

**Northwest Pipeline Corporation**

**Chehalis Compressor Station**

**Air Operating Permit**

**SW98-6-R1**

**Final Issued: March 31, 2006**

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Southwest Clean Air Agency  
11815 NE 99<sup>th</sup> Street, Suite 1294  
Vancouver, WA 98682-2454  
Telephone: (360) 574-3058

AIR OPERATING PERMIT #: SW98-6-R1

ISSUED TO:

Northwest Pipeline Corporation  
295 Chipeta Way  
P. O. Box 58900  
Salt Lake City, UT 84158-0900

PLANT SITE:

Northwest Pipeline Corporation  
Chehalis Compressor Station  
156 Meier Road West  
Chehalis, WA 98596

NATURE OF BUSINESS:

Natural Gas Compressor Station

SIC CODE:

4922 [NAICS - 486210]

AIRS NUMBER:

53-041-00051

EFFECTIVE DATE:

March 31, 2006

EXPIRATION DATE:

March 31, 2011

RENEWAL APPLICATION DUE:

September 30, 2010

PERMIT ENGINEER:

\_\_\_\_\_  
Natalia Kreitzer, Air Quality Engineer

\_\_\_\_\_  
Date

REVIEWED BY:

\_\_\_\_\_  
Paul T. Mairose, Chief Engineer

\_\_\_\_\_  
Date

SEAL

ISSUED BY:

\_\_\_\_\_  
Robert D. Elliott, Executive Director

\_\_\_\_\_  
Date

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**I. ABBREVIATIONS**List of Common Abbreviations

Administrator	EPA Region X Administrator
AOP	Air Operating Permit
BACT	Best Available Control Technology
CFR	Code of Federal Regulations
CO	Carbon monoxide
EPA	U.S. Environmental Protection Agency
EU	Emission unit
EU#	Refers to a specific emission unit numbered "#"
FCAA	Federal Clean Air Act
FIRE	Factor Information Retrieval System
G#	Refers to a specific general term and condition numbered "#"
g/hp-hr	Grams per horsepower-hour
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous air pollutant
hp	Horsepower
IEU	Insignificant emission unit
IEU#	Refers to an insignificant emission unit numbered "#"
K#	Refers to a specific recordkeeping requirement numbered "#"
lb/hr	Pounds per hour
lb/MMBtu	Pounds per million British thermal units
M#	Refers to a specific monitoring requirement numbered "#"
MMBtu	Million British Thermal Units
NSR	New source review
NO <sub>x</sub>	Oxides of nitrogen
O <sub>2</sub>	Oxygen
@ X% O <sub>2</sub>	Corrected to X% oxygen content
P#	Refers to a specific standard provision numbered "#"
PM	Particulate matter
PM <sub>10</sub>	Particulate matter less than 10 microns in diameter
PM <sub>2.5</sub>	Particulate matter less than 2.5 microns (µm) in diameter
ppm	Parts per million
ppmv	Parts per million by volume
PTE	Potential to emit
R#	Refers to a specific reporting requirement numbered "#"
RACT	Reasonably Available Control Technology
RCW	Revised Code of Washington
Region 10	Region 10 of the U.S. Environmental Protection Agency
Req #	Requirement number "#"
RPM	Revolutions per minute
SO <sub>2</sub>	Sulfur dioxide
SIP	State Implementation Plan
SWCAA	Southwest Clean Air Agency
TAP	Toxic air pollutants
tpy	Tons per year
VOC	Volatile organic compound
WAC	Washington Administrative Code
WDOE	Washington Department of Ecology

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

## II. REGULATORY BASIS

This Air Operating Permit (AOP) is authorized under the procedures established in WAC 173-401 and Title V of the 1990 Federal Clean Air Act Amendments. The terms and conditions of this permit describe the emissions limitations, operating requirements, ambient monitoring, recordkeeping requirements, and reporting frequencies for the permitted source.

Permit terms and conditions are divided into the following categories: General Terms and Conditions, Operating Terms and Conditions, Monitoring Terms and Conditions, Recordkeeping Terms and Conditions, and Reporting Terms and Conditions. As used in this permit, there is no distinction between "terms" and "conditions." As such, "condition" shall mean the same as "terms and conditions" as referred to in Title V of the 1990 Federal Clean Air Act Amendments.

The conditions required under this permit are determined necessary to assure and provide for certification of compliance with applicable local, state, and federal air pollution regulations and standards. A comprehensive list of local, state, and federal air pollution requirements that currently apply to emissions units and other air pollution sources located at the permittee's facility is provided in Sections V through X. These requirements were determined applicable based on the equipment specifications and regulatory history of each emissions unit as described in the Basis Statement for this permit.

**III. EMISSION UNIT IDENTIFICATION**

<u>Emission Unit</u>	<u>Unit Name</u>	<u>Unit Description</u>
EU-1	Engine	This unit is a Cooper-Bessemer model 14W330C2 turbocharged 14 cylinder, two cycle reciprocating engine-driven compressor rated at 6,350 horsepower, equipped with CleanBurn™ technology. It is used to drive a compressor which provides pressure in natural gas transmission lines. RPM and torque can be varied based on demand with emissions varying accordingly.
EU-2	Turbine	This unit is a mobile Solar Turbines, Inc. Saturn T-1300 portable gas turbine with a net output power of 1,164 horsepower. This unit is mobile and may be relocated to other compressor stations as necessary. Natural gas from the pipeline is run through the turbine compressor where it is compressed to increase pressure and throughput in the natural gas transmission lines.
EU-3	Turbine	This unit is a mobile Solar Turbines, Inc. Centaur 40-T4700S (SOLONOX) gas turbine with a net output power of 4,846 horsepower. The unit is mobile and may be relocated to other compressor stations as necessary. Natural gas from the pipeline is run through the turbine compressor where it is compressed to increase pressure and throughput in the natural gas transmission lines.
EU-4	Turbine	This unit is a mobile Solar Turbines, Inc. Centaur 40-T4700S (SOLONOX) gas turbine with a net output power of 4,846 horsepower. The unit is mobile and may be relocated to other compressor stations as necessary. Natural gas from the pipeline is run through the turbine compressor where it is compressed to increase pressure and throughput in the natural gas transmission lines.
EU-5	Boiler	This unit is a Sellers model C40W, serial no. 4780, gas fired process heater (boiler) with a heat input rate of 1.7 MMBtu per hour. It is used to produce hot water for process heating.
EU-6	Generator	This unit is a Caterpillar 422 kw, 566 hp, engine model 3412SPT, serial number 7DB01021, emergency electrical generator which is natural gas fired. It is used to provide emergency electrical power during power outages.

