitoring plan as needed to reflect changes in processes, monitoring instrumentation, and quality assurance procedures; or to improve procedures for the maintenance and repair of monitoring systems to reduce the frequency of monitoring equipment downtime.

b) Monitoring Equipment Maintenance. If needed to monitor fuel consumption, flow meters and other measurement devices used to measure fuel feed rates, process steam flow rates, or feedstock flow rates to provide data to perform the GHG emissions calculations must be calibrated according to the procedures specified in WAC 173-441-050(8).

c) Records. The Permittee must maintain records in accordance with WAC 173-441-050. Required records must be retained for at least at least 10 years from the date of submission of the annual GHG report for the reporting year in which the record was generated. At a minimum, the Permittee must retain the following:

i) A list of all units, operations, processes, and activities for which GHG emissions were calculated.
ii) The data used to calculate the GHG emissions for each unit, operation, process, and activity, categorized by fuel or material type. These data include, but are not limited to, the following information:
    1. The GHG emissions calculations and methods used, as required by WAC 173-

441-120.
2. Analytical results for the development of site-specific emissions factors.
3. The results of all required analyses for high heat value, carbon content, and other required fuel or feedstock parameters.
4. Any Facility operating data/process information used for the GHG emission calculations.

iii) Copies of the annual GHG reports.

iv) Missing data computations. For each missing data event, also retain a record of the cause of the event and the corrective actions taken to restore malfunctioning monitoring equipment.

v) The GHG Emissions Monitoring Plan required by condition M2a.

vi) The results of all required certification and quality assurance tests of continuous monitoring systems, fuel flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.

vii) Maintenance records for all continuous monitoring systems, flow meters, and other instrumentation used to provide data for the GHGs reported under this chapter.

[Origin: WAC 173-441-050(6) (State only)]
[Authority: WAC 173-401-615]

M3. Required Emergency Engine Records. The following records must be maintained for Emergency Engines:

a) Engine operation and maintenance records verifying the engine has been operated, maintained, and repaired in a manner consistent with the manufacturer's emissions-related specifications;

b) A copy of the manufacturer's recommendations for maintaining the engine.

c) Total hours of operation of each engine; and,

d) Total hours of maintenance testing.

[Origin: 40 CFR 63 Subpart ZZZZ, §63.6655 (f) and PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 7.1.1 and 8.1.1]
[Authority: WAC 173-401-615]

M4. Monitoring Air Impacts Detrimental or a Nuisance to Persons orProperty:

The Permittee must monitor all air quality related complaints directed to the facility as follows:

a) The Permittee must provide an automatic phone recording system or an onsite contact person available to the general public for filing a complaint whenever the facility is operating.

b) The Permittee must maintain a record of air quality related complaints, which must include, as applicable, the following information:

i) Description of the complaint.

ii) Date and time the alleged impact was first noticed.

iii) Date and time the alleged impact was last noticed.

iv) Location where the alleged impact was experienced.

v) Name and phone number of caller.

vi) The Permittee's assessment of the validity ofthe complaint.
vii) Description of any corrective action taken.

[Origin: N/A - gap filling monitoring]
[Authority: WAC 173-401-615(1)(b)&(c)]

M5. CGT Requirements for Continuous Emission Monitoring Systems (CEMS):

a) The NOx-diluent CEMS for NOx compliance shall meet the requirements contained in 40 CFR 75, Emissions Monitoring.

b) CEMS for ammonia shall meet the requirements contained in 40 CFR, Part 63, Appendix A, Reference Method 301, Validation Protocol, and 40 CFR, Part 60, Appendix F, Quality Assurance Procedures, or other EFSEC-approved performance specifications and quality assurance procedures.

c) CEMS for CO shall meet the requirements contained in 40 CFR, Part 60, Appendix B, Performance Specification 4 or 4A, and in 40 CFR, Part 60, Appendix F, Quality Assurance Procedures.

d) Continuous Opacity Monitoring Systems shall meet the requirements contained in 40 CFR Part 60, Appendix B, Performance Specification 1 and in 40 CFR, Part 60, Appendix F, Quality Assurance Procedures.

e) Continuous emission and opacity monitors must meet the requirements of 40 CFR 60.13, except that the term "applicable subpart" as used in 40 CFR 60.13 means this permit. Monitors shall be capable of determining emissions during start-up, shutdown, and periods of malfunction.

f) Stack flows for calculating mass emissions must be determined in accordance with the following. Natural gas combusted in the CGT's and boiler must be sampled and analyzed based on the sampling and analysis frequencies established in condition M8 for composition using Universal Oil Products (UOP) Laboratory Test Method 539-97 "Gas Analysis by Gas Chromatography" or equivalent. The gas composition must be used to determine the heat content of the gas in terms of British thermal unit, high heat value, per standard cubic foot (Btu/scf) and to determine the EPA Method 19 Fd factor for the gas. An alternative method to EPA Method 19 can be used to determine the Fd factor if preapproved

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 18]
[Authority: WAC 173-401-615]

M6. Auxiliary Boiler Opacity Monitoring

Ongoing compliance with the Auxiliary Boiler opacity limit must be monitored as follows:

a) A certified opacity reader must survey the Auxiliary Boiler stack daily when it operates to determine if any opacity is present. Auxiliary Boiler opacity surveys must be conducted as follows:

i) Surveys must be conducted from a location with a clear view of the Auxiliary Boiler stack and where the sun is not directly in the observer's eyes.

ii) Unless the Auxiliary Boiler is not scheduled to operate that day or is down for maintenance, surveys must be performed during daylight hours (from 9:00 am to 4:00 PM) and when the Auxiliary Boiler is operating.

iii) Any visible emissions other than uncombined water must be recorded as a positive reading.

iv) If it is not possible to conduct the survey due to inclement weather conditions the surveyor must note this in the records.

b) If opacity is not observed over the course of seven days, the frequency for surveying the boiler stack may change to monthly when operating.

c) If the opacity reader detects visible emissions, the Permittee must promptly investigate the cause of the emissions and repair the problem or perform EPA Method 9 observations for determining compliance.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 6.6.3 and 18.5]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M7. Opacity Monitoring for the Emergency Generator Engine.

Ongoing compliance with the opacity limit applying to Emergency Generator Engine must be monitored as follows:

a) Weekly, a certified opacity reader must survey and record if opacity is present from the engine whenever the engine is operated for testing and after the engine achieves normal operating temperature.

b) If opacity is observed, then Method 9 readings must be performed immediately or the next time the engine is started.

c) Survey frequency can be reduced to monthly once four readings without opacity are observed.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 7.5.2]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M8. Monitoring Natural Gas Use and Composition.

