



September 22, 2021

Mr. Mickey Dreher
TransAlta Centralia Generation, LLC
913 Big Hanaford Road
Centralia, WA 98531

Subject: Issuance of FINAL Title V Permit for TransAlta Centralia Generation

Dear Mr. Dreher:

The comment period for your draft Air Operating Permit (SW98-8-R5-A) ended on July 25, 2021. The proposed permit dated July 30, 2021 was submitted to Region 10 of the Environmental Protection Agency for the mandatory 45 day review period. The EPA's 45-day review period has passed without comment from EPA; therefore, the Southwest Clean Air Agency is issuing the final Air Operating Permit as proposed.

Copies of the Final Air Operating Permit and Title V Basis Statement accompany this letter. In addition, copies of these documents will be available on SWCAA's website at <http://www.swcleanair.org/permits/title5final.asp>.

If you have any questions or comments, please contact me at (360) 574-3058 extension 131.

Sincerely,


Clint Lamoreaux
Air Quality Engineer





**TransAlta Centralia Generation, LLC
Centralia Plant**

**Air Operating Permit
SW-98-8-R5-A**

September 22, 2021

Southwest Clean Air Agency
11815 NE 99th Street, Suite 1294
Vancouver, WA 98682-2322
Telephone: (360) 574-3058



AIR OPERATING PERMIT NUMBER: SW98-8-R5-A

ISSUED TO: TransAlta Centralia Generation, LLC
913 Big Hanaford Road
Centralia, WA 98531

PLANT SITE: TransAlta Centralia Generation, LLC
913 Big Hanaford Road
Centralia, WA 98531

NATURE OF BUSINESS: Coal-Fired Electric Energy Generation

STANDARD INDUSTRIAL CLASSIFICATION CODE (SIC): 4911

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM CODE (NAICS): 221112

AEROMETRIC INFORMATION RETRIEVAL SYSTEM NUMBER: 53-041-10010

ACID RAIN PROGRAM
PLANT NAME: Centralia Plant
ORIS CODE: 03845

EFFECTIVE DATE: September 22, 2021

EXPIRATION DATE: October 14, 2024

RENEWAL APPLICATION DUE DATE: October 14, 2023

PERMIT ENGINEER:

Clint Lamoreaux 9/22/2021
Clint Lamoreaux, P.E., Air Quality Engineer Date

REVIEWED BY:

Paul T. Mairose 9/22/2021
Paul T. Mairose, P.E., Chief Engineer Date



Uri Papish 9/22/2021
Uri Papish, Executive Director Date

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I. ABBREVIATIONS

List of Common Abbreviations

Administrator	EPA Administrator
AOP	Air Operating Permit
BAAQMD	Bay Area Air Quality Management District (California)
BACT	Best Available Control Technology
CAM	Compliance Assurance Monitoring (40 CFR 64)
CEM / CEMS	Continuous emission monitor / Continuous emission monitoring system
CFR	Code of Federal Regulations
CO	Carbon monoxide
DAHS	Data Acquisition and Handling System
EGU	Electric Utility Steam Generating Unit
EPA	U.S. Environmental Protection Agency
EU	Emissions unit
EU-"X"	Refers to a specific emissions unit numbered "X"
°F	Fahrenheit temperature, degrees
FCAA	Federal Clean Air Act
G"X"	Refers to a specific general term and condition numbered "X"
FGD	Flue gas desulfurization
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous air pollutant
IEU	Insignificant emissions unit
IEU"X"	Insignificant emissions unit numbered "X"
K"X"	Refers to a specific recordkeeping term or condition (requirement) numbered "X"
lb/hr	Pounds per hour
lb/MMBtu	Pounds per million British thermal units
M"X"	Refers to a specific monitoring term or condition (requirement) numbered "X"
MW	Megawatts
MW _{ge}	Megawatts, gross electric
NO _x	Oxides of nitrogen
NSR	New source review
O ₂	Oxygen
PM	Particulate matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to 10 micrometers
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers
ppm	Parts per million
ppmvd	Parts per million, dry volume basis
@ X% O ₂	Corrected to X% oxygen content
PTE	Potential to emit
R"X"	Refers to a specific reporting requirement numbered "X"
RACT	Reasonably Available Control Technology
RCW	Revised Code of Washington
Region 10	Region 10 of the U.S. Environmental Protection Agency
Req-X	Applicable operating term or condition (requirement) numbered "X"
SO ₂	Sulfur dioxide
SIP	State implementation plan
SWCAA	Southwest Clean Air Agency
TAP	Toxic air pollutant
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, hereafter referred to as the "Permit," is authorized under the procedures established in Washington Administrative Code (WAC) 173-401 and Title V (US Code §7661 *et seq.*) of the Federal Clean Air Act (FCAA). As used in this Permit, "term," "condition," "standard," and "requirement" have the same meaning as "applicable requirement" specified under 40 CFR 70.2 and WAC 173-401-200.

The Permit is intended to contain a comprehensive list of the local, state, and federal air pollution regulations and standards applicable to the Permittee's facility and to assure and provide for certification of compliance with those requirements. As listed in Sections V through VIII the requirements describe the emissions limitations, operating requirements, ambient monitoring, recordkeeping requirements, and reporting frequencies for the facility and cite the originating local, state, or federal regulation or requirement. Federal requirements may be direct (e.g. FCAA or CFR citation) or established under the Washington State Implementation Plan (SIP). Each citation in the table also includes one or two effective dates of the cited regulation. Where there are two dates for the same regulatory citation, the underlying requirement is substantially the same, but the date of the regulation used for enforcement purposes would be different (e.g. federally enforceable versus SWCAA enforceable).

SWCAA is the primary authority that can enforce *all* requirements – federal, state, and local requirements – listed in the Permit. However, the EPA and private citizens may also take enforcement actions under the Permit for those requirements that are federally enforceable; federal regulations, regulations that have a SIP date, and terms of ADPs are federally enforceable. Rules, regulations, and permits that are not SIP approved or federally promulgated are not federally enforceable and are denoted as "*Local*" to indicate they are only enforceable by SWCAA.

For specific subparts of 40 CFR 60, 40 CFR 61, or 40 CFR 63 for which SWCAA has not been delegated implementation and enforcement authority by the EPA, all monitoring, reporting, or recordkeeping that is required to be sent to the EPA Administrator must be sent to both SWCAA and the EPA Administrator. Unless otherwise specified in the delegation agreement or regulation, once specific subparts of 40 CFR 60, 40 CFR 61, or 40 CFR 63 have been delegated to SWCAA by EPA, all monitoring, reporting, or recordkeeping that is required to be sent to the EPA Administrator only needs to be sent to SWCAA.

Federal Regulations	Regulation Version Effective Date	SWCAA Delegation Effective Date
40 CFR 51	June 22, 2021	Not Delegated
40 CFR 52	June 22, 2021	Not Delegated
40 CFR 60 Subpart A	June 22, 2021	July 1, 2019
40 CFR 60 Subpart IIII	June 22, 2021	July 1, 2019
40 CFR 61 Subpart A	June 22, 2021	July 1, 2019
40 CFR 61 Subpart M	June 22, 2021	July 1, 2019
40 CFR 63 Subpart A	June 22, 2021	July 1, 2019
40 CFR 63 Subpart ZZZZ	June 22, 2021	July 1, 2019
40 CFR 63 Subpart DDDDD	June 22, 2021	July 1, 2019
40 CFR 63 Subpart UUUUU	June 22, 2021	July 1, 2019
40 CFR 64	7/1/2000 (this is found in WAC 173-401-615(4))	Not Delegated

Federal Regulations	Regulation Version Effective Date	SWCAA Delegation Effective Date
40 CFR 68	June 22, 2021	Not Delegated
40 CFR 72	June 22, 2021	Not Delegated
40 CFR 75	June 22, 2021	Not Delegated
40 CFR 82, Subparts B and F	June 22, 2021	Not Delegated
40 CFR 98	June 22, 2021	Not Delegated

State Regulations	SIP Regulation Version Effective Date	State Regulation Version Effective Date
WAC 173-400-105(1)	November 25, 2018	November 25, 2018
WAC 173-400-117	December 29, 2012	November 25, 2018
WAC 173-400-720	July 1, 2016	November 25, 2018
WAC 173-406-106(3)(a)(i)	—	12/24/1994
WAC 173-406-106(4)	—	12/24/1994
WAC 173-401	—	9/16/2018
WAC 173-441	—	10/16/2016
WAC 173-460	—	8/21/1998*

* Note that a newer version of WAC 173-460 has been published, however it has not been adopted by SWCAA. The version being enforced by SWCAA was effective August 21, 1998.

SWCAA Regulations	SIP Regulation Version Effective Date	SWCAA Regulation Version Effective Date
SWCAA 400-036	October 9, 2016	March 21, 2020
	October 9, 2016	March 21, 2020
SWCAA 400-040	(excludes (1)(a), (1)(c), (1)(d), (2), and (4))	
SWCAA 400-050	October 9, 2016 (excludes (3), (5), and (6))	March 21, 2020
SWCAA 400-060	October 9, 2016	March 21, 2020
SWCAA 400-070	October 9, 2016 (excludes (2)(a), (3)(b), (5), (6), (7), (8)(c), (9), (10), (11), (12), (14); and (15)(c))	March 21, 2020
SWCAA 400-072	October 9, 2016 (except (5)(a)(ii)(B), (5)(d)(ii)(B), (5)(d)(iii)(A), (5)(d)(iii)(B), and all reporting requirements related to TAPs)	March 21, 2020
SWCAA 400-075	—	March 21, 2020
SWCAA 400-076	—	March 21, 2020
SWCAA 400-081	October 9, 2016	March 21, 2020
SWCAA 400-091	October 9, 2016	March 21, 2020
SWCAA 400-100	—	March 21, 2020
SWCAA 400-103	—	March 21, 2020
	October 9, 2016	March 21, 2020
SWCAA 400-105	(excludes reporting requirements related to TAPs)	

SWCAA Regulations	SIP Regulation Version Effective Date	SWCAA Regulation Version Effective Date
SWCAA 400-106(1)(a)	October 9, 2016	March 21, 2020
SWCAA 400-107	September 21, 1995	March 21, 2020
SWCAA 400-109	October 9, 2016 (except TAP emissions thresholds (3)(d), (3)(e)(ii), and (4))	March 21, 2020
SWCAA 400-110	October 9, 2016 (except (1)(d))	March 21, 2020
SWCAA 400-111	October 9, 2016 (except (7))	March 21, 2020
SWCAA 400-112	October 9, 2016 (except (6))	March 21, 2020
SWCAA 400-114	November 9, 2003	March 21, 2020
SWCAA 400-115	—	March 21, 2020
SWCAA 400-116	November 9, 2003	March 21, 2020
SWCAA 400-120	—	March 21, 2020
SWCAA 400-130	October 9, 2016	March 21, 2020
SWCAA 400-141	—	March 21, 2020
SWCAA 400-151	November 9, 2003	March 21, 2020
SWCAA 400-171	October 9, 2016 (except (2)(a)(xii))	March 21, 2020
SWCAA 400-205	March 18, 2001	March 21, 2020
SWCAA 400-270	—	March 21, 2020
SWCAA 400 Appendix A	10/9/2016	March 21, 2020
SWCAA 425	—	June 18, 2017
SWCAA 476	—	March 22, 2020

Regulatory Orders and Permits	SIP Approval Date	State / Local Effective Date
ADP 97-2057R1	June 11, 2003	2/26/1998
ADP 01-2403	—	2/27/2002
PSD-01-01 Amendment 2	—	6/11/2004
ADP 05-2636	—	11/23/2005
ADP 08-2779	—	3/12/2008
ADP 11-2972	—	4/14/2011
ADP 11-2984	—	6/14/2011
ADP 12-3016	—	4/30/2012
ADP 14-3093	—	4/30/2014
ADP 16-3188	—	6/1/2016
ADP 16-3202	—	12/13/2016
Second Revision of BART Order No. 6426	May 7, 2021	7/29/2020

III. EMISSION UNIT IDENTIFICATION

EU NO.	Generating Equipment	Emission Control	CAM Applicable
EU-1	Unit 1 Boiler (BW21) – 670 MW (net), coal fired (Retired)	N/A (Retired)	N/A (Retired)
EU-2	Unit 2 Boiler (BW22) – 670 MW (net), coal fired	CO: Combustion controls NO _x : Combustion controls, SNCR VOC: Combustion controls PM: Dual ESPs, wet scrubber SO ₂ : Wet scrubber Hg: Sorbent enhancement additive in boiler, carbon injection between ESPs	Yes for PM
EU-3	Auxiliary Boiler – 170 MMBtu/hr, oil-fired	Fuel consumption limit	No
EU-4	Material Handling (Coal Handling, Ash Handling, FGD Bleed Treatment Lime Storage Silo, Limestone Ball Mill)	<u>Coal Handling</u> – minimal emissions, no controls necessary except use of wet suppression at Coal Unloading Facility <u>Ash Handling</u> – baghouse, wet suppression, and enclosure as appropriate <u>FGD Bleed Treatment Lime Storage Silo</u> – Baghouse <u>Limestone Ball Mill</u> – Wet process, full enclosure	No
EU-5	Turbine Lube Oil Mist Vent 1	N/A (Retired)	N/A (Retired)
EU-6	Turbine Lube Oil Mist Vent 2	Turbine Lube Oil Mist Eliminator 2	No
EU-7	Black Stop Diesel Generator Engine – 1,445 hp diesel engine (Retired)	N/A (Retired)	N/A (Retired)
EU-8	Journal Shop Welding	Journal Shop Baghouse	No
EU-9	Emergency Diesel Generator 1	Ultra-low sulfur fuel	No
EU-10	Emergency Diesel Generator 2	Ultra-low sulfur fuel, EPA Tier 3 design, operating hours limit	No
EU-11	Fire Pump Engine (205 hp diesel engine)	Ultra low sulfur fuel, EPA Tier 3 design, operating hours limit	No
EU-12	Coal Unloading Facility Emergency Diesel Sump Pump Engine (115 hp diesel engine)	Ultra low sulfur fuel, EPA Tier 2 design, operating hours limit	No
EU-13	SEA System 1	Cartridge-style Fabric Filter	No

EU NO.	Generating Equipment	Emission Control	CAM Applicable
EU-14	SEA System 2	Cartridge-style Fabric Filter	No
EU-15	Sorbent Silo 1	Cartridge-style Fabric Filter	No
EU-16	Sorbent Silo 2	Cartridge-style Fabric Filter	No
EU-17	Fly Ash Bin 11	Baghouse	Yes for PM
EU-18	Fly Ash Bin 12	Baghouse	Yes for PM
EU-19	Fly Ash Bin 14	Baghouse	Yes for PM
EU-20	Fly Ash Bin 14 Air Slide to Bin 11 Air Slide	Cartridge-style Fabric Filter	No
EU-21	Fly Ash Bin 14 to 6050 Air Slide	Cartridge-style Fabric Filter	No
EU-22	Fine Coal Handling	Wet suppression	No

IV. PERMIT PROVISIONS

P1. Credible Evidence

40 CFR 60.11
40 CFR 61.12

For the purposes of submitting compliance certifications or establishing whether a violation of any term or condition of this Permit has occurred or is occurring, nothing precludes the use, including the exclusive use, of any credible evidence or information, relevant to whether the Permittee would have been in compliance with a specific term or condition if the appropriate performance or compliance test or procedure would have been performed.