**IV. PERMIT PROVISIONS****P1. Standard Provisions** WAC 173-401-620(2) - [11/4/93]

- (a) *Duty to comply.* The permittee must comply with all conditions of this Chapter 401 permit. Any permit noncompliance constitutes a violation of Revised Code of Washington (RCW) Chapter 70.94 and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- (b) *Need to halt or reduce activity not a defense.* It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) *Permit actions.* This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- (d) *Property rights.* This permit does not convey any property rights of any sort, or any exclusive privilege.
- (e) *Duty to provide information.* The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permittee or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205.
- (f) *Permit fees.* The permittee shall pay fees in accordance with RCW 70.94.162 as a condition of this permit in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in RCW 70.94.430 and 70.94.431.
- (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 this permit.
- (h) *Severability.* If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.
- (i) *Permit appeals.* This permit or any conditions in it may be appealed only by filing an appeal with the Pollution Control Hearings Board and serving it on the permitting authority within thirty days of receipt of the permit pursuant to RCW 43.21B.310. 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.

- (j) *Permit continuation.* This permit and all terms and conditions contained herein 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.

**P2. Insignificant Emission Unit** WAC 173-401-530(6) - [10/17/02]

Any emissions unit or activity that qualifies as insignificant solely on the basis of provisions in WAC 173-401-530(1)(a) shall not exceed the emissions thresholds specified in WAC 173-401-530(4) until this permit is modified pursuant to WAC 173-401-725.

**P3. Permit Duration** WAC 173-401-610 - [11/4/93], WAC 173-401-710 - [10/17/02]

This permit shall be valid for a fixed term of 5 years. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with WAC 173-401-710(1). All terms and conditions of the permit shall remain in effect after the permit expires if a timely and complete permit application has been submitted. Operation under the terms and conditions of the expired permit will be allowed until SWCAA takes final action on the renewal application.

**P4. Federally Enforceable Requirements** WAC 173-401-625 - [11/4/93]

- (a) All terms and conditions in an air operating permit, including any provisions designed to limit a source's potential to emit, are enforceable by the Administrator and citizens under the FCAA, except as indicated in paragraph (b) below.
- (b) Notwithstanding subsection (a), any terms and conditions included in this permit that are not required under the FCAA or under any of its applicable requirements are specifically designated as "state" or "local" only, and are not federally enforceable under the FCAA. Terms and conditions so designated are not subject to the requirements of WAC 173-401-810.

**P5. Permit Shield** WAC 173-401-640 - [11/4/93]

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements that are specifically identified in this permit as of the date of permit issuance. Nothing in this permit 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 permit 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; and
- (e) The ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as defined in RCW 70.94.030(19).

**P6. Emergency Provision** WAC 173-401-645 - [11/4/93]

An "emergency" as defined in WAC 173-401-645(1) shall constitute an affirmative defense to an action brought for noncompliance with technology based emission limitations if the conditions of WAC 173-401-645(3) are met. Burden of proof lies with the permittee.

**P7. Reopenings for Cause** WAC 173-401-730 - [11/4/93]

This permit shall be reopened and revised under any of the following circumstances:

- (a) Additional applicable requirements become applicable to a major air operating permit source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 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 permit is due to expire, unless the original permit 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 permit;
- (c) The permitting authority or Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
- (d) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

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

**P8. Confidentiality of Records and Information** SWCAA 400-270 - [11/9/03 Local Only]

The permittee is responsible for clearly identifying information that is considered proprietary and confidential prior to submittal to SWCAA. Requests for proprietary and confidential information shall be released only after legal opinion by SWCAA's legal counsel, and notice to the permittee of the intent to release or deny the release of information.

**V. GENERAL TERMS AND CONDITIONS****G1. Report Submittals** WAC 173-401-520 - [11/4/93]  
40 CFR 60.4 - [7/1/02]

All application forms, reports, and compliance certifications must be certified by a responsible official. Certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information contained in the submittal are true, accurate, and complete. All application forms, reports, and compliance certifications shall be submitted to SWCAA at the address listed below. Annual compliance certifications shall be submitted to both SWCAA and EPA at the addresses listed below unless otherwise notified by SWCAA.

Control Officer  
SWCAA  
11815 NE 99<sup>th</sup> Street, Suite 1294  
Vancouver, WA 98682-2454

Regional Administrator  
US EPA Region X  
Air Operating Permits  
1200 Sixth Avenue, OAQ-107  
Seattle, WA 98101

Note: 40 CFR 60.4 is only applicable to EU-2, EU-3 and EU-4.

**G2. Duty to Supplement or Correct Application** WAC 173-401-500(6) - [10/17/02]

The permittee, upon becoming aware that relevant facts were omitted or incorrect information was submitted in a permit application, shall promptly submit such supplementary facts or corrected information. In addition, the permittee shall 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 permit.

**G3. Emission Inventory** WAC 173-400-105(1) - [9/20/93 SIP, 9/15/01 State Only],  
SWCAA 400-105(1) - [9/21/95 SIP, 11/9/03 Local Only]

The permittee shall submit an annual emission inventory report for the calendar year to SWCAA on the form supplied or approved by SWCAA no later than March 15<sup>th</sup> for the previous calendar year unless an extension has been granted by SWCAA's Executive Director in accordance with SWCAA 400-105.

**G4. Inspection and Entry** WAC 173-401-630(2) - [11/4/93]

The permittee shall allow inspection and entry, upon presentation of credentials and other documents as may be required by law, by the permitting authority or an authorized representative to perform the following:

- (a) Enter upon the permittee's premises where an air operating permit source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) As authorized by SWCAA 400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

**G5. Compliance Requirements** WAC 173-401-630(3) - [11/4/93]  
WAC 173-401-510(2)(h)(iii)(A)&(B) - [6/17/94]

The permittee shall continue to comply with all applicable requirements with which the source is currently in compliance, and meet on a timely basis any applicable requirements that become effective during the permit term.

**G6. Transfer of Ownership or Operational Control** WAC 173-401-720 - [11/4/93]

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.

**G7. New Source Review** WAC 173-400-110 - [9/20/93 SIP, 9/15/01 State Only]  
WAC 173-400-141 - [9/15/01 State Only]  
WAC 173-460 - [8/21/98 State Only]  
SWCAA 400-110 - [11/21/96 SIP, 11/9/03 Local Only]  
SWCAA 400-141 - [11/9/03 Local Only]

The permittee shall not construct or modify a source that is required to be reviewed under SWCAA 400-110 and -141 or WAC 173-460 without first receiving an approval or permit under such provisions. Portable sources may be exempt from this requirement if they fulfill the criteria described in G8.

**G8. Portable Sources** WAC 173-400-035 - [9/15/01 State Only –  
replaces WAC 173-110(5)]  
WAC 173-110(5) – [9/20/93 SIP Only]  
SWCAA 400-110(5) - [11/21/96 SIP Only]  
SWCAA 400-110(6) – [11/9/03 Local Only]

Portable sources which locate temporarily at the site of an air operating permit source shall be allowed to operate at the temporary location without filing an Air Discharge Permit application provided that:

- (a) The source/emissions units are registered with SWCAA;
- (b) The source/emissions units have an Air Discharge Permit to operate as a portable source;

- (c) The owner(s) or operator(s) notifies SWCAA of the intent to operate at the new location at least ten business days prior to starting the operation;
- (d) The owner(s) or operator(s) supplies sufficient information including production quantities and hours of operation, to enable SWCAA to determine that the operation will comply with the emission standards for a new source, and will not cause a violation of applicable ambient air quality standards and, if in a nonattainment area, will not interfere with scheduled attainment of ambient standards; and
- (e) The owner(s) and/or resident(s) of immediately adjacent properties shall be notified by the owner(s) or operator(s) of the portable source in writing at least 10 business days prior to commencement of operations at the proposed location with copies mailed to SWCAA. Written notification to the adjacent landowners/residents shall be by certified mail with return receipt requested. Such written notification shall include a complete description of the proposed operation, the associated emissions control provisions and equipment, the total estimated project emissions, the name, address and phone number of the person in charge of the operation, and the address and phone number for SWCAA. Written notification shall indicate that all comments shall be directed to SWCAA.