Composition and the actual hourly rate of natural gas combusted by each Duct Burner, Turbine and Auxiliary Boiler must be monitored as follows:

a) **Facility-wide Monitoring.** The Permittee must record monthly and report to EFSEC on a quarterly basis the quantity, heat value, and sulfur content of the natural gas burned at the facility, and purchase records.

b) **Requirement to Monitor Natural Gas Combustion.** The actual hourly rates of natural gas combusted by each Duct Burner, Turbine, and the Auxiliary Boiler in terms of standard cubic feet per hour (or equivalent) must be continuously monitored using in-line fuel flowmeters per the methods in 40 CFR Part 75, Appendix D, Section 2.1.

c) **Gas Composition.** The natural gas combusted at the facility must be sampled and analyzed at least once per calendar month for composition using Universal Oil Products (UOP) Laboratory Test Method 539-97 "Gas Analysis by Gas Chromatography," or an equivalent method approved by EFSEC. An alternative method to section 12.3.2 of EPA Method 19 can be used to determine the Fd factor if pre-approved by EFSEC. The gas composition must be used to determine:

i) The heat content of the gas in terms of British thermal unit, higher heat value, per standard cubic foot (Btu/scf); and

ii) The dry basis fuel factor (Fd) for the natural gas in terms of dry standard cubic feet per million Btu heat input (dscf/MMBtu, heat input) according to section 12.3.2 of EPA Method 19.

iii) Sulfur content of the natural gas must be determined at least once per calendar

month by sampling the natural gas combusted and analyzing samples for total sulfur content per the method specified in 40 CFR Part 75, Appendix D for high variability. Any other analysis method listed in 40 CFR Part 75, Appendix D may be used once approved by EFSEC. Valid sulfur test results from the previous month, or anaverage of valid sulfur data approved by EFSEC may be used when monthly sampling and analysis of the natural gas is inconclusive or results in invalid data.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 5.3.7 and 18.6; 40 CFR Part 60, Subpart Dc, §60.48c(g); and 40 CFR Part 75, Appendix D, Section 2.1]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M9. Calculating CGT Pollutant Mass Rates (PMR).
The following applies:

- **a)** Average and total PMRs for determining compliance with each limit must be calculated consistent with calculation methodologies prescribed in PSD Amendment 5, 40 CFR Part 60 and 40 CFR Part 75, as applicable. Calculation methodologies including specific equations, parameters, and coefficients used for monitoring compliance with each emissions limit must be documented in a written Emissions Calculation Protocol. The Emissions Calculation Protocol must be maintained and made available to EFSEC when requested.
- **b)** **Rolling 12-Month Totals.** Rolling 12-month total emissions must be calculated monthly based on the total monthly emissions from each permitted unit summed for the preceding 12 months. The actual emissions must be based on CEMS, where installed, mass balance and emission factor calculations for SO2 and H2SO4, and emission factors for other pollutants and emission units where CEMS are not installed.
- **c)** **H2SO4 to SO2 Conversion Ratios.** The unit-specific ratios of H2SO4 to SO2 must be determined for each CGT based on the most recent stack test results using EPA Reference Methods 8, CTM013, 6C, or 8A, or an equivalent method approved by EFSEC. Stack testing must be performed at each exhaust stack at 5-year intervals between the months of November – March (unless otherwise approved by EFSEC) at representative maximum heat input rate.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 10]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M10. Monitoring Compliance with Auxiliary Boiler SO_2 Limit.
Ongoing compliance with the Auxiliary Boiler SO_2 PMR limit must be determined monthly by mass-balance calculations using the:

- **a)** Monthly fuel consumption records for the auxiliary boiler;and,
- **b)** Sulfur content of the natural gas per condition M8.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 6.3]
[Authority: WAC 173-401-615(1)(a-c)]

M11. Monitoring Compliance with CGT Emissions Limits for Start-ups and Shutdowns (SU/SD).
Ongoing compliance with the SU/SD limits must be monitored by determining the total emissions in pounds during each SU/SD event as follows:

- **a)** CO and NOX must be determined based on the CEMS measurements and the amount of natural gas combusted during each event.
- **b)** VOC must be calculated using a VOC emission factor of 216 lb/startup/shutdown/CGT. The VOC emission factor accounts for combined VOC emissions during start-up and shutdown.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 11]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M12. Monitoring Compliance with Annual Emissions Limits.
Ongoing compliance with annual emissions limits are to be determined monthly as follows:

- **a)** 12-month total emissions must be calculated monthly based on the total monthly emissions from each permitted unit summed for the preceding 12 months.
- **b)** The actual emissions must be based on CEMS, where installed, mass balance and emission factor calculations for SO2 and H2SO4, and emission factors for other pollutants and emission units where CEMs are not installed.
- **c)** For the CGTs, annual emissions must include emissions from start-up and shutdown events and CGT start-up emissions are equally apportioned between the two turbines.
- **d)** PM and PM10 are assumed to be equal.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 10]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b)&(c)]

M13. Relative Accuracy Test Audits (RATA) for NOx-diluent, NH3, and CO Continuous Emission Monitoring Systems. Relative Accuracy Test Audits (RATA) for NOx-diluent, NH3, and CO Continuous Emission Monitoring Systems must be performed as follows:

- **a)** RATA testing is to be performed at the calendar year/calendar quarter frequency required by the quality assurance procedures contained in:
  - **i)** Requirements for NOx-diluent monitors from 40 CFR 75, Emissions Monitoring;
  - **ii)** Requirements for CO monitors from 40 CFR, Part 60, Appendix B, Performance Specification 4 or 4A, and in 40 CFR, Part 60, Appendix F, Quality Assurance Procedures; and,
  - **iii)** Requirements for NH3 monitors from PPS-001.
- **b)** The testing must be based on "QA operating quarters" as that term is defined in 40 CFR §72.2.
- **c)** A RATA is to be performed for all pollutants measured by CEMs as required by 40 CFR Part 75, Appendix B, Section 2.3, including minimum frequency of once every eight calendar quarters.
- **d)** A test plan must be prepared and submitted to EFSEC and Olympic Region Clean Air Agency (ORCAA) for review at least 30 days prior to any RATA test:
  - **i)** The test plan must cover all pollutants required to be monitored during that RATA test.

ii) The test plan must include the proposed dates of the testing.

iii) The Permittee must revise the test plan to address comments provided by EFSEC or ORCAA.

e) A report of the results of the RATA and other emission testing must be submitted to EFSEC and ORCAA within 45 days of completing the test.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, condition 19]
[Authority: WAC 173-401-615(1)(a) and WAC 173-401-615(1)(b) &(c)]

VII. REPORTING (R)

R1. Certification of Reports. Any application form, report, or compliance certification submitted to EFSEC or the U.S. Environmental Protection Agency Region 10 (EPA) under requirements of this AOP must contain certification by a responsible official of truth, accuracy, and completeness. This certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the submittal are true, accurate and complete. Where an applicable requirement requires reporting more frequently than once every six months, the responsible official's certification need only be submitted once every six months, covering all required reporting since the date of the last certification.

[Origin: WAC 173-401-630(1)]
[Authority: WAC 173-401-615(3)]

R2. Annual Compliance Certifications. The Permittee must submit to EFSEC and EPA an Annual Compliance Certification report, which must certify the status of compliance with respect to all AOP conditions in accordance with WAC 173-401-630(5)(d). Annual Compliance Certification Reports must be submitted to EFSEC and EPA by April 15th each year and must certify the status of compliance over the previous January through December period. The reports must be certified by a responsible official in accordance with condition R1. Annual Compliance Certification reports must include:

- **a)** Identification of each term or condition of the AOP that is the basis of the certification.
- **b)** Statement of compliance status;
- **c)** Whether compliance was continuous or intermittent;
- **d)** Method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615;
- **e)** Such other facts as EFSEC may require to determine the compliance status of the source; and,
- **f)** Such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the FCAA.