P2. Confidentiality of Records and Information

WAC 173-401-500(5)
WAC 173-401-620(2)(e)
SWCAA 400-270 (Local)

The Permittee is responsible for clearly identifying information that is considered proprietary and confidential prior to submittal to SWCAA. Information considered to be proprietary and confidential may 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. [SWCAA 400-270]

In the case where the Permittee has submitted information to SWCAA under a claim of confidentiality, SWCAA may also require the source to submit a copy of such information directly to the EPA. [WAC 173-401-500(5)]

Upon request, the Permittee must also furnish to SWCAA 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 EPA along with a claim of confidentiality. SWCAA must maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-401-620(2)(e)]

P3. Insignificant Emission Unit - Permit Revision

WAC 173-401-530(6)

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 emissions thresholds specified in WAC 173-401-530(4) until this Permit is modified pursuant to WAC 173-401-725.

- (a) *Duty to comply.* The Permittee must comply with all conditions of this Permit. Any Permit noncompliance constitutes a violation of RCW 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 must 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 must furnish to SWCAA, within a reasonable time, any information that the SWCAA 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 must also furnish to SWCAA 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 EPA along with a claim of confidentiality. SWCAA must maintain confidentiality of such information in accordance with RCW 70.94.205.
- (f) *Permit fees.* The Permittee must pay fees in accordance with RCW 70.94.162 and SWCAA's fee schedule. Failure to pay fees in a timely fashion subjects the Permittee to civil and criminal penalties as prescribed in RCW 70.94.430, RCW 70.94.431, and SWCAA 400-103(9).
- (g) *Emissions trading.* No permit revision is 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 will remain in effect and will 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 SWCAA 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 FCAA Section 505(b).
- (j) *Permit continuation.* This Permit and all terms and conditions contained herein do 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) remains in effect until the renewal Permit has been issued or denied if a timely and complete application has been submitted.

P5. Federally Enforceable Requirements

WAC 173-401-625

All terms and conditions in a Permit, including any provisions designed to limit a source's potential to emit, are enforceable by the EPA and citizens under the FCAA;

Notwithstanding the above, 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 "*Local*" and are not federally enforceable under the FCAA. Terms and conditions so designated are not subject to the EPA and affected states review requirements of WAC 173-401-700 through WAC 173-401-820.

P6. Permit Shield

WAC 173-401-640

Compliance with the conditions of this Permit is deemed compliance with all applicable requirements that are specifically identified in this Permit as of the date of Permit issuance. Nothing in this Permit alters or affect the following:

- (a) The provisions of section 303 of the FCAA (emergency orders), including the authority of the EPA 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 the EPA to obtain information from a source pursuant to section 114 of the FCAA; and
- (e) The ability of SWCAA to establish or revise requirements for the use of reasonably available control technology (RACT) as defined in RCW 70.94.

P7. Emergency Provision

WAC 173-401-645

An "emergency" as defined in WAC 173-401-645(1) constitutes an affirmative defense to an action brought for noncompliance with technology based emission limitations. The affirmative defense of emergency must be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (a) An emergency occurred and that the Permittee can identify the causes(s) of the emergency;
- (b) The permitted facility was at the time being properly operated;
- (c) During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the Permit; and

- (d) The Permittee submitted notice of the emergency to SWCAA within two working days of the time when emission limitations were exceeded due to the emergency or shorter periods of time specified in an applicable requirement. This notice fulfills the requirement of WAC 173-401-615(3)(b) unless the excess emissions represent a potential threat to human health and safety. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

Burden of proof lies with the Permittee.

P8. Permit Expiration – Application Shield **WAC 173-401-705(2)**
WAC 173-401-710(3)

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) and WAC 173-401-500. All terms and conditions of the Permit will 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.

P9. Permit Revocation **WAC 173-401-710(4)**

SWCAA may revoke a Permit only upon the request of the Permittee or for cause. SWCAA must provide at least thirty days written notice to the Permittee prior to revocation of the Permit or denial of a permit renewal application. Such notice must include an explanation of the basis for the proposed action and afford the Permittee/applicant an opportunity to meet with SWCAA prior to the authority's final decision. A revocation issued under WAC 173-401-710(4) 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.

P10. Changes not Requiring Permit Revision/Off Permit Changes **WAC 173-401-722**
WAC 173-401-724

The Permittee may make changes described in WAC 173-401-722 and WAC 173-401-724 without revising this Permit, provided that the changes satisfy the criteria set forth in those sections, including the requirements to notify SWCAA and EPA.

P11. Reopenings for Cause **WAC 173-401-730**

This Permit must be reopened and revised under any of the following circumstances:

- (a) Additional applicable requirements become applicable to a source with a remaining permit term of 3 or more years. Such a reopening must 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 EPA, excess emissions offset plans will be deemed to be incorporated into the Permit;

- (c) SWCAA or the EPA 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) SWCAA or the EPA determines that the Permit must be revised or revoked to assure compliance with the applicable requirements.

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

P12. Unavoidable Excess Emissions

SWCAA 400-107(2)

The provisions of SWCAA 400-107 do not apply to federal standards, emission limits or standards contained in a PSD permit issued solely by EPA, or any event that causes a monitored exceedance of any relevant ambient air quality standard.

Excess emissions which the owner or operator wishes to be considered as unavoidable, must be reported to SWCAA as soon as possible, but no later than forty-eight (48) hours after discovery. The owner or operator of a "source" has the burden of proving to SWCAA or decision-making authority in an enforcement action that excess emissions were unavoidable.

- (a) *Startup or shutdown.* Excess emissions due to startup or shutdown conditions will be considered unavoidable provided the Permittee reports as required under SWCAA 400-107(1) and adequately demonstrates that:
 - (1) Excess emissions could not have been prevented through careful planning and design;
 - (2) Startup or shutdown was done as expeditiously as practicable;
 - (3) All emission monitoring systems were kept in operation unless their shutdown was necessary to prevent loss of life, personal injury, or severe property damage;
 - (4) The emissions were minimized consistent with safety and good air pollution control practice during the startup or shutdown period;
 - (5) If a bypass of control equipment occurs, that such bypass was necessary to prevent loss of life, personal injury, or severe property damage; and
 - (6) Excess emissions that occur due to upsets or malfunctions during routine startup or shutdown are treated as upsets or malfunctions under section (c) below.
- (b) *Maintenance.* Excess emissions due to scheduled maintenance will be considered unavoidable if the "source" reports as required under section (1) of SWCAA 400-107 and adequately demonstrates that the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.
- (c) *Upsets or malfunctions.* Excess emissions due to upsets or equipment malfunctions will be considered unavoidable provided the Permittee reports as required under of SWCAA 400-107(1) and adequately demonstrates that:
 - (1) The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;
 - (2) The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;

- (3) The operator 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, 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;
- (4) 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; and
- (5) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent possible.

P13 Right to Appeal Permit/Petition the EPA

42 USC 7661d(b)(1)

If the Administrator does not object in writing to the issuance of a Title V Permit pursuant to 42 USC 7661d(b)(1), any person may petition the EPA within 60 days after the expiration of the 45-day review period specified in 42 USC 7661d(b)(1) to take such action. A copy of such petition must be provided to the permitting authority and the applicant by the petitioner. The petition must be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period). The petition must identify all such objections. If the permit has been issued by the permitting agency, such petition will not postpone the effectiveness of the permit.

V. GENERAL TERMS AND CONDITIONS

G1. Asbestos

40 CFR 61 Subpart M (§61.140)

SWCAA 400-075 (Local)

SWCAA 476 (Local)

The Permittee must comply with the provisions of SWCAA 476 "Standards for Asbestos Control, Demolition and Renovation" when conducting any renovation, demolition, or asbestos storage activities at the facility.

G2. Chemical Accident Prevention

40 CFR 68

The Permittee must comply with the requirements of the Chemical Accident Prevention Provisions of 40 CFR 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. [40 CFR 68.10]

G3. Protection of Stratospheric Ozone**40 CFR 82 Subpart B (§82.30)
40 CFR 82 Subpart F (§82.150)**

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

G4. Duty to Supplement or Correct Application**WAC 173-401-500(6)**

The Permittee, upon becoming aware that relevant facts were omitted or incorrect information was submitted in a Permit application, must promptly submit such supplementary facts or corrected information. In addition, an applicant 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 Permit.

G5. Certification**WAC 173-401-520**

All application forms, reports, and compliance certifications must be certified by a responsible official. Certification must state that, based on information and belief formed after reasonable inquiry, the statements and information contained in the submittal are true, accurate, and complete.

G6. Inspection and Entry**WAC 173-401-630(2)
SWCAA 400-105(2) and (3)**

The Permittee must allow inspection and entry, upon presentation of credentials and other documents as may be required by law, by SWCAA or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a 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) Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the Permit or applicable requirements.

G7. Schedule of Compliance**WAC 173-401-630(3)**

The Permittee must continue to comply with all applicable requirements with which the source is currently in compliance. The Permittee must meet on a timely basis any applicable requirements that become effective during the permit term. The Permittee must comply with any approved schedule of compliance in accordance with WAC 173-401-510(2)(h)(iii).

G8. Permit Renewal Application**WAC 173-401-710(1)
WAC 173-401-610**

The Permittee must submit a complete permit renewal application to SWCAA no later than the date established in the Permit. Permit expiration terminates the Permittee's right to operate

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unless a timely and complete renewal application has been submitted consistent with WAC 173-401-710(1) and WAC 173-401-500. All terms and conditions of the Permit must 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.

This Permit expires on October 10, 2023. A renewal application is due on October 10, 2022 and a complete renewal application is due no later than April 10, 2023.

G9. Transfer of Ownership or Operational Control **WAC 173-401-720(1)(d)**

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(1)(d).

G10. Reporting of Emissions of Greenhouse Gases **WAC 173-441 (Local)**

WAC 173-441 requires owners and operators of affected facilities to quantify and report emissions of greenhouse gases from applicable source categories listed in WAC 173-441-120. This regulation applies to any facility located in Washington State with total greenhouse gas emissions of ten thousand metric tons of carbon dioxide equivalent (CO₂e) or more per calendar year. The Permittee must prepare and submit greenhouse gas reports to Ecology for each affected facility. All requests, notifications, and communications to Ecology pursuant to chapter 173-441 WAC, other than submittal of the annual GHG report, must be submitted to the following address:

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

G11. Misrepresentation and Tampering **SWCAA 400-105(5) and (6)**

The Permittee must not make any false material statement, representation or certification in any form, notice, or report required under RCW 70.94, or any ordinance, resolution, regulation, permit or order in force pursuant thereto.

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

G12. Emission Testing and Monitoring **SWCAA 400-106**

SWCAA may conduct or require that emission testing be conducted of any "source" or emission unit within the jurisdiction of SWCAA to determine compliance, evaluate control equipment performance, evaluate RACT, or quantify emissions.

The Permittee must provide the necessary platform and sampling ports for SWCAA personnel or others to perform a test of an emission unit. SWCAA must be allowed to obtain a sample from any emission unit. The Permittee must be given an opportunity to observe the sampling and to obtain a sample at the same time.

G13. Portable Sources

**SWCAA 400-110(6)
SWCAA 400-036**

Portable sources which locate temporarily at the site a source are allowed to operate at the temporary location without filing an ADP application provided that:

- (a) The source/emissions units are registered with SWCAA;
- (b) The source/emissions units have an ADP 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) Portable sources that do not have a valid ADP issued by SWCAA, but do have a valid approval issued by a Washington air pollution control authority after July 1, 2010, may operate within SWCAA jurisdiction without filing an ADP application pursuant to SWCAA 400-109 or obtaining an ADP pursuant to SWCAA 400-110 provided the requirements of SWCAA 400-036 are met.

G14. New Source Review

**WAC 173-400-117
WAC 173-400-720
WAC 173-460-040 (Local)
SWCAA 400-072
SWCAA 400-076
SWCAA 400-109
SWCAA 400-110
SWCAA 400-820**

The Permittee must submit an application and approval must be issued or written confirmation of exempt status must be received before commencing construction of the proposed installations, modifications, changes, or alternations. Portable sources may be exempt from this requirement if they fulfill the criteria described in **G13**.

G15. Replacement or Substantial Alteration of Emission Control Technology at an Existing Stationary Source

SWCAA 400-114

Prior to replacing or substantially altering emission control technology installed at an existing stationary source or emission unit, the Permittee must file an ADP application with SWCAA. Construction must not commence on a project subject to review until SWCAA issues a final ADP or other regulatory order. However, any ADP application filed under this section is deemed to be approved without conditions if SWCAA takes no action within thirty (30) days of receipt of a complete application.

G16. Process Equipment

SWCAA 400-116(1)

Any process equipment, including features, machines, and devices constituting parts of or called for by plans, specifications, or other information submitted for approval or required as part of an approval, such as an ADP, must be maintained and operate in good working order. SWCAA reserves the right to take any and all appropriate action to maintain compliance with approval conditions, including directing the facility to cease operations of defective or malfunctioning equipment until corrective action can be completed.

G17. Pollution Control Equipment

SWCAA 400-116(2)

Any equipment that serves as air contaminant control or capture equipment must be maintained and operate in good working order at all times in accordance with good operations and maintenance practices and in accordance with SWCAA's approval conditions. SWCAA reserves the right to take any and all appropriate action to maintain compliance with approval conditions, including directing the facility to cease operations of defective or malfunctioning equipment until corrective action can be completed.

G18. Adjustment for Atmospheric Conditions

SWCAA 400-205

Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant is prohibited, except as directed according to air pollution episode regulations as specified at SWCAA 400-230(5).