**G9. Excess Emissions**      WAC 173-400-107 - [9/20/93]  
SWCAA 400-107 - [9/21/95 SIP, 11/9/03 Local Only]

The permittee shall report excess emissions to SWCAA as soon as possible. Excess emissions due to startup or shutdown conditions or due to scheduled maintenance shall be considered unavoidable provided the source reports as required under subsection (1) of SWCAA 400-107 and adequately demonstrates that the excess emissions could not have been prevented or avoided.

Excess emissions due to upsets shall be considered unavoidable provided that the permittee reports as soon as possible but no later than 48 hours after discovery, and adequately demonstrates that:

- (a) The event was not caused by poor or inadequate design, operation, or maintenance, or any other reasonably preventable conditions;
- (b) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;
- (c) The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded; and
- (d) The owner or operator(s) actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence.

**G10. Outdoor Burning** WAC 173-425 - [10/18/90 SIP, 4/13/00 State Only]  
SWCAA 425 - [8/1/02 Local Only]

The permittee is prohibited from conducting outdoor burning except as allowed by SWCAA 425.

**G11. Asbestos** 40 CFR 61.140 *et. seq.* Subpart M - [7/1/02]  
WAC 173-400-075 - [8/11/02 State Only]  
SWCAA 400-075 - [11/9/03 Local Only]  
SWCAA 476 - [11/9/03 Local Only]

The permittee shall comply with the provisions of SWCAA 476 when conducting any renovation or demolition activities at the facility.

**G12. Protection of Stratospheric Ozone** 40 CFR 82.150, Subpart F - [7/1/02]

The permittee shall comply with the standards for recycling and emissions reduction as provided in 40 CFR Part 82, Subparts B and F.

**G13. Misrepresentation and Tampering**  
WAC 173-400-105(6 & 7) - [9/15/01 State Only]  
SWCAA 400-105(6 & 7) - [11/9/03 Local Only]

- (a) The permittee shall not make any false material statement, representation or certification in any form, notice, or report.
- (b) The permittee shall 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.

**G14. Compliance Certification** WAC 173-401-630(5) - [11/4/93]

The permittee shall submit a compliance certification to SWCAA and the Administrator once per year. Each compliance certification shall include the following:

- (a) Identification of each term or condition of the permit 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 SWCAA 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.

**VI. OPERATING TERMS AND CONDITIONS**

The following table lists all federal, state, and/or locally enforceable operating requirements applicable to the permittee. The legal authority for each requirement is enclosed in brackets below each requirement. Applicable requirements identified as having "plantwide" applicability apply to both EUs and IEUs. Some of the requirements have been partially adopted into the Washington State Implementation Plan (SIP). Only those parts adopted into the Washington SIP are federally enforceable. Requirements that are not required under the FCAA are denoted as state or local only. Monitoring requirements are used to provide a reasonable assurance of compliance with the applicable requirements, and may or may not involve the use of a reference test method.

Req.#	General Requirement	Emission Point	Monitoring	Reference Test Method
Req-1	NO <sub>x</sub> concentration shall not exceed 150 ppm by volume dry corrected to 15% O <sub>2</sub> .  40 CFR 60.332(a)(2) - [7/8/04] WAC 173-400-115 - [9/15/01 State Only] SWCAA 400-115 - [11/9/03 Local Only]	EU2, EU3 EU4	M1	EPA Method 20 [40 CFR Part 60, Appendix A, July 2002]
Req-2	Permittee shall not burn any fuel which contains sulfur in excess of 0.8% by weight.  40 CFR 60.333(b) - [7/8/04] WAC 173-400-115 - [9/15/01 State Only] SWCAA 400-115 - [11/9/03 Local Only]	EU2, EU3 EU4	M2	Length of Stain Tubes or Medor Gas Chromatograph, Appendix B SW98-6-R1
Req-3	Permittee shall not cause or permit any emission which exceeds 20% opacity for more than three minutes, in any one hour.  [WAC 173-400-040(1)(a)&(b) – 9/20/93 SIP, 9/15/01 State Only SWCAA 400-040(1)(a)&(b) – 9/21/95 SIP, 11/9/03 Local Only]	Plantwide	M3	Visual Emission Evaluation, Appendix A SW98-6-R1
Req-4	Permittee shall not cause or permit fallout of particulate matter beyond the source's property boundary in sufficient quantity to interfere unreasonably with use and enjoyment of the property on which the fallout occurs.  [WAC 173-400-040(2) - 9/20/93 State Only SWCAA 400-040(2) – 11/9/03 Local Only]	Plantwide	M5	N/A
Req-5	Permittee shall take reasonable precautions to prevent the release of fugitive emissions from any emission unit which is a source of fugitive emissions.  [WAC 173-400-040(3)(a) – 9/15/01 State Only SWCAA 400-040(3)(a) – 11/9/03 Local Only]	Plantwide	M6	N/A

Req.#	General Requirement	Emission Point	Monitoring	Reference Test Method
Req-6	Permittee shall use recognized good practice and procedures to reduce odors to a reasonable minimum.  WAC 173-400-040(4) - 9/15/01 State Only SWCAA 400-040(4) – 11/9/03 Local Only SWCAA 97-2063R1, Section 36 - [3/8/99]	Plantwide	M6	N/A
Req-7	Permittee shall not cause or permit emissions detrimental to persons or property.  [WAC 173-400-040(5) – 9/20/93 SIP, 9/15/01 State Only SWCAA 400-040(5) – 9/21/95 SIP, 11/9/03 Local Only]	Plantwide	M5	N/A
Req-8	Permittee shall not cause or permit any emission unit to emit a gas containing sulfur dioxide in excess of one thousand (1000) ppm of sulfur dioxide on a dry basis, based on an average of sixty consecutive minutes.  [WAC 173-400-040(6) - 9/20/93 SIP, 9/15/01 State Only SWCAA 400-040(6) – 9/21/95 SIP, 11/9/03 Local Only SIP excludes second paragraph of WAC 173-400-040(6) and SWCAA 400-040(6)(a)]	Plantwide	M7	EPA Method 6 [40 CFR Part 60, Appendix A, July 2002]
Req-9	Permittee shall not cause or permit the installation or use of any means which conceals or masks an emission which would otherwise violate any provisions of SWCAA 400-040.  [WAC 173-400-040(7) – 9/20/93 SIP, 9/15/01 State Only SWCAA 400-040(7) – 9/21/95 SIP, 11/9/03 Local Only]	Plantwide	N/A	N/A
Req-10	Permittee shall take reasonable precautions to prevent emissions of fugitive dust and operate the source to minimize emissions.  WAC 173-400-040(8)(a) – 9/20/93 SIP, 9/15/01 State Only SWCAA 400-040(8)(a) – 9/21/95 SIP, 11/9/03 Local Only]	Plantwide	M6	N/A
Req-11	Permittee shall not cause or permit emissions of particulate matter from a combustion or incineration emission unit in excess of 0.1 gr/dscf of exhaust gas corrected to 7% oxygen.  [WAC 173-400-050(1)&(3) - 3/22/91 SIP, 9/15/01 State Only SWCAA 400-050(1)&(3) – 9/21/95 SIP, 11/9/03 Local Only Oxygen level exclusion provision of WAC 173-400-050(3) – 9/15/01 State Only Oxygen level exclusion provision of SWCAA 400-050(3) – 11/9/03 Local Only]	Plantwide	M4	EPA Method 5 [40 CFR Part 60, Appendix A, July 2002]