[Origin: WAC 173-401-630(5)]
[Authority: WAC 173-401-615(3)]

R3. Semi-annual Monitoring Reports. Consistent with WAC 173-401-615(3) the Permittee must submit to EFSEC by October 18th and April 15th for the six-month periods January through June and July through December respectively, a report on the status of all monitoring requirements. All instances of deviation from AOP requirements must be clearly identified. The semi-annual report must contain a certification of any reports submitted during the semi-annual period that have not already been certified. The certification must be consistent with WAC 173- 401-520.

[Origin: WAC 173-401-615(3)(a)]
[Authority: WAC 173-401-615(3)]

R4. Quarterly Reports. CEMS and process data must be submitted quarterly, in written form (or electronic if permitted by the EFSEC) within 30 days of the end of each calendar quarter to EFSEC as follows:

a) Format:
- **i)** For NOx, the format of the data in the quarterly reports must match that required for demonstrating compliance with the Title IV Acid Rain program reporting requirements.
- **ii)** For all other pollutants and process data, the format of the data in the quarterly reports must be in a format approved by EFSEC.

b) Quarterly Reports must include at the following:
- **i)** Process or control equipment operating parameters required to be monitored;
- **ii)** The hourly maximum and average emissions monitored, in units of each standard, for each pollutant monitored;
- **iii)** The duration and nature of any monitor downtime;
- **iv)** Results of any monitor audits or accuracy checks; and,
- **v)** Excess emissions and monitoring system performance reports for all continuous monitoring devices (CMS, CEMS and COMS) as required under 40 CFR, § 60.7(c).

c) For each occurrence of monitored emissions in excess of the limits in this AOP, the quarterly emissions report must also include the following:
- **i)** For parameters subject to monitoring and reporting under the Title IV, Acid Rain program, the reporting requirements in that program shall govern excess emissions report content.
- **ii)** For all other pollutants:
  - (1) The time of the occurrence;
  - (2) Magnitude of the emission or process parameters excess;
  - (3) The duration of the excess;
  - (4) The probable cause;
  - (5) Corrective actions taken or planned; and,
  - (6) Any other agency contacted.

[Origin: PSD No. EFSEC/2001-01, AMENDMENT 5, conditions 20, 21 and 22]
[Authority: WAC 173-401-615(3)]

R5. Reporting Deviations from AOP Conditions. The Permittee must promptly report any deviations from AOP requirements, including those attributable to upset and malfunction conditions as defined in this AOP. The following conditions apply:

a) **Prompt Reporting.** For purposes of this AOP, submitting a report "promptly" means the following:
- **i)** **Potential Threat to Human Health or Safety:** If the deviation presents a potential threat to human health or safety, "promptly" means as soon as possible but no later than 12 hours after discovery of the deviation;
- **ii)** **Other Deviations:** For other deviations, "promptly" means as soon as possible but no later than 30 days after the end of the month during which the deviation was discovered. [Origin: WAC 173-401-615(3)(b)]

b) **Deviation Report Content.** Permit deviation reports must include:
- **i)** Identification of the emission unit(s) involved;
- **ii)** The duration of the event including the beginning and end times;
- **iii)** For emission and process parameter excesses, the magnitude of the excess;

iv) The probable cause of the deviation;
v) Corrective actions taken or planned; and,
vi) Preventive measures taken. [Origin: WAC 173-401-615(3)(b)]

c) **Reporting Unavoidable Excess Emissions.** The deviation report may include demonstration that excess emissions were unavoidable due to start-up, shutdown orupset conditions consistent with the requirements of conditions P18. [Origin: WAC 173-400- 107(3)]

[Origin: listed by sub-condition]
[Authority: WAC 173-401-615(3)]

R6. Washington Requirements for Excess Emissions Reporting (WAC173-400-108):

a) **Applicability:**
i) Condition R6 is a State-only requirement and not federally enforceable.

b) **Notify EFSEC.** The Permittee must notify EFSEC of excess emissions as follows:
i) When excess emissions represent a potential threat to human health or safety, the owner or operator must notify the permitting authority by phone or electronic means as soon as possible, but not later than **twelve hours** after the excess emissions (deviation) were discovered per condition R5.
ii) For all other excess emissions, the Permittee must notify EFSEC in a report no later than 30 days after the end of the month during which the excess emissions (deviation) were discovered per condition R5.
iii) However, notice of emergencies that do not pose a potential threat to human healthor safety must be submitted within two working days from the time when emission limitations were exceeded due to the emergency, or shorter periods of time specified in an applicable requirement.

c) **Excess Emissions Report Required.** The owner or operator must report all excess emissions to the permitting authority according to conditionR5.

d) **Unavoidable Excess Emissions.** To claim emissions as unavoidable under condition P18, the report must contain the following in addition to the information required under condition R5:
i) Properly signed contemporaneous records or other relevant evidence documentingthe owner or operator's actions in response to the excess emissions event;
ii) Information on whether installed emission monitoring and pollution control systems were operating at the time of the exceedance. If either or both systems were not operating, information on the cause and duration of the outage; and
iii) Any additional information requested by EFSEC to support the claim that the excess emissions were unavoidable.

[Origin: WAC 173-400-108]
[Authority: WAC 173-401-615(3)]

R7. Notification of Complaint Received. The Permittee must notify EFSEC byphone call, e-mail or in writing of any complaint received in connection with a term or condition of this AOP as soon as possible, but no later than one week from the time the complaint was received. The notification must include a short description of the complaint, time it

was received, actions taken, actions planned and preliminary assessment.

[Origin: condition M3]
[Authority: WAC 173-401-615(3)]

R8. Annual Inventory Report. On an annual basis, the Permittee must submit an inventory of actual emissions emitted during the previous calendar year. The inventory must be submitted to EFSEC within 30 days of receipt of the standard inventory reporting forms. The inventory must be accompanied by all associated calculations and data used in calculating the emissions.

[Origin: WAC 173-400-105(1)]
[Authority: WAC 173-401-615(3)]

R9. Source Test Plans. The Permittee must notify EFSEC in writing at least 30 days prior to any stack emissions testing (Source Test) and provide EFSEC an opportunity to review the Source Test Plan and to observe the test. The Source Test Plan must describe the proposed source test methods, operational conditions proposed for the test, and provisions for monitoring source operation during the test.

[Origin: WAC 173-400-105(4)]
[Authority: WAC 173-401-615(3)]

R10. Source Test and RATA Reports. Reports of all required source or emissions testing and RATA of the CGTs or auxiliary boiler must be submitted to EFSEC within 45 days after test completion.