G19. Outdoor BurningSWCAA 425 (*Local*)

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

VI. OPERATING TERMS AND CONDITIONS

The following table lists all federal, state, and locally enforceable requirements applicable to the Permittee. The effective date for each applicable requirement is listed in Section II, which also describes the enforceability of the term. Those specific requirements that are enforceable only by SWCAA are denoted with "*Local*." Any requirement with "Plantwide" listed in the Emission Unit column, applies universally to all emission units or activities, regardless of whether identified as an EU or an IEU. 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. No.	Requirement	Emission Point	Monitoring
Req-1	Permittee must not cause or permit any emission that exceeds 20% opacity for more than three minutes in any one hour. Reference Method: SWCAA Method 9 SWCAA 400-040(1)	Plantwide	M2

Req. No.	Requirement	Emission Point	Monitoring
Req-2	Permittee must not cause or permit fallout of particulate matter beyond the source's property boundary in sufficient quantity to interfere unreasonably with the use and enjoyment of the property on which the fallout occurs. SWCAA 400-040(2)	Plantwide	M3, M5
Req-3	Permittee must take reasonable precautions to prevent the release of fugitive emissions from any emission unit which is a source of fugitive emissions. SWCAA 400-040(3)	Plantwide	M4, M6
Req-4	Permittee must use recognized good practice and procedures to reduce odors to a reasonable minimum. SWCAA 400-040(4) Local Only	Plantwide	M5
Req-5	The Permittee must not cause or permit the emission of any air contaminant if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. SWCAA 400-040(5)	Plantwide	M5
Req-6	Permittee must not cause or permit any emission unit to emit a gas containing sulfur dioxide in excess of 1,000 ppm of sulfur dioxide on a dry basis, corrected to 7% O ₂ for combustion sources, and based on an average of 60 minutes. Reference Method: 40 CFR 60 Appendix A Methods 3A, 6C SWCAA 400-040(6) ADP 97-2057R1, Sections 22 and 28(a)	EU-2, EU-3, EU-9, EU-10, EU-11, EU-12	M7, M8, M9
Req-7	Permittee must 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. SWCAA 400-040(7)	Plantwide	N/A
Req-8	Permittee must take reasonable precautions to prevent emissions of fugitive dust and operate the source to minimize emissions. SWCAA 400-040(8)(a)	Plantwide	M4, M5
Req-9	Permittee must 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. Reference Method: 40 CFR 60 Appendix A Method 5 SWCAA 400-050(1 and 4)	EU-2, EU-3, EU-9, EU-10, EU-11, EU-12	M3, M6, M8, M9, M20

Req. No.	Requirement	Emission Point	Monitoring
Req-10	The Permittee must not burn fuel oil with a sulfur content greater than 15 ppm by weight (ppmw). SWCAA 400-050(2)	EU-2, EU-3, EU-9, EU-10, EU-11, EU-12	M7, M17, M26, M27, M28
Req-11	Permittee must not cause or allow emissions of particulate matter from a general process unit (excludes combustion) in excess of 0.1 gr/dscf of exhaust gas. Reference Method: 40 CFR 60 Appendix A Method 5 SWCAA 400-060	Plantwide	M3, M6
Req-12	Permittee must conduct all abrasive blasting inside a structure designed to capture blast grit and overspray except for items too large to be reasonably handled indoors. SWCAA 400-070(8)	Plantwide	N/A

Req. No.	Requirement	Emission Point	Monitoring
Req-13	Permittee must install, calibrate, maintain, and operate continuous monitoring equipment for opacity for the bypass stack of Unit 2 in accordance with the requirements found in 40 CFR 51, App. P Section 3, 4, and 5 and 40 CFR 60 App. B – F as appropriate. SWCAA 400-105(4)(a)(i) and (4)(e)	EU-2	M9
Req-14	Permittee must not cause or allow emissions of filterable particulate matter from the stack of Unit 2 in excess of 0.010 gr/dscf of exhaust gas corrected to 7% O ₂ . Reference Method: 40 CFR 60 Appendix A Method 5 ADP 97-2057R1 Section 34	EU-2	M8, M9, M11, M20
Req-15	Permittee must not cause or permit any emission which exceeds 20% opacity based on a 6-minute average, except for one 6-minute period/hour not to exceed 27% opacity. Permittee must not allow visible emissions to exceed 20% opacity for more than three minutes, in any one hour. Reference Method: EPA Method 9 and SWCAA Method 9 ADP 97-2057R1 Section 36	EU-2	M2, M9, M11

Req. No.	Requirement	Emission Point	Monitoring
Req-16	<p>The Permittee must not cause or allow emissions of filterable particulate matter from the stack of Unit 2 in excess of either 0.030 lb/MMBtu or 0.30 lb/MWh gross output, 30-boiler operating day rolling average. These limits do not apply to periods of startup or shutdown as defined in 40 CFR 63.10042.</p> <p>Reference Method: 40 CFR 60 Appendix A Method 5 with increased filter temperature (320 ± 25°F filter temperature) and minimum 1 dry standard cubic meter sample volume per run or PM CEMS</p> <p>40 CFR 63.9991(a)(1) – Reference to Table 2 40 CFR 63.10000(a) – Startup and shutdown exception 40 CFR 63.10005(a) – Explanation that either limit applies 40 CFR 63 Subpart UUUUU Table 2 Section 1(a) - Limits 40 CFR 63 Subpart UUUUU Table 5 – Reference Methods</p>	EU-2	M8, M9
Req-17	<p>Permittee must not cause or allow total SO₂ emissions from the stack of Unit 2, the auxiliary boiler, and other emission points throughout the facility, combined, in excess of 10,000 tons per year in any rolling 12-month period.</p> <p>Reference Method: 40 CFR 75, Appendix A; 40 CFR 60 Appendix B Performance Specification 2 and 3: 40 CFR 60 Appendix F</p> <p>ADP 97-2057R1 Section 18</p>	EU-2, EU-3	M9, M12, M14
Req-18	<p>Permittee must not cause or allow any unit to emit SO₂ in excess of 250 ppm on a dry basis, corrected to 7% O₂, 1-hour average except during startups, shutdowns and forced or planned outages of the SO₂ control system.</p> <p>Reference Method: 40 CFR 60 Appendix A Methods 3A, 6C</p> <p>ADP 97-2057R1 Sections 21(a) and 28(a)</p>	EU-2	M8, M9, M11
Req-19	<p>During startups, shutdowns, and forced or planned outages of the SO₂ control system, Permittee must not allow 1-hour average SO₂ emissions from the affected unit(s) in excess of 1,000 ppm.</p> <p>Reference Method: 40 CFR 60 Appendix A Method 6C</p> <p>ADP 97-2057R1 Section 21(b) and 21(c)</p>	EU-2	M9, M11
Req-20	<p>The Permittee must schedule SO₂ emission control system outages to the maximum extent possible during daily or weekly load reduction periods. No planned SO₂ system outage is allowed from June 15 through September 15 of any year except when the unit burns no fuel.</p> <p>ADP 97-2057R1 Section 23</p>	EU-2	M11

Req. No.	Requirement	Emission Point	Monitoring
Req-21	<p>The Permittee must not cause or allow emissions of sulfur dioxide from the stack of Unit 2 in excess of either 0.20 lbMMBtu or 1.5 lb/MWh gross output, 30-boiler operating day rolling average. These limits do not apply to periods of startup or shutdown as defined in 40 CFR 63.10042.</p> <p>Reference Method: SO₂ CEMS</p> <p>40 CFR 63.9991(a)(1) – Reference to Table 2 40 CFR 63.10000(a) – Startup and shutdown exception 40 CFR 63.10005(a) – Explanation that either limit applies 40 CFR 63 Subpart UUUUU Table 2 Section 1(b) - Limits 40 CFR 63 Subpart UUUUU Table 5 – Reference methods, averaging period</p>	EU-2	M8, M9
Req-22	<p>Permittee must: (1) hold SO₂ Acid Rain allowances, as of the allowance transfer deadline, in the source's account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of SO₂ for the previous calendar year from the affected units at the source; and (2) comply with the applicable Acid Rain emissions limitation for SO₂. (See Appendix B Acid Rain Permit).</p> <p>Reference Method: 40 CFR 75</p> <p>40 CFR 72.9(c)(1) WAC 173-406-106(3)(a)(i)</p>	EU-2	M9
Req-23	<p>The Permittee must forfeit ownership of SO₂ Acid Rain allowances to SWCAA equal to 1.5 times the quantity of emissions in excess of the 10,000 ton annual limit calculated on a calendar year basis.</p> <p>Reference Method: 40 CFR 75</p> <p>ADP 97-2057R1 Section 28(f)</p>	EU-2	M9, M12
Req-24	<p>The original stack may remain for bypass provided certified CEMS are maintained to monitor SO₂ emissions from the bypass stack. If SO₂ emissions from the original stack are not monitored by certified functioning CEMS, the Permittee must only use the original stack during extreme emergency conditions.</p> <p>ADP 97-2057R1 Section 29</p>	EU-2	M13

Req. No.	Requirement	Emission Point	Monitoring
Req-25	<p>SO₂ emissions from Unit 2 must not exceed 1,350 pounds per hour (1-hour average). Compliance with the SO₂ emission limit must be based on using SO₂ emissions data from a Continuous Emissions Monitoring System (CEMS) operated in accordance with 40 CFR 75. Only unadjusted, quality-assured SO₂ concentration values and flow rate data must be used in the emissions calculations. Bias adjustment factors and 40 CFR 75 substitute data values must not be used. The CEMS must provide valid hourly SO₂ emissions for at least 95% of the hours that the boiler is operated during each calendar month except for periods of monitoring system downtime, provided that the owner or operator demonstrated that the downtime was not a result of inadequate design, operation, or maintenance, or any other reasonable preventable conditions, and any necessary repairs to the monitoring system are conducted in a timely manner.</p> <p style="text-align: center;">ADP 16-3202 Paragraphs 13 and 14</p>	EU-2	M9
Req-26	<p>The Permittee must not cause or allow emissions of mercury from the stack of Unit 2 in excess of either 1.2 lb/TBtu or 0.013 lb/GWh gross output, 30-boiler operating day rolling average. These limits do not apply to periods of startup or shutdown as defined in 40 CFR 63.10042.</p> <p>Reference Method: Hg CEMS or sorbent trap monitoring system</p> <p style="text-align: center;"> 40 CFR 63.9991(a)(1) – Reference to Table 2 40 CFR 63.10000(a) – Startup and shutdown exception 40 CFR 63.10005(a) – Explanation that either limit applies 40 CFR 63 Subpart UUUUU Table 2 Section 1(c) - Limits 40 CFR 63 Subpart UUUUU Table 5 – Reference methods, averaging period </p>	EU-2	M8, M9
Req-27	<p>Emissions of nitrogen oxides must not exceed 0.30 lb/MMBtu for those hours when the unit's generating load is 360 MW gross or greater. This annual average is calculated as the combined arithmetic sum of hourly emission rates when generating load is 360 MW gross, or greater, during the calendar year.</p> <p>Reference Method: 40 CFR 75</p> <p style="text-align: center;">ADP 97-2057R1 Section 30</p>	EU-2	M9

Req. No.	Requirement	Emission Point	Monitoring
Req-27b	<p>Emissions of nitrogen oxides from Unit 2 are limited to 0.18 lb/MMBtu (30-boiler operating day rolling average).</p> <p>The Permittee may use a variety of means as necessary to control emissions of nitrogen oxides to meet the prescribed NO_x limit including the Combustion Optimization System with Neural Network, the SNCR, Low NO_x Burners, boiler control, variety (source) of coal, or any combination thereof. Compliance with the nitrogen oxides emission limitation will be determined by use of a continuous emission monitoring system meeting the requirements of 40 CFR Part 75.</p> <p>For any hour in which coal is combusted in a unit, the owner/operator of each unit must calculate the hourly nitrogen oxides concentration in lb/MMBtu at the CEMS installed in accordance with the requirements of 40 CFR Part 75. The 30-day average lb/MMBtu rate is calculated by summing the hourly emissions in pounds (unit lb/MMBtu times unit heat input) and dividing that by the sum of the hourly heat inputs in million Btu. At the end of that boiler's operating day, the owner/operator must calculate and record a new 30-day rolling average emission rate in lb/MMBtu from all valid hourly data for that boiler's operating day and for that boiler's previous 29 successive boiler operating days.</p> <p>An hourly average nitrogen oxides emission rate is valid only if the minimum number of data points, as specified in 40 CFR 75, is acquired as necessary to calculate nitrogen oxides emissions and heat rate.</p> <p>Data reported to meet these requirements must not include data substituted using the missing data substitution procedures of subpart D of 40 CFR part 75, and the data must not have been bias adjusted according to the procedures of 40 CFR part 75.</p> <p>A boiler operating day is a 24-hour period between 12 midnight and the following midnight during which coal is combusted at any time in the boiler. It is not necessary for coal to be combusted for the entire 24-hour period.</p> <p>Second Revision of BART Order No. 6426 Conditions 1.1, 1.2, 3.3, and 5</p>	EU-2	M9
Req-28	Reserved		
Req-29	Reserved		
Req-30	<p>Emissions of ammonia from the coal-fired utility steam generating unit is limited to a maximum of 10 ppmvd, 30 operating day rolling average.</p> <p>The ammonia concentration measured during the periodic emissions testing required by M8 is the 30 operating day rolling average value used for compliance starting on the date of the completion of the test until the completion of the next required periodic emission test.</p> <p>Second Revision of BART Order No. 6426 Conditions 2.1 and 4.1.4</p>	EU-2	M8, M25