Req.#	General Requirement	Emission Point	Monitoring	Reference Test Method
Req-12	Permittee shall not cause or permit emissions of particulate matter from a general process unit in excess of 0.1 gr/dscf of exhaust gas.  WAC 173-400-060 - [3/22/91 SIP, 9/15/01 State Only] SWCAA 400-060 - [9/21/95 SIP, 11/9/03 Local Only]	Plantwide	M4	EPA Method 5 [40 CFR Part 60, Appendix A, July 2002]
Req-13	NO <sub>x</sub> combined emissions shall not exceed 205.4 tons per year on a 12-month rolling total.  SWCAA 98-2129R1, Section 24 - [4/26/99]	EU1, EU2 EU3, EU4	M8, M9	EPA Method 7E and 20 [40 CFR Part 60, Appendix A, July, 2002]
Req-14	NO <sub>x</sub> emissions shall not exceed 3.0 g/hp-hr on a one hour average at 100% torque, 330 rpm and 6,350 hp.  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU1	M8, M12	EPA Method 7E [40 CFR Part 60, Appendix A, July 2002]
Req-15	NO <sub>x</sub> emissions shall not exceed 4.9 pounds per hour on a 1-hour average at maximum load (95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU2	M9	EPA Method 20 [40 CFR Part 60, Appendix A, July 2002]
Req-16	NO <sub>x</sub> emissions shall not exceed 4.5 pounds per hour per turbine on a 1-hour average at maximum achievable load (≥95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU3, EU4	M9	EPA Method 20 [40 CFR Part 60, Appendix A, July 2002]
Req-17	NO <sub>x</sub> emissions shall not exceed 0.1788 pounds per hour and 1,566 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU5	M10	EPA Method 7E [40 CFR Part 60, Appendix A, July 2002]
Req-18	NO <sub>x</sub> emissions shall not exceed 17.5 pounds per hour and 3,509 pounds per year.  SWCAA 98-2129R1, Sections 23 & 24 - [4/26/99]	EU6	M10	EPA Method 7E [40 CFR Part 60, Appendix A, July 2002]
Req-19	CO combined emissions shall not exceed 146.5 tons per year on a 12-month rolling total.  SWCAA 98-2129R1, Sections 24 - [4/26/99]	EU1, EU2 EU3, EU4	M8, M9	EPA Method 10 [40 CFR Part 60, Appendix A, July 2002]
Req-20	CO emissions shall not exceed 2.0 g/hp-hr on a one hour average at 100% torque, 330 rpm and 6,350 hp.  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU1	M8, M12	EPA Method 10 [40 CFR Part 60, Appendix A, July 2002]
Req-21	CO emissions shall not exceed 8.2 pounds per hour on a 1-hour average at maximum load (95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU2	M9	EPA Method 10 [40 CFR Part 60, Appendix A, July 2002]

Req.#	General Requirement	Emission Point	Monitoring	Reference Test Method
Req-22	CO emissions shall not exceed 5.4 pounds per hour each on a 1-hour average at maximum achievable load (≥95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU3, EU4	M9	EPA Method 10 [40 CFR Part 60, Appendix A, July 2002]
Req-23	CO emissions shall not exceed 0.150 pounds per hour and 1,316 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU5	M10	EPA Method 10 [40 CFR Part 60, Appendix A, July 2002]
Req-24	CO emissions shall not exceed 3.78 pounds per hour and 756 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU6	M10	EPA Method 10 [40 CFR Part 60, Appendix A, July 2002]
Req-25	VOC combined emissions shall not exceed 37.2 tons per year on a 12-month rolling total.  SWCAA 98-2129R1, Section 24 - [4/26/99]	EU1, EU2 EU3, EU4	M8, M9	EPA Method 18 or 25A [40 CFR Part 60, Appendix A, July 2002]
Req-26	VOC emissions shall not exceed 0.5 g/hp-hr on a one hour average at 100% torque, 330 rpm and 6,350 hp.  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU1	M8, M12	EPA Method 18 or 25A [40 CFR Part 60, Appendix A, July 2002]
Req-27	VOC emissions shall not exceed 0.94 pounds per hour on a 1-hour average at maximum achievable load (≥95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU2	M9	EPA Method 18 or 25A [40 CFR Part 60, Appendix A, July 2002]
Req-28	VOC emissions shall not exceed 1.5 pounds per hour each on a 1-hour average at maximum achievable load (≥95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU3, EU4	M9	EPA Method 18 or 25A [40 CFR Part 60, Appendix A, July 2002]
Req-29	VOC emissions shall not exceed 0.0098 pounds per hour and 86.2 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU5	M10	EPA Method 18 or 25A [40 CFR Part 60, Appendix A, July 2002]
Req-30	VOC emissions shall not exceed 1.40 pounds per hour and 280 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU6	M10	EPA Method 18 or 25A [40 CFR Part 60, Appendix A, July 2002]
Req-31	SO <sub>2</sub> combined emissions shall not exceed 8.3 tons per year on a 12-month rolling total.	EU1, EU2 EU3, EU4	M8, M9	EPA Method 6 [40 CFR Part 60, Appendix A,