[Origin: 40 CFR 60.8, WAC 173-400-105(4)]
[Authority: WAC 173-401-615(3)]

R11. State Greenhouse Gas (GHG) Reporting. The Permittee is subject to the requirement to report greenhouse gas (GHG) emissions to Ecology in accordance with Chapter 173-441 WAC if annual facility wide emissions of carbon dioxide equivalents (CO_2e) are 10,000 metric tons per year or more from all source categories listed in WAC 173-441-120. The following requirements apply:

- **a)** Once the facility emits 10,000 metric tons of GHGs or more per calendar year, the Permittee must report emissions of GHGs to Ecology annually thereafter unless the Permittee is allowed to discontinue reporting as allowed by WAC 173-441-030(5) and the specified notice is submitted to Ecology.
- **b)** To calculate GHG emissions, the Permittee must include all GHGs listed in Table A-1 of WAC 173-441-040, including those emitted from the combustion of biomass, using equation A-1 from WAC 173-441-030(1)(b)(iii).
- **c)** Reports must meet the requirements of WAC 173-441-050, and include the annual emissions of the GHGs listed in WAC 173-441-040 from source categories listed in WAC 173-441-120.
- **d)** The annual GHG report must be submitted electronically in accordance with the requirements of WAC 173-441-050 and 173-441-060 and in a format specified by Ecology.

e) GHG emissions reports are due to Ecology:

i) No later than March 31 of each calendar year for GHG emissions in the previous calendar year for facilities required to report GHG emissions to the Administrator under 40 C.F.R. Part 98;

ii) No later than October 31st of each calendar year for GHG emissions in the previous calendar year for facilities not required to report GHG emissions to the Administrator under 40 C.F.R. Part 98.

f) All requests, notifications, and communications to Ecology pursuant to GHG emissions reporting, other than submittal of the annual GHG report, must be submitted to the following address:

Greenhouse Gas
Report Air Quality
Program Department
of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

g) The Permittee must submit a revised annual GHG report within 45 days of discovering that an annual GHG report previously submitted contains one or more substantive errors. A substantive error is an error that impacts the quantity of GHG emissions reported or otherwise prevents the reported data from being validated or verified. The revised report must correct all substantive errors.

h) Ecology may notify the Permittee in writing that an annual GHG report previously submitted contains one or more substantive errors. Such notification will identify each such error. The Permittee must, within 45 days of receipt of the notification, either resubmit the report that, for each identified substantive error, corrects the identified substantive error (in accordance with the applicable requirements of this AOP) or provide information demonstrating that the previously submitted report does not contain the identified substantive error or that the identified error is not a substantive error.

[Origin: Chapter 173-441 WAC (State only)]
[Authority: WAC 173-401-615(3)]

VIII. PERMIT SHIELD CONDITIONS (S)

S1. Permit Shield. Compliance with an AOP condition shall be deemed compliance with the applicable requirements upon which that condition is based, as of the date of permit issuance.

The permit shield does not apply to any insignificant emissions units or activity designated under WAC 173-401-530.

[Origin: N/A]
[Authority: WAC 173-401-640(1)]

S2. Inapplicable or Exempt Requirements. The requirements shown in Table 6, as of the date of permit issuance, have been determined not to apply to the corresponding emissions units indicated due to either inapplicability of the requirement or an exemption.

Commencing the date this AOP is issued, the AOP shield shall cover the requirements specified in Table 6 with respect to the specific emissions units indicated, unless applicability of the requirement is triggered by an action or change after the date the AOP was issued.

[Origin: N/A]
[Authority: WAC 173-401-640(2)]

S3. Exclusions. Nothing in this AOP shall alter or affect the following:

- **a)** The provisions of Section 303 of the FCAA (emergency orders), including the authority of the administrator under that section,
- **b)** The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of AOP issuance,
- **c)** The applicable requirements of the acid rain program, consistent with section 408(a) of the FCAA,
- **d)** The ability of EPA to obtain information from a source pursuant to section 114 of the FCAA, or
- **e)** The ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in chapter 252, Laws of 1993.

[Origin: N/A]
[Authority: WAC 173-401-640(4)]

TABLE 6: RELEVANT REQUIREMENTS DETERMINED INAPPLICABLE OR EXEMPT

Note: The requirements listed in the following table include only those requirements for which inapplicability must be based on a determination or comparison of the size, age, emissions or other characteristic of an emission unit with respect to applicability criteria and threshold contained in the requirement. All other requirements are considered obviously inapplicable to the facility and are not included in the table below.

Requirement	Emissions Unit	Exempt or Inapplicable	Brief Description of Requirement	Basis
WAC 173-400-100	Facility-wide	Inapplicable	**Registration Required:** Annual Registration is required for regulated sources of emissions, excluding sources subject to the operating permit program	The facility is subject to the operating permit program.
WAC 173-400-040(4)(b)	Facility-wide	Inapplicable	**Fugitive Emissions (Non-attainment requirements):** Emission units identified as significant contributors to non-attainment must use reasonable and available control methods to control emission of contaminants for which the area is designated non-attainment.	There are no non-attainment areas within Grays Harbor County or neighboring counties.
WAC 173-400-040(9)(b)	Facility-wide	Inapplicable	**Fugitive Dust (Non-attainment requirements):** Fugitive dust sources identified as significant contributors to PM10 non-attainment must apply RACT.	There are no non-attainment areas within Grays Harbor County or neighboring counties.

Chapter 173-435 WAC	Facility-wide	Inapplicable	**Emergency episode plan requirements**	The facility has not been requested to prepare such a plan.
40 CFR Part 68	Facility-wide	Inapplicable	**Risk Management Programs:** Requirements for Title V sources.	40 CFR Part 68 applies to any facility that has more than a threshold quantity of a regulated substance in a process, as determined under §68.115. GHE does not use or store any materials above the threshold quantities listed in 40 CFR Part 68. This is documented in GHE's AOP application.
WAC 173-401-635	Facility-wide	Inapplicable	**Temporary Title V Sources:** No "affected source" as defined in WAC 173-401-200(1) shall be permitted as a temporary source [WAC 173-401-635].	WAC 173-401-635 provides that the permitting authority may issue a single AOP authorizing emissions from similar operations at multiple temporary locations, except for "affected sources." Since this AOP is for a single location, this provision does not apply.
40 CFR Part 98 Mandatory Greenhouse Gas Reporting (Federal)	Facility-wide	Not an applicable requirement under the state and federal Clean Air Acts	**Federal Mandatory Greenhouse Gas Reporting Rule.** Establishes requirements for reporting emissions of GHGs.	These requirements are not pursuant to either the state or federal Clean Air Acts and, therefore, are not "Applicable Requirements" for purposes of Title V.