Req. No.	Requirement	Emission Point	Monitoring
Req-31	<p>Unit 1 and Unit 2 must permanently cease coal-fired power generation operations as follows:</p> <p>(a) One of the units must cease no later than December 31, 2020.</p> <p>(b) The other unit must cease no later than December 31, 2025.</p> <p>These conditions do not apply in the event the Washington Department of Ecology determines as a requirement of state or federal law or regulation that the selective catalytic reduction technology must be installed on either coal fired unit.</p> <p style="text-align: center;">Second Revision of BART Order No. 6426 Condition 3</p>	EU-1, EU-2	M9, R9
Req-32	Reserved		
Req-33	Reserved		
Req-34	Reserved		
Req-35	<p>NO_x emissions must not exceed 0.40 lb/million Btu annual average for Unit 2 (see Appendix B Acid Rain Permit).</p> <p>Reference Method: 40 CFR 75</p> <p style="text-align: center;">40 CFR 76.7(a)(1) WAC 173-406-106(4)</p>	EU-2	M9
Req-36	<p>Permittee must not cause or allow carbon monoxide emissions in excess of 200 ppm, on a dry basis, corrected to 7% O₂, annual (calendar year) average.</p> <p>Reference Method: Averaging of plant CO CEMS data as provided in M8</p> <p style="text-align: center;">ADP 97-2057R1 Section 39</p>	EU-2	M8
Req-37	<p>Permittee must certify, operate, and maintain continuous emissions monitoring systems (CEMS) and a continuous opacity monitoring system (COMS) with an automated data acquisition and handling system for determining and recording all SO₂, NO_x, and CO₂ emissions from the scrubber stack and all SO₂, NO_x, and CO₂ emissions and opacity from the bypass stack as required by 40 CFR 75.</p> <p style="text-align: center;">40 CFR 75.10(a)</p>	EU-2	M9
Req-38	<p>The Permittee must conduct a tune-up of Unit 2 initially and every 48 months thereafter in accordance with the requirements of 40 CFR 63.10021(e) and Table 3 of 40 CFR 63 Subpart UUUUU.</p> <p style="text-align: center;">40 CFR 63.10000(e) – Requirement for periodic tune-ups 40 CFR 63.10006(i)(2) – Frequency of periodic tune-ups 40 CFR 63.10021(e) – Procedures and frequency 40 CFR 63 Subpart UUUUU Table 3 Section 1 40 CFR 63 Subpart UUUUU Table 7 Section 5</p>	EU-2	M33

Req. No.	Requirement	Emission Point	Monitoring
Req-39	<p>For startup of Unit 2, the Permittee must comply with one of the options provided in Table 3 of 40 CFR 63 Subpart UUUUU.</p> <p>If Option 2 is chosen, the Permittee must use clean fuels to the maximum extent possible during the startup period and engage both sets of electrostatic precipitators within 1 hour of firing coal. All other control devices must be engaged as expeditiously as possible, considering safety and manufacturer/supplier recommendations. Applicable emission limits from 40 CFR 63 Subpart UUUUU apply within 4 hours of the start of electricity generation. Startup ends when all applicable emission control devices are engaged (ESPs, mercury control system and flue gas desulfurization system) or 4 hours after the electrical generating unit generates electricity or useful thermal energy, whichever is earlier.</p> <p>While firing coal or residual oil during shutdown, the Permittee must operate all applicable control technologies, and continue to operate those control devices after the cessation of coal or residual oil being fed into the boiler and for as long as possible thereafter considering operational and safety concerns. Shutdown ends when the electrical generating unit no longer generates electricity or makes useful thermal energy and no fuel is being fired in the electrical generating unit.</p> <p>The Permittee must comply with all applicable emissions limits at all times except for periods that meet the definitions of startup and shutdown in 40 CFR 63 Subpart UUUUU.</p> <p>40 CFR 63.10000(a) for startup and shutdown work practice requirements 40 CFR 63.10042 "startup" and "shutdown" definitions 40 CFR 63 Subpart UUUUU Table 3 Sections 3 and 4</p>	EU-2	M33
Req-40	<p>At all times, including periods of startup, shutdown, and malfunction, the Permittee must, to the extent practicable, maintain and operate air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to SWCAA, which may include, but is not limited to, monitoring results, review of operating and maintenance procedures and records, and inspection of the source. [40 CFR 63.10000(b), ADP 97-2057R1 Section 48]</p> <p>The flue gas desulfurization system must be operated at all times consistent with 40 CFR 63.10000(b) except as allowed during startup by Table 3 of Subpart UUUUU of Part 63. [40 CFR 63.9991(c)(2), 40 CFR 63 Subpart UUUUU Table 3, Section 3]</p> <p>40 CFR 63.9991(c)(2) 40 CFR 63.10000(b) ADP 97-2057R1 Section 48</p>	EU-2	M8, M9

Req. No.	Requirement	Emission Point	Monitoring
Req-41	<p>Permittee must not cause or allow total annual fuel oil combusted in the auxiliary boiler in excess of 600,000 gallons per year.</p> <p style="text-align: center;">ADP 97-2057R1 Section 45</p>	EU-3	M14
Req-42	<p>Effective January 31, 2016, the Permittee must operate and maintain the Auxiliary Boiler in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to SWCAA, which may include, but is not limited to, monitoring results, review of operating and maintenance procedures and records, and inspection of the source.</p> <p style="text-align: center;">40 CFR 63.7500(a)(3)</p>	EU-3	N/A
Req-43	<p>A tune-up of the Auxiliary Boiler must be conducted initially and every 5 years thereafter, no later than 61 months after the previous tune-up. The initial tune-up must be conducted no later than January 31, 2016. Each tune-up must be conducted in accordance with 40 CFR 63.7540(a)(10)(i) through (vi). The burner inspection specified in 40 CFR 63.7540(a)(10)(i) may be delayed until the next scheduled or unscheduled unit shutdown; however the burner must be inspected at least once every 72 months.</p> <p style="text-align: center;"> 40 CFR 63.7500(c) 40 CFR 7505(a) 40 CFR 63.7510(e) 40 CFR 63.7515(d) 40 CFR 63.7540(a)(12) 40 CFR 63 Subpart DDDDD Table 3 </p>	EU-3	M34
Req-44	<p>The opacity of emissions from the loading of fly ash trucks from the 6050 unloaders must not exceed twenty percent for more than 3 minutes in any one-hour period as determined in accordance with SWCAA 400, Appendix A, Method 9.</p> <p style="text-align: center;">ADP 01-2403 Section 11(a)</p>	EU-4	M4
Req-45	<p>The opacity of emissions from the Unit 2 turbine lube oil mist eliminator stack must not exceed five percent for more than 3 minutes in any one-hour period as determined in accordance with SWCAA 400, Appendix A, Method 9.</p> <p style="text-align: center;">ADP 01-2403 Section 11(b)</p>	EU-6	M2
Req-46	<p>Emissions of PM₁₀ from the Coal Unloading Facility must not exceed 2,411 pounds per year. Annual emissions must be calculated using the methodology identified in Section V of the Title V Basis Statement.</p> <p style="text-align: center;">ADP 11-2972 Condition 2</p>	EU-4	M3, M21

Req. No.	Requirement	Emission Point	Monitoring
Req-47	<p>The opacity of emissions from all emission points within the Coal Unloading Facility must not exceed zero percent for more than three minutes in any one hour period as determined in accordance with SWCAA 400, Appendix A, Method 9.</p> <p style="text-align: center;">ADP 11-2972 Condition 3</p>	EU-4	M3
Req-48	<p>Coal drop (transfer) points associated with the Coal Unloading Facility must utilize a high pressure water spray system to control fugitive dust during coal unloading and transfer operations. Water pressure at the spray/fog nozzles must be maintained at 80 psig or greater during coal unloading and coal transfer operations. A functional pressure gauge must be maintained onsite and a connection point provided for the gage for the purpose of demonstrating compliance with this pressure limit.</p> <p style="text-align: center;">ADP 11-2972 Condition 8</p>	EU-4	M3
Req-49	<p>Emissions of PM₁₀ from the FGD Bleed Treatment Lime Storage Silo must not exceed 0.005 grains per dry standard cubic foot (1-hour average).</p> <p>Reference Method: 40 CFR 60 Appendix A Method 5 or 201A</p> <p style="text-align: center;">ADP 05-2636 Condition 1</p>	EU-4	M3, M22
Req-50	<p>The opacity of emissions from the FGD Bleed Treatment Lime Storage Silo must not exceed zero percent for more than three minutes in any one hour period as determined in accordance with SWCAA 400, Appendix A, Method 9.</p> <p style="text-align: center;">ADP 05-2636 Condition 2</p>	EU-4	M3
Req-51	<p>The opacity of emissions from the Journal Shop Baghouse must not exceed zero percent for more than three minutes in any one hour period as determined in accordance with SWCAA 400, Appendix A, Method 9.</p> <p style="text-align: center;">ADP 08-2779 Condition 1</p>	EU-8	M3, M6
Req-52	<p>The Journal Shop Baghouse must be operated to collect welding fume whenever welding activities are taking place in the Journal Shop. The Journal Shop baghouse must be maintained in good repair and must utilize afterfilters meeting a HEPA or better particulate matter collection efficiency (99.97% or better on particles measuring 0.3 microns or greater in diameter).</p> <p style="text-align: center;">ADP 08-2779 Condition 2</p>	EU-8	M3, M6

Req. No.	Requirement	Emission Point	Monitoring
Req-53	<p>The Permittee must conduct the following maintenance for Emergency Diesel Generator 1.</p> <p>(a) Change oil and filter every 500 hours of operation or annually, whichever comes first except as provided in 40 CFR 63.6625(i);</p> <p>(b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and</p> <p>(c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</p> <p style="text-align: center;">40 CFR 63.6640(a) 40 CFR 63.6602 and Table 2c SWCAA 400-075</p>	EU-9	M26
Req-54	<p>The Permittee must minimize the time Emergency Diesel Generator 1 spends at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.</p> <p style="text-align: center;">40 CFR 63.6602 40 CFR 63.6625(h) and Table 2c SWCAA 400-075</p>	EU-9	N/A
Req-55	<p>The Permittee must operate and maintain Emergency Diesel Generator 1 according with the Small Engine Maintenance Plan detailed in Appendix C.</p> <p style="text-align: center;">40 CFR 63.6625(e) 40 CFR 63.6640(a) and Table 6 SWCAA 400-075</p>	EU-9	M26
Req-56	<p>The Permittee must maintain a non-resettable hour meter on Emergency Diesel Generator 1 and Emergency Diesel Generator 2.</p> <p style="text-align: center;">40 CFR 60.4209(a) – Emergency Diesel Generator 2 40 CFR 63.6625(f) – Emergency Diesel Generator 1 SWCAA 400-075</p>	EU-9, EU-10	M26
Req-57	<p>At all times Emergency Diesel Generator 1 must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions.</p> <p style="text-align: center;">40 CFR 63.6605(b), SWCAA 400-075</p>	EU-9	M26

Req. No.	Requirement	Emission Point	Monitoring												
Req-58	<p>Operation of Emergency Diesel Generator 1 and Emergency Diesel Generator 2 for maintenance checks and readiness testing must not exceed 100 hours per year each. Emergency operation of the emergency generator engines is not limited. A nonresettable time totalizer must be installed on each engine and used to measure hours of operation. Emergency Diesel Generator 1 and Emergency Diesel Generator 2 may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine.</p> <p style="text-align: center;">40 CFR 63.6640(f) - Em. Diesel Generator 1 40 CFR 60.4211(f)(2) – Em. Diesel Generator 2 SWCAA 400-075 ADP 16-3188 Condition 5</p>	EU-9, EU-10	M26												
Req-59	<p>Operation of Emergency Diesel Generator 1 and Emergency Diesel Generator 2 must be limited to maintenance checks, readiness testing, and as necessary for emergency service.</p> <p style="text-align: center;">40 CFR 63.6640(f)(2) -Em. Diesel Generator 1 40 CFR 60.4211(f)(2) – Em. Diesel Generator 2 SWCAA 400-075 ADP 16-3188 Condition 6</p>	EU-9, EU-10	M26												
Req-60	<p>Emissions from the Coal Unloading Facility Emergency Diesel Sump Pump Engine must not exceed:</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Pollutant</u></th> <th style="text-align: left;"><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>Nitrogen Oxides</td> <td>0.25 tons per year</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0.044 tons per year</td> </tr> <tr> <td>PM</td> <td>0.0055 tons per year</td> </tr> <tr> <td>PM₁₀</td> <td>0.0055 tons per year</td> </tr> <tr> <td>PM_{2.5}</td> <td>0.0055 tons per year</td> </tr> </tbody> </table> <p>Reference Methods: EPA Methods 1-5, 7E, 10, 201A</p> <p>Annual emissions must be calculated using the methodology identified in Section V of the Title V Basis Statement.</p> <p style="text-align: center;">ADP 11-2972 Condition 5</p>	<u>Pollutant</u>	<u>Emission Limit</u>	Nitrogen Oxides	0.25 tons per year	Carbon Monoxide	0.044 tons per year	PM	0.0055 tons per year	PM ₁₀	0.0055 tons per year	PM _{2.5}	0.0055 tons per year	EU-12	M28
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Req. No.	Requirement	Emission Point	Monitoring
Req-61	<p>Visible emissions from the Coal Unloading Facility Emergency Diesel Sump Pump Engine must not exceed five percent opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (See Appendix A of SWCAA 400) except during startup. For the purposes of this requirement, the startup period ends when the earlier of the following operating events occurs:</p> <p>(a) The engine has reached normal operating temperature; or (b) The engine has been operating for 15 minutes.</p> <p>Reference Method: SWCAA Method 9</p> <p style="text-align: center;">ADP 11-2972 Condition 6</p>	EU-12	M5
Req-62	<p>The Coal Unloading Facility Emergency Diesel Sump Pump Engine must only be fired on No. 2 diesel or better. The sulfur content of the fuel fired in the diesel engine must not exceed 0.0015% by weight (15 ppm). A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement.</p> <p style="text-align: center;">40 CFR 60.4207(b) SWCAA 400-050(2) ADP 11-2972 Condition 9</p>	EU-12	M28
Req-63	<p>Operation of the Coal Unloading Facility Emergency Diesel Sump Pump Engine must be limited to maintenance checks, readiness testing, and as necessary to provide emergency or backup pumping. The engine may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Operation for maintenance checks and readiness testing must not exceed 100 hours per year.</p> <p style="text-align: center;">40 CFR 60.4211(f)(2) ADP 11-2972 Condition 10</p>	EU-12	N/A
Req-64	<p>The Coal Unloading Facility Emergency Diesel Sump Pump Engine must be operated no more than 200 hours per year. A nonresettable time totalizer must be installed and used to measure hours of operation.</p> <p style="text-align: center;">ADP 11-2972 Condition 11</p>	EU-12	M28
Req-65	<p>The exhaust from the Coal Unloading Facility Emergency Diesel Sump Pump Engine must be discharged vertically. Any device that obstructs or prevents vertical discharge is prohibited.</p> <p style="text-align: center;">ADP 11-2972 Condition 12</p>	EU-12	N/A