Req.#	General Requirement	Emission Point	Monitoring	Reference Test Method
	SWCAA 98-2129R1, Section 24 - [4/26/99]			July 2002]
Req-32	SO <sub>2</sub> emissions shall not exceed 1.8 pounds per hour on a one hour average at 100% torque, 330 rpm and 6,350 hp.  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU1	M8	EPA Method 6 [40 CFR Part 60, Appendix A, July 2002]
Req-33	SO <sub>2</sub> emissions shall not exceed 0.08 pounds per hour on a 1-hour average at maximum achievable load (≥95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU2	M9	EPA Method 6 [40 CFR Part 60, Appendix A, July 2002]
Req-34	SO <sub>2</sub> emissions shall not exceed 0.06 pounds per hour each on a 1-hour average at maximum achievable load (≥95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU3, EU4	M9	EPA Method 6 [40 CFR Part 60, Appendix A, July 2002]
Req-35	SO <sub>2</sub> emissions shall not exceed 0.0011 pounds per hour and 9.4 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU5	M10	EPA Method 6 [40 CFR Part 60, Appendix A, July 2002]
Req-36	SO <sub>2</sub> emissions shall not exceed 0.002 pounds per hour and 0.43 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU6	M10	EPA Method 6 [40 CFR Part 60, Appendix A, July 2002]
Req-37	PM combined emissions shall not exceed 16.6 tons per year on a 12-month rolling total.  SWCAA 98-2129R1, Section 24 - [4/26/99]	EU1, EU2 EU3, EU4	M8, M9	EPA Method 5 [40 CFR Part 60, Appendix A, July 2002]
Req-38	PM emissions shall not exceed 2.16 pounds per hour on a one hour average at 100% torque, 330 rpm and 6,350 hp.  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU1	M8	EPA Method 5 [40 CFR Part 60, Appendix A, July 2002]
Req-39	PM emissions shall not exceed 0.2 pounds per hour on a 1-hour average at maximum achievable load (≥95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU2	M9	EPA Method 5 [40 CFR Part 60, Appendix A, July 2002]
Req-40	PM emissions shall not exceed 1.62 pounds per hour each on a 1-hour average at maximum achievable load (≥95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU3, EU4	M9	EPA Method 5 [40 CFR Part 60, Appendix A, July 2002]
Req-41	PM emissions shall not exceed 0.0136 pounds per hour and 119 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU5	M10	EPA Method 5 [40 CFR Part 60, Appendix A, July 2002]
Req-42	PM emissions shall not exceed 0.027 pounds per hour and 5.4 pounds per year.	EU6	M10	EPA Method 5 [40 CFR

Req.#	General Requirement	Emission Point	Monitoring	Reference Test Method
	SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]			Part 60, Appendix A, July 2002]
Req-43	Formaldehyde combined emissions shall not exceed 15.1 tons per year on a 12-month rolling total. SWCAA 98-2129R1, Section 24 - [4/26/99]	EU1, EU2 EU3, EU4	M8, M9	EPA Method 320
Req-44	Formaldehyde emissions shall not exceed 3.4 pounds per hour on a one hour average at 100% torque, 330 rpm and 6,350 hp. SWCAA 98-2129R1, Section 25 - [4/26/99]	EU1	M8	EPA Method 320
Req-45	Formaldehyde emissions shall not exceed 0.0022 pounds per hour on a 1-hour average at maximum achievable load ( $\geq 95\%$ gas producer speed). SWCAA 98-2129R1, Section 25 - [4/26/99]	EU2	M9	EPA Method 320
Req-46	Formaldehyde emissions shall not exceed 0.015 pounds per hour each on a 1-hour average at maximum achievable load ( $\geq 95\%$ gas producer speed). SWCAA 98-2129R1, Section 25 - [4/26/99]	EU3, EU4	M9	EPA Method 320
Req-47	Formaldehyde emissions shall not exceed 0.0001 pounds per hour and 1.2 pounds per year. SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU5	M10	EPA Method 320
Req-48	Formaldehyde emissions shall not exceed 0.470 pounds per hour and 94.1 pounds per year with a 200 hour per year operating limit. SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU6	M10	EPA Method 320
Req-49	Benzene combined emissions shall not exceed 512 pounds per year on a 12-month rolling total. SWCAA 98-2129R1, Section 24 - [4/26/99]	EU1, EU2 EU3, EU4	M8, M9	EPA Method 18 [40 CFR Part 60, Appendix A, July 2002]
Req-50	Benzene emissions shall not exceed 0.0567 pounds per hour on a one hour average at 100% torque, 330 rpm and 6,350 hp. SWCAA 98-2129R1, Section 25 - [4/26/99]	EU1	M8	EPA Method 18 [40 CFR Part 60, Appendix A, July 2002]

Req.#	General Requirement	Emission Point	Monitoring	Reference Test Method
Req-51	Benzene emissions shall not exceed 0.0018 pounds per hour each on a 1-hour average at maximum load (95% gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU3, EU4	M9	EPA Method 18 [40 CFR Part 60, Appendix A, July 2002]
Req-52	Benzene emissions shall not exceed 0.000004 pounds per hour and 0.03 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU5	M10	EPA Method 18 [40 CFR Part 60, Appendix A, July 2002]
Req-53	Benzene emissions shall not exceed 0.002 pounds per hour and 0.41 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU6	M10	EPA Method 18 [40 CFR Part 60, Appendix A, July 2002]
Req-54	Mercury combined emissions shall not exceed 6.7 pounds per year on a 12-month average rolled monthly.  SWCAA 98-2129R1, Section 24 - [4/26/99]	EU1, EU2 EU3, EU4	M8, M9	EPA Method 29 [40 CFR Part 60, Appendix A, July 2002]
Req-55	Mercury emissions shall not exceed $4.6 \times 10^{-4}$ pounds per hour on a one hour average at 100% torque, 330 rpm and 6,350 hp.  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU1	M8	EPA Method 29 [40 CFR Part 60, Appendix A, July 2002]
Req-56	Mercury emissions shall not exceed $9 \times 10^{-5}$ pounds per hour on a 1-hour average at maximum achievable load ( $\geq 95\%$ gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU2	M9	EPA Method 29 [40 CFR Part 60, Appendix A, July 2002]
Req-57	Mercury emissions shall not exceed $3 \times 10^{-4}$ pounds per hour each on a 1-hour average at maximum achievable load ( $\geq 95\%$ gas producer speed).  SWCAA 98-2129R1, Section 25 - [4/26/99]	EU3, EU4	M9	EPA Method 29 [40 CFR Part 60, Appendix A, July 2002]
Req-58	Mercury emissions shall not exceed $1.9 \times 10^{-5}$ pounds per hour and 0.17 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU5	M10	EPA Method 29 [40 CFR Part 60, Appendix A, July 2002]
Req-59	Mercury emissions shall not exceed $4.0 \times 10^{-5}$ pounds per hour and 0.01 pounds per year.  SWCAA 98-2129R1, Sections 24 & 25 - [4/26/99]	EU6	M10	EPA Method 29 [40 CFR Part 60, Appendix A, July 2002]

Req.#	General Requirement	Emission Point	Monitoring	Reference Test Method
Req-60	<p>Only the following equipment may operate simultaneously: a) one reciprocating engine; b) one reciprocating engine and one Saturn turbine; c) one Centaur turbine; d) two Centaur turbines; e) one Centaur turbine and one Saturn turbine; f) one Centaur turbine and one reciprocating engine.</p> <p style="text-align: center;">SWCAA 98-2129R1, Section 23 - [4/26/99]</p>	EU1, EU2 EU3, EU4	M11	N/A
Req-61	<p>Permittee shall not cause or permit any emission which exceeds 5% opacity for more than three minutes, in any one hour.</p> <p style="text-align: center;">SWCAA 98-2129R1, Section 26 - [4/26/99]</p>	EU1, EU2 EU3, EU4 EU5, EU6 Individually	M3	Visible Emission Evaluation, Appendix A SW98-6-R1
Req-62	<p>All emission units shall be fired only with pipeline quality natural gas.</p> <p style="text-align: center;">SWCAA 98-2129R1, Section 27 - [4/26/99]</p>	EU1, EU2 EU3, EU4 EU5, EU6	M7	N/A
Req-63	<p>RPM shall be maintained at levels greater than or equal to 230 rpm on a one hour average except during startup and shut down; rpm and torque shall be monitored and recorded continuously.</p> <p style="text-align: center;">SWCAA 98-2129R1, Section 28 - [4/26/99]</p>	EU1	M12	N/A

**VII. NON-APPLICABLE REQUIREMENTS** WAC 173-401-640(2) - [11/4/93]

The following table lists all federally, state, and/or locally enforceable requirements which might reasonably apply to the permittee, but are deemed nonapplicable after review by SWCAA.