Requirement	Emissions Unit	Exempt or Inapplicable	Brief Description of Requirement	Basis
40 CFR Part 60 Subpart GG	CGTs	Inapplicable	Subpart GG—Standards of Performance for Stationary Gas Turbines	According to the Washington Department of Ecology (Ecology), as documented in the Fact Sheet for PSD Amendment 5, GHE's AGP upgrades triggered applicability of the combustion turbine standards in 40 CFR Part 60, Subpart KKKK (Subpart KKKK). Under § 60.4305 of Subpart KKKK it states, "Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this part." Therefore, the requirements under Subpart GG do not apply to the combustion turbines at GHE. It also states, "Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part."
40 CFR Part 60 Subpart Da	Heat Recovery Steam Generators and Duct Burners	Inapplicable	Subpart Da – Standards of Performance for Electric Utility Steam-Generation Units	According to the Washington Department of Ecology (Ecology), as documented in the Fact Sheet for PSD Amendment 5, GHE's AGP upgrades triggered applicability of the combustion
40 CFR Part 60 Subpart Db	Heat Recovery Steam Generators and	Inapplicable	Standards of Performance for Industrial-Commercial-Institutional Steam Generating	

	Duct Burners		Units	turbine standards in 40 CFR Part 60, Subpart KKKK (Subpart KKKK). Under § 60.4305 of Subpart KKKK it states, "Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part."
40 CFR Part 60 Subpart Dc	Heat Recovery Steam Generators and Duct Burners	Inapplicable	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	
40 CFR Part 64 Compliance Assurance Monitoring (CAM) Rule	Facility-wide	Inapplicable	Establishes the minimum requirements for compliance assurance monitoring at major sources	• For CGTs, pollutants triggering CAM are continuously monitored. • For the Auxiliary Boiler, pre-controlled emissions of controlled air pollutants (NOx) are less than the CAM

PERMIT ATTACHMENTS

Permit attachments are part of the associated Air Operating Permit (AOP) and may contain applicable requirements that apply as specified by referencing conditions.

Attachment 1: ACID RAIN PERMIT

No <ACID RAIN #>
Issued by the Washington State Energy Facility Site Evaluation Council

Issued to: **Grays Harbor Energy Center,**
Washington Operated by: Grays Harbor Energy LLC

Address:	Grays Harbor Energy Center 401 Keys Road Elma, WA 98541-91491
ORIS code:	7999
Affected units:	Combustion Turbine Generator #1 (CTG1) Combustion Turbine Generator #2 (CTG2)
Effective:	This Acid Rain permit, as part of the Grays Harbor Energy Center Title V permit, will become effective upon the effective date of the Title V permit June 17, 2020. The Acid Rain Permit shall have a permit term ending on June 17, 2025 (the expiration date of Title V Permit No. EFSEC/94-1-AOP).

Acid Rain Permit Contents

1) Statement of Basis

2) SO2 allowances allocated under this permit and NOX requirements for each affected unit.

3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions as per WAC 173-406-501, "Acid Rain Permit Contents" as adopted by WAC 463-78.

4) The permit application submitted for this source. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application and in WAC 173-406-106 "Standard Requirements" as adopted by WAC 463-78.

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1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with section 005 of Washington Administrative Code (WAC) 463-78 "General and Operating Permit Regulations for Air Pollution Sources," which adopts 173-406 "Acid Rain Regulation" and WAC 173-401 "Operating Permit Regulation," by reference, the Washington State Energy Facility Site Evaluation Council (EFSEC) issues this permit pursuant to WAC 463-78. WAC 173-406 is based on the provisions of Title 40 Code of Federal Regulations (CFR) parts 72-76, which is part of the requirements established pursuant to Title IV of the Clean Air Act, 40 U.S.C.

7401, et seq., as amended by Public Law 101-549 (November 15, 1990).

In accordance with WAC 173-406-103(1)(c), Combustion Turbine Generator #1(CTG1) and Combustion Turbine Generator #2 (CTG2) are "utility units" because they serve generators greater than twenty-five (25) MWe and do not qualify for any of the exemptions provided under WAC 173-406-103(2). As such, they are subject to the acid rain requirements under Chapter 173-406 WAC.

2) SO_2 Allowance Allocations and NO_X Requirements for Each Affected Unit

		2010	After 2010
CT1 & CT2 Combined	SO_2 allowances held as of January 31, 2010	20[a]	To be determined
	Acid Rain NO_X limit	N/A[b]	N/A[b]

This Acid Rain Permit shall not be construed to exempt or exclude an affected unit from compliance with any other provisions of the Clean Air Act consistent with 40 CFR 72.9(h) and WAC 173-406-106(8) as adopted by WAC 463-78. Additional requirements for this facility include those contained in Prevention of Significant Deterioration permit EFSEC/2001-01 Amendment 5.

Table Footnotes

a Pursuant to 40 CFR 72.9(c)(i) and WAC 173-406-106(3)(a)(i) as adopted by WAC 463-78, this unit is required to hold SO_2 allowances, as of the allowance transfer deadline, in the unit's compliance subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit. Each combustion turbine has the potential to generate up to 14.5 tons per year of SO_2 emissions. According to 40 CFR 72.2, a fraction of a ton equal to or greater than 0.50 is equal to 1.0 ton and a fraction of a ton less than 0.50 is equal to no tons.
Depending on the unit operating hours, each unit could be required to hold between 0 and 14 SO_2 allowances.

b Since this unit is not a coal-fired unit, there are no applicable acid rain NO_X emission limits and a Phase II NO_X permit application is not required. A NO_X limitation is included in PSD permit EFSEC/2001-01 Amendment 5.

3) Comments, Notes and Justifications

This Acid Rain Permit is deemed to incorporate the definition of terms under WAC 173- 406-101 as adopted by WAC 463-78 unless otherwise expressly defined in this permit.

4) Permit Application

The permit application was signed on August 7, 2002. A copy of the application is attached.

Standard Requirements

Permit Requirements

(1) The designated representative of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30 and WAC 173-406-301 as adopted by WAC 463-78; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit.

(2) The owners or operators of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operator to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act, applicable requirements of Title 463 WAC, and other provisions of an operating permit for the Grays Harbor Energy Center.

Sulfur Dioxide Requirements

(1) The owners and operator of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall:

(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  (i) Starting January 1, 2000, an affected unit under WAC 173-406-103(1)(b) as adopted by WAC 463-78; or
  (ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR part 75, an affected unit under WAC 173-406-103(1)(c) as adopted by WAC 463-78.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7, 40 CFR 72.8, WAC 174-406-104 as adopted by WAC 463-78, or WAC 173-406-105 as adopted by WAC 463-78 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such an authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.

(2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
  (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  (ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certification of representation, in accordance with 40 CFR 72.24; provided that the certificate

and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and

(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of the Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall submit the reports and compliance certifications required under the Acid Rain Program, including those under WAC 173-406-800 as adopted by WAC 463-78 and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7, 40 CFR 72.8, WAC 173-406-104 as adopted by WAC 463-78, or WAC 173-406-105 as adopted by WAC 463-78, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act and by the permitting authority pursuant to Revised Code of Washington (RCW) 80.50.150.

(2) Any person who knowingly makes any false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001 and by the permitting authority pursuant to RCW 80.50.150.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) The Grays Harbor Energy Center and each affected unit at the Grays Harbor Energy Center shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to the Grays Harbor Energy Center (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of the Grays Harbor Energy Center and to the affected units at the Grays Harbor Energy Center.