Req. No.	Requirement	Emission Point	Monitoring												
Req-66	<p>Except as provided in 40 CFR 60.4211(g), the Coal Unloading Facility Emergency Diesel Sump Pump Engine must be operated and maintained according to the manufacturer's emissions-related written instructions and the Permittee may only change those emissions-related settings that are permitted by the manufacturer. The manufacturer's written instructions have been summarized in Appendix C of this Permit. 40 CFR 60.4211(g) contains alternative requirements, including a source test requirement, if the Permittee chooses to deviate from the manufacturer's written instructions.</p> <p style="text-align: center;">40 CFR 60.4211(a) SWCAA 400-115 ADP 11-2972 Condition 13</p>	EU-12	M28												
Req-67	<p>Emissions from the Fire Pump Engine must not exceed:</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Pollutant</u></th> <th style="text-align: left;"><u>Emission Limit</u></th> </tr> </thead> <tbody> <tr> <td>Nitrogen Oxides</td> <td>0.28 tons per year</td> </tr> <tr> <td>Carbon Monoxide</td> <td>0.14 tons per year</td> </tr> <tr> <td>PM</td> <td>0.013 tons per year</td> </tr> <tr> <td>PM₁₀</td> <td>0.013 tons per year</td> </tr> <tr> <td>PM_{2.5}</td> <td>0.013 tons per year</td> </tr> </tbody> </table> <p>Annual emissions must be calculated using the methodology identified in Section V of the Title V Basis Statement.</p> <p>Reference Methods: EPA Methods 1-5, 7E, 10, 201A</p> <p style="text-align: center;">ADP 16-3188 Condition 1</p>	<u>Pollutant</u>	<u>Emission Limit</u>	Nitrogen Oxides	0.28 tons per year	Carbon Monoxide	0.14 tons per year	PM	0.013 tons per year	PM ₁₀	0.013 tons per year	PM _{2.5}	0.013 tons per year	EU-11	M27
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PM _{2.5}	0.013 tons per year														
Req-68	<p>Visible emissions from the Fire Pump Engine and Emergency Diesel Generator 2 must not exceed five percent opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (See Appendix A of SWCAA 400) except during startup. For the purposes of this requirement, the startup period ends when the earlier of the following operating events occurs:</p> <p>(a) The engine has reached normal operating temperature; or (b) The engine has been operating for 15 minutes.</p> <p style="text-align: center;">ADP 16-3188 Condition 2</p>	EU-10, EU-11	M2, M5												

Req. No.	Requirement	Emission Point	Monitoring
Req-69	<p>Except as provided in 40 CFR 60.4211(g), the Fire Pump Engine and Emergency Diesel Generator 2 must be operated and maintained according to the manufacturer's emissions-related written instructions and the Permittee may only change those emissions-related settings that are permitted by the manufacturer. The manufacturer's written instructions have been summarized in Appendix C of this Permit for the Fire Pump Engine. 40 CFR 60.4211(g) contains alternative requirements, including a source test requirement, if the Permittee chooses to deviate from the manufacturer's written instructions.</p> <p style="text-align: center;">40 CFR 60.4211(a) SWCAA 400-115</p>	EU-10, EU-11	M26, M27
Req-70	<p>The Fire Pump Engine and Emergency Diesel Generator 2 must only be fired on No. 2 diesel or better. The sulfur content of the fuel fired in the diesel engines must not exceed 0.0015% by weight (15 ppm). A fuel certification or receipt from the fuel supplier, or test results using an appropriate method listed in 40 CFR 60.17, may be used to demonstrate compliance with this requirement.</p> <p style="text-align: center;">40 CFR 60.4207(b) SWCAA 400-050(2) ADP 16-3188 Condition 3</p>	EU-10, EU-11	M27
Req-71	<p>The Fire Pump Engine must be operated no more than 504 hours per year. A nonresettable time totalizer must be installed on the engine and used to measure hours of operation.</p> <p style="text-align: center;">ADP 16-3188 Condition 4</p>	EU-11	M27
Req-72	<p>The exhaust from the Fire Pump Engine and Emergency Diesel Generator 2 must be discharged vertically. Any device that obstructs or prevents vertical discharge is prohibited.</p> <p style="text-align: center;">ADP 16-3188 Condition 7</p>	EU-10, EU-11	N/A

Req. No.	Requirement	Emission Point	Monitoring																														
Req-73	<p>Emissions of filterable particulate matter (PM, PM₁₀, and PM_{2.5}) from each of the mercury control project material handling exhaust stacks must not exceed 0.005 gr/dscf (1-hour average) and the quantities identified below:</p> <table border="1" data-bbox="240 352 1182 835"> <thead> <tr> <th data-bbox="240 384 638 422">Generating Equipment</th> <th data-bbox="638 352 914 422">Short-Term Limit (1-hour average)</th> <th data-bbox="914 384 1182 422">Annual Limit</th> </tr> </thead> <tbody> <tr> <td data-bbox="240 422 638 459">SEA System 1</td> <td data-bbox="638 422 914 459">0.048 lb/hr</td> <td data-bbox="914 422 1182 459">0.21 tons per year</td> </tr> <tr> <td data-bbox="240 459 638 497">SEA System 2</td> <td data-bbox="638 459 914 497">0.048 lb/hr</td> <td data-bbox="914 459 1182 497">0.21 tons per year</td> </tr> <tr> <td data-bbox="240 497 638 535">Sorbent Silo 1</td> <td data-bbox="638 497 914 535">0.015 lb/hr</td> <td data-bbox="914 497 1182 535">0.07 tons per year</td> </tr> <tr> <td data-bbox="240 535 638 573">Sorbent Silo 2</td> <td data-bbox="638 535 914 573">0.015 lb/hr</td> <td data-bbox="914 535 1182 573">0.07 tons per year</td> </tr> <tr> <td data-bbox="240 573 638 611">Fly Ash Bin 11</td> <td data-bbox="638 573 914 611">0.63 lb/hr</td> <td data-bbox="914 573 1182 611">2.77 tons per year</td> </tr> <tr> <td data-bbox="240 611 638 648">Fly Ash Bin 12</td> <td data-bbox="638 611 914 648">0.63 lb/hr</td> <td data-bbox="914 611 1182 648">2.77 tons per year</td> </tr> <tr> <td data-bbox="240 648 638 686">Fly Ash Bin 14</td> <td data-bbox="638 648 914 686">0.63 lb/hr</td> <td data-bbox="914 648 1182 686">2.77 tons per year</td> </tr> <tr> <td data-bbox="240 686 638 758">Fly Ash Bin 14 Air Slide to Bin 11 Air Slide</td> <td data-bbox="638 686 914 758">0.039 lb/hr</td> <td data-bbox="914 686 1182 758">0.17 tons per year</td> </tr> <tr> <td data-bbox="240 758 638 829">Fly Ash Bin 14 to 6050 Air Slide</td> <td data-bbox="638 758 914 829">0.026 lb/hr</td> <td data-bbox="914 758 1182 829">0.11 tons per year</td> </tr> </tbody> </table> <p>Annual emissions must be calculated using the methodology identified in Section V of the Title V Basis Statement.</p> <p>Reference Method: EPA Method 5 or 17</p> <p style="text-align: center;">ADP 11-2984 Condition 1</p>	Generating Equipment	Short-Term Limit (1-hour average)	Annual Limit	SEA System 1	0.048 lb/hr	0.21 tons per year	SEA System 2	0.048 lb/hr	0.21 tons per year	Sorbent Silo 1	0.015 lb/hr	0.07 tons per year	Sorbent Silo 2	0.015 lb/hr	0.07 tons per year	Fly Ash Bin 11	0.63 lb/hr	2.77 tons per year	Fly Ash Bin 12	0.63 lb/hr	2.77 tons per year	Fly Ash Bin 14	0.63 lb/hr	2.77 tons per year	Fly Ash Bin 14 Air Slide to Bin 11 Air Slide	0.039 lb/hr	0.17 tons per year	Fly Ash Bin 14 to 6050 Air Slide	0.026 lb/hr	0.11 tons per year	EU-13, EU-14, EU-15, EU-16, EU-17, EU-18, EU-19, EU-20, EU-21	M29, M30, M31
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Req-74	<p>Visible emissions from each emission unit installed as part of the mercury control project must not exceed zero percent opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (See Appendix A of SWCAA 400). This limit applies to stack exhausts as well as fugitive leaks from equipment.</p> <p style="text-align: center;">ADP 11-2984 Condition 2</p>	EU-13, EU-14, EU-15, EU-16, EU-17, EU-18, EU-19, EU-20, EU-21	M2, M29, M30, M31																														
Req-75	<p>Each pollution control device must be operated whenever the processing equipment served by that control device is in operation. Each control device must be maintained in good working order. Furthermore, control devices must be operated in a manner that minimizes emissions.</p> <p style="text-align: center;">ADP 11-2984 Condition 3</p>	EU-13, EU-14, EU-15, EU-16, EU-17, EU-18, EU-19, EU-20, EU-21	M29, M31																														

Req. No.	Requirement	Emission Point	Monitoring									
Req-76	<p>Exhaust from each of the mercury control project material handling filters must be discharged vertically. Any device that obstructs or prevents vertical discharge is prohibited.</p> <p style="text-align: center;">ADP 11-2984 Condition 4</p>	EU-13, EU-14, EU-15, EU-16, EU-17, EU-18, EU-19, EU-20, EU-21	N/A									
Req-77	<p>Each fly ash bin baghouse and dust collector must be equipped with a differential pressure gauge capable of continuously measuring the pressure drop across filtration media in the unit.</p> <p style="text-align: center;">ADP 11-2984 Condition 5</p>	EU-17, EU-18, EU-19	N/A									
Req-78	<p>Emissions of filterable particulate matter (PM, PM₁₀, and PM_{2.5}) from the Fly Ash Weigh Bin Baghouse must not exceed 0.002 gr/dscf (1-hour average) and the quantities identified below:</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th style="text-align: center;">Short-Term Limit (1-hour average)</th> <th style="text-align: center;">Annual Limit</th> </tr> </thead> <tbody> <tr> <td><u>Generating Equipment</u></td> <td></td> <td></td> </tr> <tr> <td>Fly Ash Weigh Bin</td> <td style="text-align: center;">0.046 lb/hr</td> <td style="text-align: center;">0.20 tons per year</td> </tr> </tbody> </table> <p>Reference Method: EPA Method 5 or 17</p> <p style="text-align: center;">ADP 12-3016 Condition 1</p>		Short-Term Limit (1-hour average)	Annual Limit	<u>Generating Equipment</u>			Fly Ash Weigh Bin	0.046 lb/hr	0.20 tons per year	EU-4	M3, M5
	Short-Term Limit (1-hour average)	Annual Limit										
<u>Generating Equipment</u>												
Fly Ash Weigh Bin	0.046 lb/hr	0.20 tons per year										
Req-79	<p>Visible emissions from the Fly Ash Weigh Bin must not exceed zero percent opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (See Appendix A of SWCAA 400). This limit applies to stack exhausts as well as fugitive leaks from equipment.</p> <p>Reference Method: SWCAA Method 9</p> <p style="text-align: center;">ADP 12-3016 Condition 2</p>	EU-4	M3, M5									
Req-80	<p>The Weigh Bin Baghouse must be used to control emissions whenever the equipment served by that baghouse is in operation.</p> <p style="text-align: center;">ADP 12-3016 Condition 3</p>	EU-4	M5									
Req-81	<p>Exhaust from the Fly Ash Weigh Bin Baghouse must be discharged vertically. Any device that obstructs or prevents vertical discharge is prohibited.</p> <p style="text-align: center;">ADP 12-3016 Condition 4</p>	EU-4	N/A									
Req-82	<p>The Fly Ash Weigh Bin Baghouse must be equipped with a differential pressure gauge capable of continuously measuring the pressure drop across filtration media in the unit.</p> <p style="text-align: center;">ADP 12-3016 Condition 5</p>	EU-4	N/A									

Req. No.	Requirement	Emission Point	Monitoring								
Req-83	<p>Emissions from fine coal recovery must not exceed:</p> <table border="0" data-bbox="233 275 812 420"> <tr> <td><u>Pollutant</u></td> <td><u>Emission Limit</u></td> </tr> <tr> <td>PM</td> <td>0.009 tons per year</td> </tr> <tr> <td>PM₁₀</td> <td>0.003 tons per year</td> </tr> <tr> <td>PM_{2.5}</td> <td>0.0005 tons per year</td> </tr> </table> <p>Annual emissions must be calculated using the methodology identified in Section V of the Title V Basis Statement.</p> <p style="text-align: center;">ADP 14-3093 Condition 1</p>	<u>Pollutant</u>	<u>Emission Limit</u>	PM	0.009 tons per year	PM ₁₀	0.003 tons per year	PM _{2.5}	0.0005 tons per year	EU-22	M3, M35
<u>Pollutant</u>	<u>Emission Limit</u>										
PM	0.009 tons per year										
PM ₁₀	0.003 tons per year										
PM _{2.5}	0.0005 tons per year										
Req-84	<p>Visible emissions from fine coal handling and conveying equipment must not exceed 0% opacity for more than 3 minutes in any one hour period as determined in accordance with SWCAA Method 9 (See Appendix A of SWCAA 400).</p> <p>Reference Method: SWCAA Method 9</p> <p style="text-align: center;">ADP 14-3093 Condition 2</p>	EU-22	M3, M35								
Req-85	<p>Visible emissions from fine coal handling and conveying equipment must be less than 10% opacity (1-hour average) as determined in accordance with EPA Method 9.</p> <p>Reference Method: EPA Method 9</p> <p style="text-align: center;">40 CFR 60.254(b)(1) ADP 14-3093 Condition 3</p>	EU-22	M3, M35								
Req-86	<p>The transfer of fine coal from the stacker to the fine coal stockpile (TP-05) must be controlled as necessary using a high pressure water spray system or other wet suppression system reviewed and approved by SWCAA to provide equivalent or superior control of particulate matter emissions. Each high pressure spray system must maintain 80 psig or greater during operation. A functional pressure gauge must be maintained onsite and a connection point provided for the gage for the purpose of demonstrating compliance with this pressure limit.</p> <p style="text-align: center;">ADP 14-3093 Condition 4</p>	EU-22	M3								
Req-87	<p>The fine coal stockpile must be watered as necessary to control fugitive dust emissions.</p> <p style="text-align: center;">ADP 14-3093 Condition 5</p>	EU-22	M3								
Req-88	<p>Additional wet suppression must be provided as necessary to control fugitive dust from material handling equipment in the event that process controls or enclosures are insufficient to meet the visible emission limits.</p> <p style="text-align: center;">ADP 14-3093 Condition 7</p>	EU-22	M3, M35								

Req. No.	Requirement	Emission Point	Monitoring
Req-89	<p>The Permittee must develop and operate in accordance with a fugitive coal dust emissions control plan for any clean coal stockpile subject to 40 CFR 60 Subpart Y.</p> <p style="text-align: center;">40 CFR 60.254(c) ADP 14-3093 Condition 8</p>	EU-22	N/A

VII. MONITORING AND RECORDKEEPING TERMS AND CONDITIONS

The Permittee must conduct each of the monitoring and recordkeeping activities listed below. All monitoring information required by this permit must be recorded and readily available on-site for inspection. [WAC 173-401-615(2)]

All records and supporting information required by this Permit must be kept for a minimum period of no less than five years and must be maintained in a form readily available for inspection by SWCAA representatives. [WAC 173-401-615(2)(c), 40 CFR 63.10(b)(1), 40 CFR 63.6660]

Pursuant to WAC 173-401-530(2)(c), the following monitoring or recordkeeping requirements do not apply to IEUs unless specified.