**1. Registration program** WAC 173-400-099 - [4/22/95 State Only], SWCAA 400-100(2) - [9/21/95 SIP, 11/9/03 Local Only]

The permittee is an air operating permit source. Pursuant to WAC 173-400-101(7), air operating permit sources are exempt from the registration program established under WAC 173-400-099, and implemented in accordance with WAC 173-400-100 through WAC 173-400-104. Pursuant to SWCAA 400-100(1)(b) air operating permit sources are exempt from the registration requirements of SWCAA 400-100.

**VIII. MONITORING TERMS AND CONDITIONS**

To assure compliance with all applicable requirements, the permittee shall perform the monitoring program specified below. These monitoring requirements also ensure that the equipment is being maintained as per 40 CFR 60.11(d) where applicable. Each monitoring requirement is indexed according to the underlying requirement(s). Pursuant to WAC 173-401-530(2)(c), none of the following monitoring requirements apply to IEUs.

**M1. NO<sub>x</sub> Standard** 40 CFR 60.332(a)(2) - [7/8/04], SWCAA 400-115 - [11/9/03],

This monitoring requirement applies to Req-1.

Compliance with the standard shall be demonstrated by source test per M9. Since no allowance for fuel bound nitrogen is being used, no nitrogen content monitoring is required.

**M2. SO<sub>2</sub> Standard** SWCAA 98-2129R1, Section 30 - [4/26/99]

This monitoring requirement applies to Req-2.

The fuel sulfur content shall be determined by the Length of Stain Tube test or the Medor Gas Chromatograph Method which were approved by EPA Region 10 in a letter dated January 19, 1999 (Appendix B) as alternate methods to satisfy these requirements. Monitoring shall be conducted twice annually. Sampling results shall be reported in the semiannual report.

**M3. Opacity Monitoring** WAC 173-401-615(1) - [10/17/02]

This monitoring requirement applies to Reqs-3 and 61.

The permittee shall perform monthly inspections of affected operations during daylight hours for the purpose of identifying potential visible emission violations. Whenever any visible emissions are observed during the monthly inspection, or whenever visible emissions are indicated by a complaint, the permittee shall identify the equipment causing the emissions. The permittee shall within 60 minutes of observing visible emissions confirm whether the equipment involved is experiencing a malfunction and whether all air pollution control equipment is operating properly. The permittee shall either eliminate visible emissions within 24-hours of initial

discovery or demonstrate compliance by recording opacity within three working days using the visual emission evaluation method in Appendix A of this permit. Implementation of corrective action does not relieve the permittee from the obligation of reporting permit deviations as specified in WAC 173-401-615(3). Records of monitoring activities shall be maintained in accordance with Section IX (a-c) of this permit.

**M4. Particulate Matter Emissions Monitoring** WAC 173-401-615(1) - [10/17/02]

This monitoring requirement applies to Reqs-11 and 12.

The permittee shall perform monthly inspections of affected operations during daylight hours for the purpose of identifying potential particulate matter emissions violations. Whenever any visible emissions are observed during the monthly inspection, or whenever any visible emissions are indicated by a complaint, the permittee shall identify the equipment causing the emissions. The permittee shall within 60 minutes of observing visible emissions confirm whether the equipment involved is experiencing a malfunction and whether all air pollution control equipment is operating properly. If the equipment is experiencing a malfunction then, within 24-hours, the equipment shall be fixed or shutdown until repairs are made. Implementation of corrective action does not relieve the permittee from the obligation of reporting permit deviations as specified in WAC 173-401-615(3). Records of monitoring activities shall be maintained in accordance with Section IX (a-c) of this permit.

**M5. Complaint Monitoring** WAC 173-401-615(1) - [10/17/02]

This monitoring requirement applies to Reqs-4 and 7.

This permittee shall record, and maintain record of, any air quality, odor or fallout related complaints received by the permittee or forwarded to the permittee by SWCAA regarding the compressor station property excluding noise or right-of-way issues. These complaints shall be investigated no later than one work day after the permittee has been notified. Investigation shall verify the validity of each complaint, the cause of emissions which prompted the complaint, and what, if any, corrective action was taken in response to the complaint. Permittee shall take appropriate corrective action for all valid complaints. Records of monitoring activities shall be maintained in accordance with Section IX (a and b) of this permit.

**M6. Fugitive Emissions Monitoring** WAC 173-401-615(1) - [10/17/02]

This monitoring requirement applies to Reqs-5, 6 and 10.

This permittee shall record, and maintain record of, any air quality, odor or fallout related complaints received by the permittee or forwarded to the permittee by SWCAA regarding the compressor station property excluding noise or right-of-way issues. These complaints shall be investigated no later than one work day after the permittee has been notified. Investigation shall verify the validity of each complaint, the cause of emissions which prompted the complaint, and what, if any, corrective action was taken in response to the complaint.

In addition to complaint response, the permittee shall perform monthly inspections of affected operations during daylight hours for the purpose of identifying excess fugitive emissions. Whenever any fugitive emissions are observed during the monthly inspection or as the result of

a complaint, the permittee shall identify the equipment causing the emissions. The permittee shall within 60 minutes of discovery confirm whether the equipment involved is experiencing a malfunction, and whether reasonable precautions and good work practices are being employed to minimize emissions. Reasonable precautions and good work practices include, but are not limited to, worker training programs, closed doors and windows, vertical exhaust or ventilation equipment, and proper operation of ventilation systems. Records of monitoring activities shall be maintained in accordance with Section IX (a and b) of this permit.

**M7. Fuel Certification** WAC 173-401-615(1) - [9/15/01], SWCAA 97-2063R1, Section 28 - [3/8/99]

This monitoring requirement applies to Reqs-8 and 62.

The permittee shall certify in each semi-annual report that only pipeline quality natural gas is used as fuel for all permitted combustion units at the facility. Records of monitoring activities shall be maintained in accordance with Section IX (a) of this permit.

**M8. Reciprocating Engine Testing and Emission Limits** SWCAA 400-052 - [9/21/95 SIP, 11/9/03 Local Only], SWCAA 98-2129R1, Section 29 - [4/26/99]

This monitoring requirement applies to Reqs-13, 14, 19, 20, 25, 26, 31, 32, 37, 38, 43, 44, 49, 50, 54 and 55.