(6) Any provision of the Acid Rain Program that applies to an affected unit at the Grays Harbor Energy Center (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under WAC 173-406-402 (Phase II repowering extension plans) as adopted by WAC 463-78, and 40 CFR part 76, and except with regard to the requirements applicable to a unit with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 40 CFR 75.17, and 40 CFR 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other unit of which they are not the owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of WAC 173-406-100 through 173-406-950 as adopted

by WAC 463-78 and 40 CFR 72, 73, 75, 76, 77, and 78, and regulations implementing section 410 of the Act by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 40 CFR 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affect unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or

(5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

[Origin:40 CFR Part 72]
[Authority: WAC 173-401-600(1)(a)]

Attachment 2: DEFINITIONS

Accuracy (A) The accuracy of the CEMS in percent as determined by the equation in section 5.f through a cylinder gas audit.

Add-on control means a pollution reduction control technology that operates independent of the combustion process.

Administrator means the Administrator of the United States Environmental Protection Agency or the Administrator's duly authorized representative.

Air Emission Testing Body (AETB) means a company or other entity that provides to the owner or operator the certification required by section 6.1.2(b) of appendix A to 40 CFR Part 75.

Automated data acquisition and handling system means that component of the CEMS, COMS, or other emissions monitoring system approved by the Administrator for use in the Acid Rain Program, designed to interpret and convert individual output signals from pollutant concentration monitors, flow monitors, diluent gas monitors, moisture monitors, opacity monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in the measurement units required by 40 CFR Part 75.

Bias means systematic error, resulting in measurements that will be either consistently low or high relative to the reference value.

Bypass operating quarter means a calendar quarter during which emissions pass through a stack, duct, or flue that bypasses add-on emission controls.

Calibration Drift (CD) The difference in the CEMS output reading from a reference value after a period of operation during which no unscheduled maintenance, repair or adjustment took place. The reference value may be supplied by a cylinder gas, gas cell, or optical filter and need not be certified.

Calibration error means the difference between:
(1) The response of a gaseous monitor to a calibration gas and the known concentration ofthe calibration gas;
(2) The response of a flow monitor to a reference signal and the known value of the reference signal; or,
(3) The response of a continuous opacity monitoring system to anattenuation filter and the known value of the filter after a stated period of operation during which no unscheduled maintenance, repair, or adjustment took place.

CEMS precision or precision as applied to the monitoring requirements of 40 CFR Part 75, means the closeness of a measurement to the actual measured value expressed as the uncertainty associated with repeated measurements of the same sample or of different samples from the same process (e.g., the random error associated with simultaneous measurements of a process made by more than one instrument). A measurement technique is determined to have increasing “precision” as the variation among the

repeated measurements decreases.

Centroidal Area means a concentric area that is geometrically similar to the stack or duct cross section and is no greater than 1 percent of the stack or duct cross-sectional area.

Common stack means the exhaust of emissions from two or more units through a single flue.

Continuous Emission Monitoring System means the total equipment required for the determination of a gas concentration or emission rate. The sample interface, pollutant analyzer, diluent analyzer, and data recorder are the major subsystems of the CEMS.

Continuous Opacity Monitoring System (COMS) The total equipment required for determining the opacity of exhaust gases.

Coverage Factor k means, in general, a value chosen on the basis of the desired level of confidence to be associated with the interval defined by $U = ku_C$. Typically, k is in the range 2 to 3. When the normal distribution applies and u_C is a reliable estimate of the standard deviation of y, $U = 2\ u_C$ (*i.e.,* k = 2) defines an interval having a level of confidence of approximately 95%, and $U = 3\ u_C$ (*i.e.,* k = 3) defines an interval having a level of confidence greater than 99%.

Data Recorder means that portion of the CEMS that provides a permanent record of the analyzer output. The data recorder may include automatic data reduction capabilities.

Designated representative means a responsible natural person authorized by the owners and operators of an affected source and of all affected units at the source or by the owners and operators of a combustion source or process source, as evidenced by a certificate of representation submitted in accordance with subpart B of this part, to represent and legally bind each owner and operator, as a matter of Federal law, in matters pertaining to the Acid Rain Program. Whenever the term "responsible official" is used in 40 CFR Part 70, in any other regulations implementing title V of the Act, or in a State operating permit program, it shall be deemed to refer to the "designated representative" with regard to all matters under the Acid Rain Program.

Diluent Analyzer means that portion of the CEMS that senses the diluent gas (*i.e.,* CO_2 or O_2) and generates an output proportional to the gas concentration.

Diluent Gas means a major gaseous constituent in a gaseous pollutant mixture. For combustion sources, CO_2 and O_2 are the major gaseous constituents of interest.

Diluent gas monitor means that component of the continuous emission monitoring system that measures the diluent gas concentration in a unit's flue gas. *Emissions* means air pollutants exhausted from a unit or source into the atmosphere.

EPA as used in this permit EPA shall mean Region 10 of the United States Environmental Protection Agency. All reports required by this permit to be submitted to EPA shall be mailed to the following address:

Part 70 Operating Permit Program
U.S. EPA Region 10, Mail Stop: OAW-150
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

EPA Protocol Gas means a calibration gas mixture prepared and analyzed according to section 2 of the "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards," September 1997, as amended August 25, 1999, EPA-600/R-97/121 (incorporated by reference, see §72.13) or such revised procedure as approved by the Administrator.

Equivalent diameter means a value, calculated using the Equation 1-1 in section 12.2 of Method 1 in 40 CFR Part 60, appendix A, and used to determine the upstream and downstream distances for locating CEMS or CEMS components in flues or stacks with rectangular cross sections.

Excess emissions means emissions of an air pollutant in excess of any applicable emission standard or an emission limit established in a permit or order, including an alternative emission limit.

Facility means any institutional, commercial, or industrial structure, installation, plant, source, or building.

File means to send or transmit a document, information, or correspondence to the official custody of the person specified to take possession in accordance with the applicable regulation. Compliance with any "filing" deadline shall be determined by the date that person receives the document, information, or correspondence.

Fuel flowmeter system means an excepted monitoring system (as defined in this section) which provides a continuous record of the flow rate of fuel oil or gaseous fuel, in accordance with appendix D to 40 CFR, part 75. A fuel flowmeter system consists of one or more fuel flowmeter components, all necessary auxiliary components (e.g., transmitters, transducers, etc.), and a data acquisition and handling system (DAHS).

Gaseous fuel means a material that is in the gaseous state at standard atmospheric temperature and pressure conditions and that is combusted to produce heat.

Generator Output capacity means the full-load continuous rating of a generator under specific conditions as designed by the manufacturer.

Heat input rate means the product (expressed in mmBtu/hr) of the gross calorific value of the fuel (expressed in mmBtu/mass of fuel) and the fuel feed rate into the combustion device (expressed in mass of fuel/hr) and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

Kilowatthour saved or *savings* means the net savings in electricity use (expressed in Kwh) that result directly from a utility's energy conservation measures or programs.