M1. General Recordkeeping

WAC 173-401-615(2)
ADP 97-2057R1 Sections 26, 29, and 42
ADP 05-2636 Condition 4
ADP 08-2779 Condition 4(b)
ADP 11-2972 Condition 15
ADP 14-3093 Condition 11(c)

Except for data recorded by an automated system, each record required by this Permit must include, at a minimum, the date and the name of the person making the record entry. For those records required for a control device or process, if the control device or process is not operating during a specific time period, a record must be made to that effect.

Permittee is required to keep the following records as applicable:

- (a) Inspections and Certifications
 - (1) Date and time of the inspection or certification;
 - (2) Name and title of the person who conducted the inspection or certification;
 - (3) Identification of the unit or activity being inspected or certified;
 - (4) Operating conditions of the unit or the type of activity occurring at the time of the inspection or certification;
 - (5) Compliance status of each monitored requirement as described in Sections VI and VII of this Permit; and
 - (6) Description of corrective action (if any) taken in response to a discovered permit deviation, excess emission, upset condition, or malfunction, as applicable.
- (b) Complaints
 - (1) Date and time of complaint;
 - (2) Name of the complainant;

- (3) Description of the complaint;
 - (4) Date and time of follow-up inspection;
 - (5) The name and title of the person who conducted the follow-up inspection; and
 - (6) Description of corrective action (if any) taken in response to complaint.
- (c) Sampling and Emissions Testing
- (1) Date sampling was performed;
 - (2) Entity that performed the sampling;
 - (3) Name and title of the person or the entity that performed the sampling or testing to include, as a minimum for source emissions testing;
 - (i) Heat input into boiler (million Btu/hr) (EU-2);
 - (ii) Fuel consumption rate (lb/hr);
 - (iii) Air discharge flowrate (dry standard cubic feet);
 - (iv) Exhaust temperature of emissions out the stack; and
 - (v) Unit load on an hourly basis (megawatts);
 - (4) Analytical techniques used to take the sample;
 - (5) Operating conditions existing at the time of sampling or measurement;
 - (6) Date analytical analyses (if any) were performed;
 - (7) Entity that performed the analyses;
 - (8) Analytical techniques or methods used;
 - (9) Results of such analyses;
 - (10) Compliance status of each monitored requirement as described in Section VI and VII of this Permit; and
 - (11) Description of corrective action taken in response to permit deviations and when action was initiated.
- (d) Periodic Monitoring and Emissions Records
- (1) Date and time of parameter observation or emission calculation;
 - (2) Name of parameter observed or emission calculated;
 - (3) Observed parameter value or calculated emission value with appropriate units; and
 - (4) Periods that data was unavailable.
- (e) Excess Emissions and Permit Deviations
- (1) Date and time of excess emission or permit deviation occurred;
 - (2) Description of the excess emission or permit deviation and an identification of the affected unit, process, or activity; and
 - (3) Description of corrective action taken in response to a discovered permit deviation, excess emission, upset condition, or malfunction, as applicable.
- (f) Maintenance Activities
- (1) Date and time of the maintenance activity;
 - (2) Name of the person/company who performed the maintenance;
 - (3) Identification of the unit or activity being maintained; and
 - (4) Description of the maintenance being conducted.
- (g) Changes at Source
- (1) Date changes were made to the source that resulted in emissions of a regulated air pollutant but not otherwise regulated under the Permit;
 - (2) Description of the changes made to the source; and
 - (3) Quantity of emissions resulting from the changes.
- (h) Upset Conditions

Coal Plant [ADP 97-2057R1 Sections 26 and 29]

- (1) Equipment out of service and upset conditions that impact SO₂ emissions; and
- (2) Any emissions bypass that is not monitored by a certified functional CEMS.

Coal Unloading Facility [ADP 11-2972 Condition 15(d)]

- (3) Upset conditions that cause excess emissions from the coal unloading facility must be recorded for each occurrence.

FGD Bleed Treatment Lime Storage Silo [ADP 05-2636 Condition 4(c)]

- (4) Upset conditions that cause excess emissions from the FGD Bleed Treatment Lime Storage Silo must be recorded for each occurrence.

Journal Shop [ADP 08-2779 Condition 4(b)]

- (5) Upset conditions that cause excess emissions from the Journal Shop must be recorded for each occurrence.

Fine Coal Handling [ADP 14-3093 Condition 11(c)]

- (6) Upset conditions that cause excess emissions from fine coal handling must be recorded for each occurrence.

M2. Visible Emission Monitoring

**WAC 173-401-615(1) - (for EU-3)
ADP 97-2057R1 Section 36
ADP 01-2403 Section 11(c)
ADP 11-2984 Condition 7
ADP 14-3093 Condition 10**

EU-1, EU2, and EU-3: At least 6 minutes of opacity observations must be conducted each calendar quarter for EU-2 and EU-3 by a Certified Observer using the visible emissions evaluation method in Appendix A of this permit. [ADP 97-2057R1 Section 36, and WAC 173-401-615(1)]

EU-4 and EU-6: The Permittee must perform monthly inspections of fly ash loading from the 6050 unloaders and Unit 2 turbine lube oil mist eliminator during daylight hours to identify any evidence of visible emissions violations. The inspections must be conducted by an EPA Method 9 certified individual or someone educated in the procedures of visible emission evaluation. Inspection of the fly ash unloading must consist of a survey to determine the presence or absence of excessive opacity, excessive fugitive dust, or evidence of excess emissions. Inspection of the turbine lube oil mist eliminator stack must consist of at least six minutes of opacity observations taken in accordance with SWCAA 400, Appendix A, Method 9. If conditions do not permit opacity readings, an opacity log sheet must be filled out with the weather and operating conditions noted. A reasonable attempt must be made to schedule opacity readings while weather conditions are favorable for the method (i.e. in a warm afternoon vs. a cool morning). For every reading in excess of the opacity standard, opacity must be read for an additional 6 minutes to a maximum total of 60 minutes or 13 readings in excess of the opacity standard, whichever is shorter. Whenever visible emissions in excess of the standard or excessive fugitive dust are observed during the monthly inspection, or any other time, the Permittee must initiate corrective action within 2 hours of observing excess visible emissions. Whenever excess emissions are observed or evidenced, the Permittee must identify the pertinent equipment and verify whether the equipment is or is not experiencing a malfunction and that all relevant air pollution control equipment is operating properly. [ADP 01-2403 Condition 11(c)]

EU-11, EU-13, EU-14, EU-15, EU-16, EU-17, EU-18, EU-19, EU-20, EU-21, and EU-22 and plantwide sources of fugitive dust: The Permittee must perform monthly inspections of EU-11, EU-13, EU-14, EU-15, EU-16, EU-17, EU-18, EU-19, EU-20, EU-21, and EU-22 during daylight hours to identify and prevent potential emissions violations. Whenever visible emissions are observed, at least six minutes of opacity observations must be conducted of that source using SWCAA Method 9. For every reading in excess of the opacity standard, opacity must be read for an additional 6 minutes to a maximum total of 60 minutes or 13 readings in excess of the opacity standard, whichever is shorter. Whenever fallout of particulate matter beyond the

Permittee's property boundary, visible emissions in excess of the standard, or any other potential excess emissions are observed during the monthly inspection or any other time, the Permittee must determine the source of the emissions. The Permittee must initiate corrective action within 2 hours of observing the excess emissions. The Permittee must determine whether the pertinent equipment is or is not experiencing a malfunction and whether all relevant air pollution control equipment is operating properly. Within 24 hours of initial discovery, the Permittee must resolve the operational problem, or notify SWCAA by the next working day of progress made in resolving the operational problem. [ADP 14-3094 Condition 10 for EU-22, ADP 11-2984 Condition 7 for EU-19 through EU-27]

Implementation of corrective action does not relieve the Permittee from the obligation of reporting permit deviations as specified in WAC 173-401-615(3).

M2. Particulate Matter Emissions Monitoring

SWCAA 05-2636 Condition 3
SWCAA 11-2972 Condition 14
SWCAA 12-3016 Condition 7
SWCAA 14-3093 Condition 6
WAC 173-401-615(1)

The Permittee must perform monthly inspections of emission units EU-2 through EU-6, and EU-8 during daylight hours to identify potential particulate matter emissions violations. All other emission units (EUs and IEUs) must be inspected if the specific unit is implicated by a complaint or if otherwise unusual emissions are observed. Whenever fallout of particulate matter beyond the Permittee's property boundary or visible emissions in excess of the standard are observed during the periodic inspection as required in M1, or any other time, the Permittee must determine the source of the emissions. The Permittee must initiate corrective action within 2 hours of observing particulate matter fallout or excess visible emissions. The Permittee must confirm whether the pertinent equipment is or is not experiencing a malfunction and whether all relevant air pollution control equipment is operating properly. Within 24 hours of initial discovery, the Permittee must resolve the particulate matter fallout or excess emissions or notify SWCAA by the next working day of progress made in resolving the operational problem.

Spray/fog nozzles in high pressure water spray systems at the Coal Unloading Facility must be visually inspected once per month when in operation to ensure proper function. Clogged or defective nozzles must be replaced or repaired prior to subsequent operation. The operating pressure of the water spray system must be measured during the monthly inspection.

Spray/fog nozzles in the wet suppression system(s) for the fine coal handling system must be visually inspected once per week when in operation to ensure proper function. Clogged or defective nozzles must be replaced or repaired prior to subsequent operation.

M4. Fugitive Emissions Monitoring

WAC 173-401-615(1)
SWCAA 01-2403 Section 11(c)

The Permittee must perform monthly inspections of emission units EU-2 through EU-8 during daylight hours to identify any excess fugitive emissions including fugitive dust. All other emission units (EUs and IEUs) must be inspected if the specific unit is implicated by a complaint or if otherwise unusual emissions are observed. Inspection of the fly ash unloading must consist of a survey to determine the presence or absence of excessive opacity, excessive fugitive dust, or evidence of excess emissions. Whenever fugitive emissions including excessive fugitive dust are observed during the monthly inspection or any other time, the Permittee must determine the source

of the emissions. The Permittee must within 2 hours of discovery initiate investigation of the equipment involved to confirm whether the equipment is or is not experiencing a malfunction, and whether reasonable precautions and good work practices are being employed to minimize emissions. For this requirement, reasonable precautions and good work practices include, but are not limited to, the following:

- (a) Apply water and/or chemical dust suppressants to coal when received at the plant site and to coal entering conveyors or other process or transfer points daily when fugitive dust from coal handling operations is routinely observed to be 20% or higher opacity, or more frequently as necessary to minimize fugitive coal dust consistent with Req-8;
- (b) Operate baghouse dust collectors at any shop where significant welding is conducted (e.g. Journal Shop); and
- (c) Use a water truck to apply water to paved and unpaved traffic areas on a daily basis during periods when fugitive dust from these areas is routinely observed to be 20% opacity, or more frequently as necessary, to minimize fugitive road dust.

M5. Complaint Monitoring

WAC 173-401-615(1)
SWCAA 11-2984 Condition 9
SWCAA 12-3016 Condition 9

The Permittee must record, and maintain record of, any air quality related complaints received by either the Permittee or SWCAA. All complaints must be investigated no later than one workday after the Permittee has been notified, and those complaints subject to requirement M2 must be addressed in a timely manner consistent with M2. The Permittee must determine the validity of each complaint and the cause of any emissions that may have prompted the complaint, and initiate corrective action, if needed, in response to the complaint. Within 24 hours of notification and investigation, the Permittee must resolve the subject of the complaint, or notify SWCAA by the next working day of progress made in resolving the complaint.

M6. Operations Monitoring

WAC 173-401-615(1)

The Permittee must perform monthly inspections of emission units EU-2 through EU-8 during daylight hours to confirm that pollution control equipment is operating according to manufacturer specifications and/or consistent with good engineering and maintenance practices. All other emission units (EUs and IEUs) must be inspected if the specific unit is implicated by a complaint or if otherwise unusual emissions are observed. Whenever nonstandard conditions are observed during the monthly inspection or any other time, the Permittee must initiate corrective action within 2 hours of observing an equipment problem. The Permittee must determine whether the pertinent equipment is or is not experiencing a malfunction and whether all relevant air pollution control equipment is operating properly. The Permittee must review maintenance records as necessary to monitor the operations of air pollution control equipment. Within 24 hours of initial discovery, Permittee must resolve the operational deficiency, or notify SWCAA by the next working day of progress made in resolving the operating problem. Implementation of corrective action does not relieve the Permittee from the obligation of reporting permit deviations as specified in WAC 173-401-615(3).

M7. Coal Plant SO₂ General Standard Monitoring

SWCAA 97-2057R1 Section 27(c) and 43(a)

This monitoring requirement applies to EU-2 and EU-3 only.

Monitoring to ensure compliance with Req-6 on a 60-minute average is described in M8. The Permittee must monitor, record, and maintain record of the sulfur content of coal combusted in the boiler of emission unit EU-2. This monitoring must include, at a minimum, the sulfur content determined on a monthly basis from analysis of composite coal samples. A linear relationship exists between coal sulfur content and unscrubbed SO₂ concentration with a sulfur content of approximately 1% by weight corresponding to an unscrubbed emission concentration of 1,000 ppm. Coal sulfur content must be used, as necessary, to verify SO₂ monitoring results required by M8. The Permittee must determine the sulfur content of the fuel oil used to fuel the auxiliary boiler (EU-3) and for startup of EU-2 at a sufficient frequency that allows the sulfur content to be certified in each quarterly report.