The permittee shall test the reciprocating engine every two calendar years with the exception of formaldehyde which shall be tested every 5,000 hours of operation. A minimum of three 120 minute test runs at maximum load of 100% torque, 250 rpm and 4,000 hp shall be performed. EPA Method 7E shall be used for NO<sub>x</sub>. EPA Method 10 shall be used for CO and EPA Method 18 or 25A for VOCs. EPA Method 5 with back half condensable matter by Method 202, combined, or Method 17, or equivalent shall be used for PM. EPA Method 320, EPA Proposed Method 323 or equivalent as defined in Appendix C shall be used for formaldehyde. SWCAA Method 9 (Appendix A) for a minimum of 15 minutes shall be used for opacity.

The permittee shall record monthly fuel consumption and hours of operation. Compliance with the annual emission limits for NO<sub>x</sub>, CO, VOCs, PM and formaldehyde shall be demonstrated by summing the hours of operation for each of the four load condition ranges (shown in R3(d)) and applying the corresponding emission rates in pounds per hour from the most recent source test data. Compliance with the annual emission limits for the remaining pollutants shall be calculated using hours of operation and the following emission factors from Air Discharge Permit 98-2129R1:

<u>Pollutant</u>	<u>Factor</u>
SO <sub>2</sub>	1.8 lb/hr
Benzene	0.0567 lb/hr
Mercury	0.00046 lb/hr

Records of monitoring activities shall be maintained in accordance with Section IX of this permit.

**M9. Turbine Testing and Emission Limits** SWCAA 98-2129R1, Section 29 - [4/26/99]

This monitoring requirement applies to Reqs-13, 15, 16, 19, 21, 22, 25, 27, 28, 31, 33, 34, 37, 39, 40, 43, 45, 46, 49, 51, 54, 56 and 57.

Each turbine shall be tested every five calendar years at 95% gas producer speed provided that the turbine has operated at the Chehalis facility during the previous five year period. EPA Method 20 shall be used for NO<sub>x</sub>. EPA Method 10 shall be used for CO and EPA Method 18 or 25A for VOCs. SWCAA Method 9 (Appendix A) for a minimum of 15 minutes shall be used for opacity.

The permittee shall record monthly fuel consumption and hours of operation for each turbine. The most recent source test data shall be used to demonstrate compliance with NO<sub>x</sub>, CO, and VOC concentration limits. The hours of operation multiplied by the most recent source test data shall be used to demonstrate compliance with each annual emission limits for NO<sub>x</sub>, CO and VOCs. Compliance with the annual emission limits for the Saturn turbine (EU2) for the remaining pollutants shall be calculated using the annual hours of operation and the following emission factors from Air Discharge Permit 98-2129R1:

<u>Pollutant</u>	<u>Factor</u>
SO <sub>2</sub>	0.08 lb/hr
PM	0.2 lb/hr
Formaldehyde	0.0022 lb/hr
Mercury	0.00009 lb/hr

Compliance with the annual emission limit for the Centaur turbines (EU3 and EU4) for the remaining pollutants shall be calculated using the annual hours of operation for each turbine and the following emission factors from Air Discharge Permit 98-2129R1:

<u>Pollutant</u>	<u>Factor</u>
SO <sub>2</sub>	0.06 lb/hr
PM	1.62 lb/hr
Formaldehyde	0.015 lb/hr
Benzene	0.0018 lb/hr
Mercury	0.0003 lb/hr

Records of monitoring activities shall be maintained in accordance with Section IX of this permit.

**M10. Boiler and Generator Emission Limits** SWCAA 98-2129R1, Sections 22, 24 & 25 - [4/26/99]

This monitoring requirement applies to Reqs-17, 18, 23, 24, 29, 30, 35, 36, 41, 42, 47, 48, 52, 53, 58 and 59.

The permittee shall record monthly fuel consumption and hours of operation for the boiler and generator. Annual emissions for the boiler shall be calculated using annual hours of operation and the following emission factors from Air Discharge Permit 98-2129R1:

<u>Pollutant</u>	<u>Factor</u>
NO <sub>x</sub>	0.1788 lb/hr
CO	0.150 lb/hr
VOC	0.0098 lb/hr
SO <sub>2</sub>	0.0011 lb/hr
PM	0.0136 lb/hr
Formaldehyde	0.0001 lb/hr
Benzene	0.000004 lb/hr
Mercury	0.000019 lb/hr

The generator shall not operate more than 200 hours per year. Annual emissions for the generator shall be calculated using annual hours of operation and the following emission factors from Air Discharge Permit 98-2129R1:

<u>Pollutant</u>	<u>Factor</u>
NO <sub>x</sub>	17.5 lb/hr
CO	3.78 lb/hr
VOC	1.40 lb/hr
SO <sub>2</sub>	0.002 lb/hr
PM	0.027 lb/hr
Formaldehyde	0.470 lb/hr
Benzene	0.002 lb/hr
Mercury	0.00004 lb/hr

Records of monitoring activities shall be maintained in accordance with Section IX of this permit.

**M11. Simultaneous Equipment Operation** SWCAA 98-2129R1, Section 22 - [4/26/99]

This monitoring requirement applies to Req-60.

The date and time of startup and shutdown of the reciprocating engine, Saturn turbine and Centaur turbines shall be continuously monitored and recorded. Records of monitoring activities shall be maintained in accordance with Section IX of this permit.

**M12. Reciprocating Engine RPM and Torque** SWCAA 98-2129R1, Section 28 - [4/26/99]

This monitoring requirement applies to Req-14, 20, 26 and 63.

The rpm and torque shall be continuously monitored and recorded during normal operation. The data shall be reported based on hourly averages. Records of monitoring activities shall be maintained in accordance with Section IX of this permit.

**IX. RECORDKEEPING TERMS AND CONDITIONS**

All monitoring records shall be maintained in a readily accessible form for a minimum period of five years. Pursuant to WAC 173-401-530(2)(c), none of the recordkeeping requirements apply to IEUs. Records shall be maintained as per 40 CFR 60.7(f) where applicable. The permittee shall maintain records of required monitoring as identified in M1-M12 as follows if applicable:

## (a) Inspections &amp; certifications

- (i) The date, place, and time of activity;
- (ii) Identification of the person who conducted the inspection or certification;
- (iii) The operating conditions existing at the time of the activity;
- (iv) Compliance status of each monitored requirement as described in Section V and VII of this permit; and
- (v) Corrective action taken in response to permit deviations and/or complaints.

## (b) Complaints

- (i) The date, and time of complaint;
- (ii) Name of the complainant;
- (iii) The nature of the complaint;
- (iv) Date inspection was conducted; and
- (v) Corrective action taken in response to complaints.

## (c) Sampling and testing

- (i) The date sampling was performed;
- (ii) The entity that performed the sampling;
- (iii) The analytical techniques used to take the sample;
- (iv) The operating conditions existing at the time of sampling or measurement;
- (v) The date analyses were performed;
- (vi) The entity that performed the analyses;
- (vii) The analytical techniques or methods used;
- (viii) The results of such analyses;
- (ix) Compliance status of each monitored requirement as described in Section V and VII of this permit; and
- (x) Corrective action taken in response to permit deviations.

## (d) Continuous monitoring

- (i) The date, averaging time for each variable monitored;
- (ii) Data reduced to the appropriate averaging time;
- (iii) Periods that data was unavailable excluding calibration periods;
- (iv) Calibration corrections performed and date of correction;
- (v) Compliance status of each monitored requirement as described in Section V and VII of this permit; and
- (vi) Corrective action taken in response to permit deviations.