Maximum potential hourly heat input means an hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use appendix D of 40 CFR Part 75 to report heat input, this value should be calculated, in accordance with 40 CFR Part 75, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value should be reported, in accordance with 40 CFR Part 75, using the maximum potential flow rate and either the maximum carbon dioxide concentration (in percent CO_2) or the minimum oxygen concentration (in percent O_2).

Maximum potential NO_X emission rate or MER means the emission rate of nitrogen oxides (in lb/mmBtu) calculated in accordance with section 3 of appendix F of 40 CFR Part 75, using the maximum potential nitrogen oxides concentration (MPC), as defined in section 2.1.2.1 of appendix A of 40 CFR Part 75, and either the maximum oxygen concentration (in percent O_2) or the minimum carbon dioxide concentration (in percent CO_2) under all operating conditions ofthe unit except for unit start-up, shutdown, and upsets. The diluent cap value, as defined in this section, may be used in lieu of the maximum O_2 or minimum CO_2concentration to calculate the MER. As a second alternative, when the NO_X MPC is determined from emission test results or from historical CEM data, as described in section 2.1.2.1 of appendix A of 40 CFR Part 75, quality-assured diluent gas (*i.e.,* O_2 or CO_2) data recorded concurrently with the MPC may be used to calculate the MER. For the purposes of §§75.4(f), 75.19(b)(3), and 75.33(c)(7) in 40 CFR Part 75 and section 2.5 in appendix E to 40 CFR Part 75, the MER is specific to the type of fuel combusted in the unit.

Maximum rated hourly heat input rate means a unit-specific maximum hourly heat input rate (mmBtu/hr or lbs/hr) which is the higher of the manufacturer's maximum rated hourly heat input rate or the highest observed hourly heat input rate.

Missing data period means the total number of consecutive hours during which any certified CEMS or approved alternative monitoring system is not providing quality-assured data, regardless of the reason.

Monitor accuracy means the closeness of the measurement made by a CEMS to the reference value of the emissions or volumetric flow being measured, expressed as the difference between the measurement and the reference value.

Monitor operating hour means any unit operating hour or portion thereof over which a CEMS, or other monitoring system approved by the Administrator under 40 CFR Part 75 is operating, regardless of the number of measurements (*i.e.*, data points) collected during the hour or portion of an hour.

Nameplate capacity means the maximum electrical generating output (expressed in MWe) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings, as listed in the NADB under the data field "NAMECAP" if the generator is listed in the NADB or as measured in accordance with the United States Department of Energy standards if the generator is not listed in the NADB.

Natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that

maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20.0 grains or less of total sulfur per 100 standard cubic feet. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

Ninetieth (90th) percentile means a value that would divide an ordered set of increasing values so that at least 90 percent are less than or equal to the value and at least 10 percent are greater than or equal to the value.

Ninety-fifth (95th) percentile means a value that would divide an ordered set of increasing values so that at least 95 percent of the set are less than or equal to the value and at least 5 percent are greater than or equal to the value.

Operating when referring to a combustion or process source seeking entry into the Opt-in Program, means that the source had documented consumption of fuel input for more than 876 hours in the 6 months immediately preceding the submission of a combustion source's opt-in application under §74.16(a) of 40 CFR Part 75.

Operating permit means a permit issued under 40 CFR Part 70 and any other regulations implementing title V of the Act.

Out-of-control period means any period:
(1) Beginning with the hour corresponding to the completion of a daily calibrationerror, linearity check, or quality assurance audit that indicates that the instrument is not measuring and
recording within the applicable performance specifications; and
(2) Ending with the hour corresponding to the completion of an additional calibration error, linearity check, or quality assurance audit following corrective action that demonstrates that the instrument is measuring and recording within the applicable performancespecifications.

Path CEMS means a CEMS that measures the gas concentration along a path greater than 10 percent of the equivalent diameter of the stack or duct cross section.

Pipeline natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline natural gas contains 0.5 grains or less of total sulfur per 100 standard cubic feet. Additionally, pipeline natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot.

Point CEMS means a CEMS that measures the gas concentration either at a single point or along a path equal to or less than 10 percent of the equivalent diameter of the stack or duct cross section.

Pollutant Analyzer means that portion of the CEMS that senses the pollutant gas and generates an output proportional to the gas concentration.

Pollutant concentration monitor means that component of the continuous emission monitoring system that measures the concentration of a pollutant in a unit's flue gas.

Potential electrical output capacity means the MWe capacity rating for the units which shall be equal to 33 percent of the maximum design heat input capacity of the steam generating unit, as calculated according to appendix D of 40 CFR Part 72.

Precision as applied to the monitoring requirements of 40 CFR Part 75, means the closeness of a measurement to the actual measured value expressed as the uncertainty associated with repeated measurements of the same sample or of different samples from the same process (e.g., the random error associated with simultaneous measurements of a process made by more than one instrument). A measurement technique is determined to have increasing "precision" as the variation among the repeated measurements decreases.

Probationary calibration error test means an on-line calibration error test performed in accordance with section 2.1.1 of appendix B of 40 CFR Part 75 that is used to initiate a conditionally valid data period.

QA operating quarter means a calendar quarter in which there are at least 168 unit operating hours (as defined in this section) or, for a common stack or bypass stack, a calendar quarter in which there are at least 168 stack operating hours (as defined in this section).

Qualified individual (QI) means an individual who is identified by an AETB as meeting the requirements described in ASTM D 7036-04 "Standard Practice for Competence of Air Emission Testing Bodies" (incorporated by reference, see §72.13), as of the date of testing.

Quality-assured monitor operating hour means any unit operating hour or portion thereof over which a certified CEMS, or other monitoring system approved by the Administrator under 40 CFR Part 75, is operating:
(1) Within the performance specifications set forth in 40 CFR Part 75, appendix A and the quality assurance/quality control procedures set forth in 40 CFR Part 75, appendix B, without unscheduled maintenance, repair, or adjustment; and
(2) In accordance with §75.10(d), €, and (f) of 40 CFR Part 75.

Receive or receipt of means the date the Administrator or a permitting authority comes into possession of information or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official log, or by a notation made on the information or correspondence, by the Administrator or the permitting authority in the regular course of business.

Reference method (RM) means any direct test method of sampling and analyzing for an air pollutant as specified in appendix A of 40 CFR Part 60.

Reference value or reference signal means the known concentration of a calibration gas, the known value of an electronic calibration signal, or the known value of any other measurement standard approved by the Administrator, assumed to be the true value for the pollutant or diluent concentration or volumetric flow being measured.
Relative Accuracy (RA): The absolute mean difference between the gas concentration or emission rate determined by the CEMS and the value determined by the RM's plus the 2.5 percent error confidence coefficient of a series of tests divided by the mean of the RM tests or the applicable emission limit.

Sample Interface means that portion of the CEMS used for one or more of the following: sample acquisition, sample delivery, sample conditioning, or protection of the monitor from the effects of the stack effluent.

Span means the highest pollutant or diluent concentration or flow rate that a monitor component is required to be capable of measuring.