M8. Coal Plant Stack Sampling Monitoring Requirements

SWCAA 97-2057R1 Sections 35, 40, and 42

Second Revision of BART Order No. 6426 Condition 4.1 except 4.1.4

40 CFR 63 Subpart UUUUU Sections 63.10007 and 63.10030

CO, PM Monitoring [SWCAA 97-2057R1]

This monitoring requirement applies to EU-2 only.

The Permittee must conduct emissions testing of EU-2 at least once every year to quantify emissions of particulate matter and to validate the CO CEMS. A minimum of three test runs must be performed at a minimum of 500 MW gross to establish that collected data are representative of normal operation. The use of continuous monitors is acceptable as an alternative emissions sampling schedule. The following reference test methods from 40 CFR 60 Appendix A, or equivalent methods if approved in writing by SWCAA in advance, must be used for these emissions tests:

<u>Pollutant:</u>	<u>CO</u>	<u>PM</u>
EPA Test Method:	10	5 and 202

The carbon monoxide annual emission concentration must be determined by the arithmetic average of hourly plant operating CO data corrected to 7% O₂ as follows:

$$\text{CO, dry @ 7\% O}_2 = [(20.9 - 7) / (20.9 - \text{O}_2\%, \text{dry})] * \text{CO, dry @ actual O}_2\%$$

The CO concentrations must be validated once per year, for each stack (flue), by source testing and the plant CO data adjusted for bias based on the Method 10 results. A formal relative accuracy test audit is not required.

The particulate matter test method must be consistent with the SO₂ control technology selected and must be appropriate for the stack conditions (i.e., wet or dry stack). Only the filterable fraction (as measured by EPA Method 5) must be used for comparison with the permitted limit, however, the condensable portion must continue to be measured and reported for emission inventory purposes. The PM result must be corrected to 7% O₂.

Ammonia Monitoring [Second Revision of BART Order No. 6426 Condition 4.1 except 4.1.4]

The ammonia monitoring and recordkeeping requirements below apply in any calendar year in which urea is injected using the SNCR system.

Ammonia emissions for compliance must be monitored by means of periodic emissions testing utilizing Bay Area Air Quality Management District (BAAQMD) Method ST1B or Environmental Protection Agency Conditional Test Method 027 (CTM-027). The sampling point will be in the stack following the wet scrubber. Stack testing must occur on the following frequency:

- (a) Testing must occur once each calendar year if the ammonia feed-rate exceeds 1.5 gallons per minute during that calendar year. Testing must be performed while the SNCR is in operation and the feed-rate is above 1.5 gallons per minute during testing, with no consecutive tests less than 80 or more than 110 calendar days apart.
- (b) If two consecutive tests are each more than the ammonia limitation, then the testing frequency decreases to once every six calendar months, provided the nitrogen oxides emission limit is complied with during the test.
- (c) If, after there are three consecutive tests less than the ammonia limitation, the next two consecutive tests are less than 50% of the ammonia emission limitation, then the testing frequency reduces to once annually, provided the nitrogen oxides emission limit is complied with during the tests.

Performance Testing for 40 CFR 63 Subpart UUUUU

Performance testing for PM must be conducted quarterly in accordance with M9 if the Permittee chooses the quarterly testing option over the PM CEMS option.

The Permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [40 CFR 63.9(e) as modified by 40 CFR 63 Subpart UUUUU Table 9, 40 CFR 63.10030(a), 40 CFR 63.10030(d)]

Upon request, the Permittee must make available to the EPA Administrator such records as may be necessary to determine whether the performance tests have been done according to the requirements of 40 CFR 63.10007. [40 CFR 63.10007(g)]

M9. Coal Plant Continuous Monitoring Provisions

40 CFR 63 Subpart UUUUU Sections 63.10000(c)(1)(iv), 63.10000(d), 63.10006, 63.10007, 63.10010, 63.10020, 63.10021, Table 3 and Table 5

40 CFR 75

WAC 173-401-615

SWCAA 400-105(4)(a) and (4)(e)

SWCAA 97-2057R1 Sections 21, 24, 26, 27a, 27b, 27c, 30, and 36

SWCAA 16-3202 Section 14

Second Revision of BART Order No.6426 Condition 5

This monitoring requirement applies to EU-2 only.

The Permittee must monitor opacity, SO₂, NO_x, Hg, filterable PM, diluent (CO₂ and/or O₂), moisture, and stack flow for EU-2 in accordance with the requirements listed below.

The Permittee must monitor and collect data to demonstrate continuous compliance with the 30-boiler operating day Hg, SO₂, and PM emission limits from 40 CFR 63 Subpart UUUUU according to the requirements in 40 CFR 63.10020 and 40 CFR 63 Subpart UUUUU Table 3. 40 CFR

63.10020 requires that monitoring be conducted at all times with certain exceptions (e.g. calibration checks), that data from all time periods except certain excepted periods listed in 63.10020(c) be used to report emissions, and specifies that any failure to collect required data is a deviation from the monitoring requirements of 40 CFR 63 Subpart UUUUU. 40 CFR 63.10020, 63.10021(h), and Table 3 require that monitoring be conducted during startup and shutdown. [40 CFR 63.10020, 40 CFR 63.10021(h)(2), 40 CFR 63 Subpart UUUUU Table 3]

Opacity

- (a) Opacity of emissions from EU-2 must be monitored in accordance with the requirements of 40 CFR 75.
- (b) If moisture is present in the gas stream to the extent that it interferes with the COMS providing accurate opacity data, then visual observations using Method 9, as described in Appendix A to this permit, must be performed a minimum of once per quarter to demonstrate compliance. [SWCAA 97-2057R1 Section 36]
- (c) The Permittee must reduce all opacity data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Opacity data recorded as 1-minute averages calculated from 6 or more data points equally spaced over each 1-minute period must also meet this monitoring requirement. [40 CFR 75.10(d)(2); 40 CFR 51 Appendix P; SWCAA 97-2057R1 Section 36; WAC 173-401-615(1)]

SO₂

- (d) SO₂ emissions from EU-2 must be monitored in accordance with the requirements of 40 CFR 75. [40 CFR 75, 40 CFR 63.10010(f), SWCAA 97-2057R1 Section 27, SWCAA 16-3202 Section 14]
- (e) For the purposes of demonstrating compliance with the SO₂ limits found in SWCAA 97-2057R1 and SWCAA 400 the following additional requirements apply:
 - (1) In addition to 40 CFR Part 75 requirements, the SO₂ CEMS with automated DAHS must also record the SO₂ concentration (ppm) corrected to 7% O₂, dry, consistent with SWCAA 400-050(4) with the use of an O₂ CEMS (consisting of an O₂ concentration monitor) with automated DAHS. The O₂ system measures and records O₂ concentration (%) in the stack gas discharged to the atmosphere in accordance with 40 CFR 75.13(c) and 40 CFR 75 Appendix F. The correction for SO₂ must use the following method:
$$\text{SO}_2, \text{ dry @ 7\% O}_2 = [(20.9 - 7) / (20.9 - \text{O}_2\%, \text{ dry})] * \text{SO}_2, \text{ dry @ actual O}_2\%;$$
[SWCAA 97-2057R1 Sections 21 and 27a, and SWCAA 400-040(6) and 400-050(4)]
 - (2) 40 CFR Part 75 provisions also apply to each CEMS and component thereof for measuring and recording fixed clock 1-hour averages of O₂ concentrations and SO₂ standard concentrations (dry, corrected to 7% O₂). [SWCAA 97-2057R1 Section 27a]
 - (3) Except for the purposes of 40 CFR 63 Subpart UUUUU, whenever a valid hour of SO₂ concentration and flow rate data have not been measured and recorded, the Permittee must provide substitute data in accordance with 40 CFR 75 Subpart D. When determining compliance with the SO₂ concentration standard of SWCAA 97-2057R1 Sections 21 and 22, and SWCAA 400-040(6) (dry @ 7% O₂) and the SO₂ annual emission standard of SWCAA 97-2057R1 Sections 18 and 20, alternative data may be used for missing data periods. For monitor out-of-service periods of four hours or less in duration, the average of the hour before and the hour following a monitor out-of-service period, in accordance with 40 CFR 75.33(b)(1)(i) must be used. For monitor out-of-service periods greater than four hours, data from an on-line coal analyzer, any as-burned coal analyses conducted by the Permittee, and plant emission control system operating data must be evaluated. The data or combination of data that best represents actual emissions must be used to determine compliance with the SO₂ limitations. Stack source test data may be used, if available and

the source test is conducted according to methods approved by SWCAA. [SWCAA 97-2057R1 Section 27c]

- (4) The Permittee must maintain records of SO₂ rolling 12-month mass emissions (not recorded hourly), as measured and reported from the certified primary monitoring system(s), certified redundant or non-redundant back-up monitoring system(s), or other approved method(s) of emissions determination: [SWCAA 97-2057R1 Sections 24, 26, and 27b]
 - (i) Tons of SO₂ emitted from all relevant stacks (including any emergency bypasses) for each rolling 12-month period; and
 - (ii) All SO₂ emissions during startup, shut down, equipment out of service, and upset conditions must be recorded separately from normal operations.
- (f) For the purposes of demonstrating compliance with the SO₂ emission limits from 40 CFR 63 Subpart UUUUU, the following additional requirements apply:
 - (1) Use only unadjusted, quality-assured SO₂ concentration values in the emissions calculations; do not apply bias adjustment factors to the part 75 SO₂ data and do not use part 75 substitute data values. For startup or shutdown hours the default electrical load and the diluent cap are available for use in the hourly SO₂ emission rate calculations, as described in 40 CFR 63.10007(f). Use a flag to identify each startup or shutdown hour and report a special code if the diluent cap or default electrical load is used to calculate the SO₂ emission rate for any of these hours. [40 CFR 63.10010(f)(4), 40 CFR 63.10021(h)(1)]
 - (2) Calculate and record a 30-boiler operating day rolling average SO₂ emission rate in the units of the standard, updated after each new boiler operating day. Each 30-boiler operating day rolling average emission rate is the average of all of the valid SO₂ emission rates in the preceding 30-boiler operating days. [40 CFR 63.10010(f)(3)]

NO_x

- (g) NO_x emissions from each EU-2 be monitored in accordance with the requirements of 40 CFR 75.
- (h) For the purposes of demonstrating compliance with the NO_x limits found in SWCAA 97-2057R1, the following additional requirements apply:
 - (1) Whenever a valid hour of NO_x concentration and flow rate data have not been measured and recorded, the Permittee must provide substitute data in accordance with 40 CFR 75 Subpart D. Stack source test data may be used, if available and the source test is conducted according to methods approved by SWCAA. [SWCAA 97-2057R1 Section 27c]
 - (2) The Permittee must maintain records of the hourly average NO_x emission rate (lb/million Btu, rounded to nearest hundredth) adjusted for bias if necessary as provided for in 40 CFR 75.24(d), for those hours when a unit's generating load is 360 MW gross or greater, both units averaged together. [SWCAA 97-2057R1 Section 30, WAC 173-401-615]
- (i) Reserved

Mercury (Hg) – Note that TransAlta is also subject to off-permit Hg control and monitoring requirements from a settlement agreement with Washington State signed in May 2010.

- (j) For the purposes of demonstrating compliance with the Hg emission limits from 40 CFR 63 Subpart UUUUU, the Permittee must install, certify, operate, maintain and quality assure the data from the Hg CEMS or Hg sorbent trap monitoring system in accordance with Appendix A of 40 CFR 63 Subpart UUUUU. The Permittee must calculate and record a 30-boiler operating day rolling average Hg emission rate in the units of the standard, updated after each new boiler operating day. Each 30-boiler operating day rolling average emission rate is

the average of all of the valid Hg emission rates in the preceding 30-boiler operating days. [40 CFR 63.10000(d), 40 CFR 63.10010(g), 40 CFR 63 Appendix A]

Filterable PM

(k) For the purposes of demonstrating compliance with the PM emission limits from 40 CFR 63 Subpart UUUUU, the Permittee must either install, certify, operate, maintain and quality assure the data from a PM CEMS or perform quarter testing as described below [40 CFR 63.1000(c)(1)(iv)]:

(1) PM CEMS Option

The CEMS must be operated in accordance with 40 CFR 63.10010(i) and 40 CFR 63 Subpart UUUUU Table 5. The Permittee must calculate the arithmetic 30-boiler operating day rolling average of all of the hourly average PM CEMS output data collected during all nonexempt boiler operating hours. [40 CFR 63.10010(i) and 40 CFR 63 Subpart UUUUU Table 5]

(2) Quarterly Testing Option

Testing for filterable PM must be conducted in accordance with 40 CFR 63.10007 and Section 1 of 40 CFR 63 Subpart UUUUU Table 5. Tests must be conducted each calendar quarter except as provided by 40 CFR 63.10021(d)(1). 40 CFR 63.10021(d)(1) allows a performance test to be skipped in a quarter with less than 168 operating hours, except that a performance test must be conducted at least once every calendar year. [40 CFR 63.1000(c)(1)(iv), 40 CFR 63.10021(d)(1)]

At least 45 calendar days, measured from the test's end date, must separate performance tests conducted every quarter. [40 CFR 63.10006(f)(1)(i)]

A performance test must be conducted in the 4th quarter of a calendar year if the unit has skipped performance tests in the first 3 quarters of the calendar year. [40 CFR 63.10006(f)(2)]

If a unit misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next quarter, an additional performance test must be conducted in that quarter. At least 15 calendar days must separate two performance tests conducted in the same quarter. [40 CFR 63.10006(f)(3)]

A minimum of 1 dry standard cubic meter of stack gas must be collected for each run. The unit must be operated at maximum normal operating load during each performance test run. [40 CFR 63.10006(c), 63.10007(a)(2), 63.10007(b), 63.10021(d) and Section 1 of Table 2 and Section 1 of Table 5 of 40 CFR 63 Subpart UUUUU]

Diluent (O₂ and/or CO₂)

(l) CO₂ and/or O₂ in the exhaust from EU-2 must be monitored in accordance with the requirements of 40 CFR 75. [40 CFR 75, 40 CFR 63.10010(b) SWCAA 97-2057R1 Sections 27]

(m) For the purposes of demonstrating compliance with the SO₂, PM, and Hg emission limits from 40 CFR 63 Subpart UUUUU, the following additional requirements apply:

(1) Only quality-assured diluent (O₂ or CO₂) data may be used in emission calculations. The data substitution procedures of 40 CFR 75 must not be used. [40 CFR 63.10010(b)]