**X. REPORTING TERMS AND CONDITIONS**

All required reports must be certified by a responsible official consistent with WAC 173-401-520. 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.

Where a reporting schedule is specified (e.g. quarterly, semi-annual, or annual), compliance with the reporting frequency is met when reports are submitted more frequently than required.

Addresses of regulatory agencies are the following, unless otherwise instructed:

Southwest Clean Air Agency  
11815 NE 99<sup>th</sup> Street, Suite 1294  
Vancouver, WA 98682-2454

US EPA Region X  
Air Operating Permits  
1200 Sixth Avenue, OAQ-107  
Seattle, WA 98101

**R1. Deviations from Permit Conditions** WAC 173-401-615(3)(b) - [10/17/02], 40 CFR 60.7(b) - [7/1/02] where applicable, SWCAA 400-107 - [11/9/03]

Excess emissions shall be reported as soon as possible but no later than 48 hours after discovery in accordance with SWCAA 400-107. Deviations from permit requirements shall be reported no later than thirty days after each deviation is discovered. Deviations which represent a potential threat to human health or safety shall be reported as soon as possible but no later than twelve hours after the deviation is discovered. Reports of deviations shall include:

- (a) Whether or not the deviation was due to an upset condition;
- (b) The probable cause of the deviation; and
- (c) The corrective action taken and when the corrective action was initiated.

**R2. Complaint Reports** WAC 173-401-615(3) - [10/17/02]

The permittee shall report all complaints to SWCAA within three days of receipt. Complaint reports shall include the date and time of the complaint, the name of the complainant, and the nature of the complaint.

**R3. Semi-annual Reports** 173-401-615(3) - [10/17/02]

The permittee shall submit to SWCAA by October 15th and April 15th for the six month periods January through June and July through December respectively the following information:

- (a) A report on the status of all monitoring requirements. Any deviation from permit requirements shall be clearly identified;
- (b) Certification of any reports submitted during the semi-annual period that have not already been certified consistent with the provisions of WAC 173-401-520;
- (c) Custom fuel gas sulfur content results using the Length of Stain Tube test or the Medor Gas Chromatograph Method (as approved by EPA Region 10 in a letter dated January 19 1999);

(d) Total hours of reciprocating engine operation at the nearest to the following four load condition:

<u>Load</u>	<u>Torque(%)</u>	<u>RPM</u>
1	<85	<290
2	<85	≥290
3	≥85	<290
4	≥85	≥290

(e) Monthly fuel consumption and/or operating hours for each unit.

**R4. Annual Reports** WAC 173-401-630(5) - [11/4/93], 40 CFR 60.11(g) [7/1/00]

The permittee shall submit to SWCAA and EPA certification of compliance with all terms and conditions of this permit in accordance with WAC 173-401-630(5)(d). The permittee shall submit by April 15th of the following year the following information for the period of January through December:

- (a) Identification of each term or condition of the permit that is the basis of the certification;
- (b) The compliance status;
- (c) Whether compliance was continuous or intermittent; and
- (d) The method(s) used to determine the compliance status.

When the permittee submits compliance certification for EU2, EU3, and EU4 all credible evidence must be considered as in accordance with 40 CFR 60.11(g).

**R5. Emission Inventory Reports** WAC 173-400-105 - [9/20/93 SIP, 8/15/01 State Only], SWCAA 400-105 - [9/21/95 SIP, 11/9/03 Local Only]

The permittee shall submit an inventory of annual emissions from the source each year to SWCAA by March 15th of the following year in accordance with SWCAA 400-105. The inventory shall include emissions of NO<sub>x</sub>, SO<sub>2</sub>, CO, VOCs, PM, HAPs and TAPs.

**R6. Source Test Reports** WAC 173-401-615(3) - [9/15/01]

Whenever source testing is required, the permittee shall submit test results to SWCAA within 45 days of test completion.

**APPENDIX A - VISIBLE EMISSION EVALUATION METHOD**1. Principle

The opacity of emissions from stationary sources is determined visually by a qualified observer.

2. Procedure

The observer must be certified in accordance with the provisions of Section 3 of 40 CFR Part 60, Appendix A, Method 9, as in effect on July 1, 2000.

2.1 Position

The observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to his/her back. Consistent with maintaining the above requirement, the observer shall, as much as possible, make his/her observations from a position such that his/her line of vision is approximately perpendicular to the plume direction, and when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, noncircular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight should not include more than one plume at a time when multiple stacks are involved, and in any case, the observer should make his/her observations with his/her line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g., stub stacks on baghouses).

2.2 Field Records

The observer shall record the name of the plant, emission location, type of facility, observer's name and affiliation, a sketch of the observer's position relative to the source, and the date on a field data sheet. The time, estimated distance to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background are recorded on a field data sheet at the time opacity readings are initiated and completed.

2.3 Observations

Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. The observer shall not look continuously at the plume, but instead shall observe the plume momentarily at 15 second intervals.

2.3.1 Attached Steam Plumes

When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible. The observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made.

### 2.3.2 Detached Steam Plumes

When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume.

### 2.4 Recording Observations

Opacity observations shall be recorded to the nearest 5 percent at 15 second intervals on a field data sheet. A minimum of 24 observations shall be recorded. Each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15 second period.

### 2.5 Data Reduction

The number of observation at each opacity level shall be determined and recorded on the field data sheet. Opacity shall be determined by the highest 13 observations in any consecutive 60-minute period. The opacity standard or emission limit is exceeded if there are more than 12 observations during any consecutive 60 minute period for which an opacity greater than the standard or emission limit is recorded. The opacity standard is a 1 hour standard (rolling 60 minutes). Only one violation of the standard per hour may be recorded meaning that a violation for any given consecutive 60 minute period may be recorded in substantially fewer than 60 minutes. No one hour time sets shall overlap for purpose of determining a violation or violations. Data used to establish a violation in one consecutive 60 minute period can not be used to establish a violation in a second consecutive 60 minute period. The opacity determination shall be recorded on the observational record sheet.

### 3. References

Federal Register, Vol. 36, No. 247, page 24895, December 23, 1971.

"Criteria for Smoke and Opacity Training School 1970 - 1971" Oregon-Washington Air quality Committee."

"Guidelines for Evaluation of Visible Emissions" EPA 340/1-75-007.

**APPENDIX B - SULFUR FUEL CONTENT ALTERNATE METHOD**

**APPENDIX B - SULFUR FUEL CONTENT ALTERNATE METHOD**

**APPENDIX C - EQUIVALENT SOURCE TEST METHOD**

Permittee may use an alternate source test method for formaldehyde testing provided the accuracy of the alternate test method has been demonstrated as follows:

1. Accuracy shall be verified by performing simultaneous tests of both EPA Method 320 and the alternate test method.
2. The testing shall consist of a minimum of three 60 minute test runs.
3. The testing shall be performed on a two cycle reciprocating engine equipped with CleanBurn™ technology rated between 2,000 and 10,000 horsepower.
4. The results of each of the three test runs shall agree within 20%.