Span Value means the calibration portion of the measurement range as specified in the applicable regulation or other requirement. If the span is not specified in the applicable regulation or other requirement, then it must be a value approximately equivalent to two times the emission standard. For spans less than 500 ppm, the span value may either be rounded upward to the next highest multiple of 10 ppm, or to the next highest multiple of 100 ppm such that the equivalent emission concentration is not less than 30 percent of the selected span value.

Stack operating hour means a clock hour during which flue gases flow through a particular stack or duct (either for the entire hour or for part of the hour) while the associated unit(s) are combusting fuel.

Stack operating time means the portion of a clock hour during which flue gases flow through a particular stack or duct while the associated unit(s) are combusting fuel. The stack operating time, in hours, is expressed as a decimal fraction, with valid values ranging from 0.00 to 1.00.

Standard conditions means 68 °F at 1 atm (29.92 in. of mercury).

Substitute data means emissions or volumetric flow data provided to assure 100 percent recording and reporting of emissions when all or part of the continuous emission monitoring system is not functional or is operating outside applicable performance specifications.

Thermal energy means the thermal output produced by a combustion source used directly as part of a manufacturing process but not used to produce electricity.

Unit means a fossil fuel-fired combustion device.

Unit load means the total (*i.e.*, gross) output of a unit or source in any calendar year (or other specified time period) produced by combusting a given heat input of fuel, expressed in terms of:

(1) The total electrical generation (MWe) for use within the plant and for sale; or
(2) In the case of a unit or source that uses part of its heat input for purposes other than electrical generation, the total steam pressure (psia) produced by the unit or source.

Unit operating day means a calendar day in which a unit combusts any fuel.
Unit operating hour means a clock hour during which a unit combusts any fuel, either for part of the hour or for the entire hour.

Unit operating quarter means a calendar quarter in which a unit combusts any fuel.

Unit operating time means the portion of a clock hour during which a unit combusts any fuel. The unit operating time, in hours, is expressed as a decimal fraction, with valid values ranging from 0.00 to 1.00.

Utility unit means a unit owned or operated by a utility:
(1) That serves a generator in any State that produces electricity for sale, or
(2) That during 1985, served a generator in any State that produced electricity for sale.
(3) Notwithstanding paragraphs (1) and (2) of this definition, a unit that was in operation during 1985, but did not serve a generator that produced electricity for sale during 1985, and did not commence commercial operation on or after November 15, 1990 is not a utility unit for purposes of the Acid Rain Program.
(4) Notwithstanding paragraphs (1) and (2) of this definition, a unit that cogenerates steam and electricity is not a utility unit for purposes of the Acid Rain Program, unless the unit is constructed for the purpose of supplying, or commences construction after November 15, 1990, and supplies, more than one-third of its potential electrical output capacity and more than 25 MWe output to any power distribution system for sale.

Volumetric flow means the rate of movement of a specified volume of gas past a cross-sectional area (e.g., cubic feet per hour).

Zero air material means either:
(1) A calibration gas certified by the gas vendor not to contain concentrations of SO_2, NO_x, or total hydrocarbons above 0.1 parts per million (ppm), a concentration of CO above 1 ppm, or a concentration of CO_2 above 400 ppm;
(2) Ambient air conditioned and purified by a CEMS for which the CEMS manufacturer or vendor certifies that the particular CEMS model produces conditioned gas that does not contain concentrations of SO_2, NO_x, or total hydrocarbons above 0.1 ppm, a concentration of CO above 1 ppm, or a concentration of CO_2 above 400 ppm;
(3) For dilution-type CEMS, conditioned and purified ambient air provided by a conditioning system concurrently supplying dilution air to the CEMS; or
(4) A multicomponent mixture certified by the supplier of the mixture that the concentration of the component being zeroed is less than or equal to the applicable concentration specified in paragraph (1) of this definition, and that the mixture's other components do not interfere with the CEM readings.

Zero, Low-Level, and High-Level Values means the CEMS response values related to the source specific span value. Determination of zero, low-level, and high-level values is defined in the appropriate PS in appendix B of this part.

Attachment 3: ABBREVIATIONS

TABLE 1: The following is a list of abbreviations used in this permit.

Administrat	EPA Region X Administrator
AOP	Air Operating Permit
AP-42	EPA Compilation of Emission Factors, AP-42, Fifth Edition, Volume I
AR#	Refers to a specific condition numbered "#" containing an "Applicable
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
CEMS	Continuous Emissions Monitoring System
CGT-#	Refers to specific combined cycle gas turbine unit numbered "#"
CMS	Continuous Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
CO	Carbon monoxide
CPMS	Continuous Parametric Monitoring System
CT-#	Refers to specific combustion turbine unit numbered "#"
DAS	Data Acquisition and System
DB-#	Refers to specific duct burner unit numbered "#"
EFSEC	Washington Energy Facility Site Evaluation Council (a.k.a. the Council)
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
EU-#	Refers to a specific emissions unit numbered "#"
FCAA	Federal Clean Air Act
FGR	Flue Gas Recirculation – means to control NO_X emissions
G#	Refers to a specific "General" permit condition numbered "#"
grain/dscf	Concentration in terms of grains per dry standard cubic feet
HAP	Hazardous Air Pollutant
hp	Horsepower
HRSG	Heat Recovery Steam Generator
IEU-#	Insignificant emission unit numbered "#"
kW	A kilowatt is a unit of electrical power consumption in thousands of watts.
M#	Refers to a specific monitoring term or condition numbered "#"
MW	A megawatt is a unit of electrical power consumption in millions of watts.
MACT	Maximum Achievable Control Technology
MMBtu/hr	Million British Thermal Units per hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NAICS	North American Industry Classification System
NCASI	National Council of the Paper Industry for Air and Stream Improvement,
NH3	Ammonia
NOC	Notice of Construction
NOx	Oxides of Nitrogen
NSPS	New Source Performance Standards (from 40 CFR Part 60)
NSR	New Source Review
O2	Oxygen
O&M	Operations and Maintenance Plan
ORCAA	Olympic Region Clean Air Agency
P#	Refers to a specific administrative permit term or condition numbered "#"
PM	Particulate matter air pollution
PM10	Particulate matter with aerodynamic diameter less than 10 microns

$PM_{2.5}$	Particulate matter with aerodynamic diameter less than 2.5 microns
ppmvd	Parts per million by volume (assumed standard and dry)
PPS-001	Preliminary Performance Specification for Ammonia
PSD	Prevention of Signification Deterioration
PTE	Potential to emit
RACT	Reasonably Available Control Technology
RCW	Revised Code of Washington
Region 10	Region 10 of the U.S. Environmental Protection Agency
RICE	Reciprocating Internal Combustion Engine
R	Refers to a specific reporting condition numbered "#"
SIP	State implementation plan
SIC	Standard Industrial Classification
SCR	Selective Catalytic Reduction – a means to control NO_X emissions
SO_2	Sulfur dioxide
TAP	Toxic Air Pollutant as defined in Chapter 173-460 WAC
tpy	Tons per year
VOC	Volatile Organic Compounds
WAC	Washington Administrative Code

Terms not otherwise defined in this permit have the meaning assigned to them in the referenced regulations.