Stack Gas Moisture Content

- (n) The moisture content of the exhaust from EU-2 must be monitored in accordance with the requirements of 40 CFR 75 as necessary to convert pollutant concentrations or stack flow measurements from the measured basis (wet or dry) to the necessary basis (wet or dry) for emission rate calculations or comparison with applicable emission limits. [40 CFR 75]
- (o) For the purposes of demonstrating compliance with the SO₂, PM, and Hg emission limits from 40 CFR 63 Subpart UUUUU, the following additional requirements apply:
 - (1) If the Permittee is required to make corrections for stack gas moisture content when converting pollutant concentrations to the units of an emission standard in Table 2 of Subpart UUUUU, the Permittee must install, certify, operate, and maintain a moisture monitoring system in accordance with part 75 of this chapter. Alternatively, the Permittee may use appropriate fuel-specific default moisture values from 40 CFR 75.11(b) to estimate the moisture content of the stack gas. If a moisture monitoring system is utilized, the Permittee must not use substitute moisture data in the emissions calculations. [40 CFR 63.10010(d)]

Stack Flow

- (p) Stack flow rate from EU-2 must be monitored in accordance with the requirements of 40 CFR 75. [40 CFR 75, 63.10010(c), SWCAA 97-2057R1 Section 27, SWCAA 16-3202 Section 14]
- (q) For the purposes of demonstrating compliance with the SO₂, PM, and Hg emission limits from 40 CFR 63 Subpart UUUUU, the following additional requirements apply:
 - (1) If stack flow is used to convert pollutant concentrations to units of an electrical output-based emission standard from Subpart UUUUU, only unadjusted, quality-assured flow rate data may be used. Bias adjustment factors must not be applied to the flow rate data and substituted flow rate data must not be used in the calculations. [40 CFR 63.10010(c)]

General Monitoring Provisions Specific to 40 CFR 63 Subpart UUUUU

- (r) CEMS for SO₂ and CEMS or sorbent trap monitoring systems for Hg must be installed in accordance with location requirements of 40 CFR 63.10010(a). [40 CFR 63.10010(a)]
- (s) If a CEMS for SO₂ or Hg is not installed on the bypass stack of Unit 2, any operation through the affected bypass stack other than during startup or shutdown is a deviation from the monitoring requirements of 40 CFR 63 Subpart UUUUU. If a PM CEMS is not installed, or quarterly testing for PM is not conducted on the bypass stack of Unit 2, any operation through the affected bypass stack other than during startup or shutdown is a deviation from the monitoring requirements of 40 CFR 63 Subpart UUUUU. [40 CFR 63.10006(c), 40 CFR 63.10010(a)(4)] (All deviations must be reported in the semiannual report).
- (t) Except as otherwise provided in 40 CFR 63.10020(c), all quality-assured hourly data recorded by the SO₂, PM, and Hg CEMS and the other required monitoring systems (e.g. flow rate, CO₂, O₂, or moisture systems) must be used to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day rolling average basis, updated at the end of each new boiler operating day. The following equation must be used to determine the 30-boiler operating day rolling average: [40 CFR 63.10021(b), Section 1 of 40 CFR 63 Subpart UUUUU Table 7]

$$\text{Boiler operating day average} = \frac{\sum_{i=1}^n Her_i}{n}$$

Where:

Her_i is the hourly emissions rate for hour i and n is the number of hourly emissions rate values collected over 30-boiler operating days.

- (u) The Permittee must operate, maintain, and quality assure the SO₂, PM, and Hg CEMS in accordance with 40 CFR 63.8 except that the general duty clause to minimize emissions referenced to 40 CFR 63.6(e)(1) and requirements related to a written startup, shutdown, and malfunction plan do not apply. [40 CFR 63.8 and 40 CFR 63 Subpart UUUUU Table 9]
- (v) The electrical output from Unit 2 must be recorded for each hour of operation. [WAC 173-401-615(1)]
- (w) Submit notification to SWCAA of the date required SO₂ and Hg RATAs are scheduled to begin at least 60 calendar days before the RATA is scheduled to begin. [40 CFR 63.9(g)(1), 40 CFR 63.10030(a), 40 CFR 63 Subpart UUUUU Table 9]

M10. 40 CFR 63 Subpart UUUUU Recordkeeping and Startup Monitoring

40 CFR 63.8

40 CFR 63.10

40 CFR 63 Subpart UUUUU Sections 63.10000(m), 63.10020(e), 63.10032, 63.10033, and Table 9

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- (a) The Permittee must generate and maintain the following records for Unit 2 (EU-2): [40 CFR 63.10032]
 - (1) A copy of each notification and report submitted to comply with 40 CFR 63 Subpart UUUUU, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report submitted according to the requirements of 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.10032(a)]
 - (2) Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required by 40 CFR 63.10(b)(2)(viii). The applicable reports referenced in 40 CFR 63.10(b)(2)(viii) are performance tests and continuous monitoring system evaluations (e.g. RATAs).
 - (3) The following records regarding PM, Hg, and SO₂ CEMS: [40 CFR 63.10032(b)]
 - (i) Each period during which a continuous monitoring system was malfunctioning or inoperative (including out-of-control periods).
 - (ii) All required measurements needed to demonstrate compliance with the requirements of 40 CFR 63 Subpart UUUUU as described in 40 CFR 63.10(b)(2)(vii).
 - (iii) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations.
 - (iv) All CEMS calibration check results.
 - (v) All adjustments and maintenance performed on the CEMS.
 - (4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. [40 CFR 63.10032(b)(4)]
 - (5) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3). [40 CFR 63.10032(b)(2)]
 - (6) Records of PM performance test reports, tune-up reports, startup and shutdown work practice standard monitoring, and all monitoring data and calculated averages for the SO₂ CEMS and Hg sorbent trap monitoring system. [40 CFR 63.10032(c)]
 - (7) Identification of the type and amount of each fuel combusted. [40 CFR 63.10032(d)(1)]
 - (8) Regarding startup periods or shutdown periods: [40 CFR 63.10000(m), 40 CFR 63.10032(f)]

- (i) Records of occurrence and duration of each startup and/or shutdown.
- (ii) Records of the determination of the maximum clean fuel capacity;
- (iii) Records of the determination of the maximum hourly clean fuel heat input and of the hourly clean fuel heat input; and
- (iv) Records of the information required in 40 CFR 63.10020(e). 40 CFR 63.10020(e) requires that the following information be recorded for each startup and shutdown period: [40 CFR 63.10020(e)]
 - a. The date and time that clean fuels being combusted for the purposes of startup and shutdown begins. [40 CFR 63.10020(e)(1)(i), 63.10020(e)(2)(i)]
 - b. The quantity and heat input of clean fuel for each hour of startup and shutdown. [40 CFR 63.10020(e)(1)(ii), 63.10020(e)(2)(ii)]
 - c. The gross output for each hour of startup and shutdown. [40 CFR 63.10020(e)(1)(iii), 63.10020(e)(2)(iii)]
 - d. The date and time that non-clean fuel combustion begins for each startup and ends for each shutdown. [40 CFR 63.10020(e)(1)(iv), 63.10020(e)(2)(iv)]
 - e. The date and time that clean fuels being combusted for the purpose of startup and shutdown ends for each startup and shutdown. [40 CFR 63.10020(e)(1)(v), 63.10020(e)(2)(v)]
 - f. The temperature and combustion air flow or calculated flow as determined from combustion equations of post-combustion (exhaust) gas, as well as amperage of forced draft fan(s) upstream of the filterable PM control devices during each hour of startup. [40 CFR 63.10020(e)(3)(i)(A)]
 - g. The temperature and flow rate of exhaust gas and amperage of induced draft fan(s) downstream of each filterable control device during each hour of startup. [40 CFR 63.10020(e)(3)(i)(B)]
 - h. The number of ESP fields in service, as well as each field's secondary voltage and secondary current during each hour of startup. [40 CFR 63.10020(e)(3)(i)(C)]

For the monitoring systems used to provide the data listed above, the Permittee must install, verify, operate, maintain, and quality assure each monitoring system and develop a site-specific monitoring plan for work practice monitoring during startup periods. The site-specific monitoring plan must be developed in accordance with the requirements listed in 40 CFR 63.10010(l). The Permittee must submit the site-specific monitoring plan upon request by SWCAA. [40 CFR 63.10010(l)]

During startup periods, the Permittee must monitor and collect data according to this section and the site-specific monitoring plan required by 40 CFR 63.10010(l). [40 CFR 63.10020(e)(3)]

- (9) Records of the occurrence and duration of each malfunction of an operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.10032(g)]
- (10) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.10032(h)]
- (11) Records of the type(s) and amount(s) of fuel used during each startup or shutdown. [40 CFR 63.10032(i)]

- (b) The Permittee must generate and maintain the records required by the sections of 40 CFR 63.10 listed in 40 CFR 63 Subpart UUUUU Table 9 for Unit 2 (EU-2). These records include, but are not limited to: [40 CFR 63 Subpart UUUUU Table 9]
- (1) All required maintenance of CEMS and pollution control equipment.
 - (2) All CEMS data.
 - (3) Identification of all time periods when a CEMS was inoperative except for zero and span checks.
 - (4) Identification of all time periods when a CEMS was out of control.
 - (5) Identification of each period of excess emissions.
 - (6) The nature and cause of any malfunction.
 - (7) The corrective action taken or preventive measures adopted.
 - (8) The nature of the repairs or adjustments to CEMS that were inoperative or out of control.
 - (9) All procedures that are part of a quality control program developed and implemented for the CEMS under 40 CFR 63.8(d).

The records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). The records must be maintained for five years following the date of each occurrence, measurement, maintenance, corrective action, report or record. Each record must be kept on site, or they must be accessible from on site, for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.10033]

**M11. Coal Plant Startup, Shut Down, and Outage Operation Procedures for RACT Order
SWCAA 97-2057R1 Sections 21b, 23, 25, 26, 28e, 37, and 38**

This monitoring requirement applies to EU-2 only.

During startup and shutdown of EU-2, emissions control equipment must be operated to minimize overall emissions, except to the extent equipment operation will cause degradation of its long-term performance. Opacity exceedances during manual ESP rapping and boiler chemical cleaning are excused under SWCAA 400-107(2)(d). Exceedances of the PM and opacity limitations are excused under SWCAA 400-107 during unit startup and shutdown when the ESPs are out of service. Exceedances of the normal operation hourly SO₂ limitation (250 ppmvd @ 7% O₂), are excused under SWCAA 400-107 during startup and shutdown when the ESPs and SO₂ emission control technology are out of service, provided the alternative SO₂ emission limits of Req-19 are met. The shutdown period begins when the ESP temperature drops to 220°F, when the SO₂ emission control technology and then the ESPs are taken out of service. The startup period begins when fuel is introduced into a boiler to raise its temperature to operating conditions. The startup period ends when the earlier of the two operating events below occurs:

- (a) Opacity in the gas path downstream of both ESPs has stabilized below 10% for 30 minutes; or
- (b) 8 hours have elapsed after the startup unit is synchronized electrically on-line.

During SO₂ emission control technology outages and upsets, emissions in excess of the hourly SO₂ limitation are excused provided they satisfy the alternative SO₂ emission limits of Req-19 or they meet the burden of proof regarding unavoidable emissions in accordance with SWCAA 400-107. The Permittee must demonstrate that a forced outage of the SO₂ emission control technology while the unit operates is managed to minimize emissions. Implementation of corrective action does not relieve the Permittee from the obligation of reporting permit deviations as specified in WAC 173-401-615(3).

M12. Coal Plant SO₂ 12-Month Period Emission Evaluation**SWCAA 97-2057R1 Sections 26, 28c, and 28d**

This monitoring requirement applies to EU-2, and EU-3 only.

All hourly SO₂ emission data for startup, shutdown, upset and forced or planned emission control system outage periods must be included in the calculations of the annual tons of SO₂ emitted. For periods when all fuel is out of a boiler, SO₂ emissions for that unit must be assumed to be zero. An exceedance of the annual limitation is one 12-month period exceeding the tons/year SO₂ limitation as defined in Req-17. Each exceedance of the rolling 12-month emission limitation, except as excused under SWCAA 400-107, will constitute a continuing violation for the days in the last month of the 12-month period. Each day of violation must be treated equally and be subject to penalty as allowed by law at the time of the non-compliance. The Permittee may calculate 365-day emission summations ending on each day in the last month of the 12-month period to reduce the number of violation days subject to penalty. If adequately demonstrated, the number of violation days must not include the number of 365-day periods ending within the last month of the exceedance period for which the emissions summation did not exceed the annual limit.

M13. Coal Plant SO₂ Monitoring of Bypass Stack**SWCAA 97-2057R1 Section 29**

This monitoring requirement applies to EU-2 only.

Any bypass through the bypass stack that is not monitored by a certified functional CEMS for SO₂ is considered an upset condition and must be reported consistent with requirement R1. All SO₂ emissions discharged from the bypass stack must be included in the calculation of emissions for determining compliance with the annual limit.

M14. Coal Plant Fuel Oil Usage Evaluation**40 CFR 63.7525(k)****SWCAA 97-2057R1 Sections 43 and 45**

The Permittee must monitor fuel oil usage in the boilers at the Coal Plant (EU-2, and EU-3). The Auxiliary Boiler (EU-3) must have a separate fuel meter to monitor the total amount of fuel consumed in that boiler. Emissions of SO₂ from the Auxiliary Boiler must be included when evaluating the 10,000 tons per year emission limit in Req-17. Emissions must be calculated based on fuel consumption and fuel sulfur content. [SWCAA 97-2057R1 Sections 43 and 45]

The amount of fuel oil used in the Auxiliary Boiler must be recorded for each day of operation. [40 CFR 63.7525(k)]

M15. Reserved**M16. Reserved****M17. Reserved****M18. Reserved**

M19. Maintenance Activities Monitoring

**40 CFR 63.6655(e)
SWCAA 01-2403 Section 11(c)**

This monitoring requirement applies to EU-4 and EU-6 only.

The Permittee must document each occurrence of maintenance and repairs to the fly ash unloading pugmill and turbine lube oil mist eliminator that may affect emissions.

M20. Particulate Matter Compliance Assurance Monitoring for BW22

**40 CFR 64
WAC 173-401-615(4)**

This monitoring requirement applies to EU-2 only.

This monitoring requirement applies unless a particulate matter continuous emissions monitoring system is installed and certified in accordance with the requirements of 40 CFR 63 Subpart UUUUU.

In addition to the opacity monitoring requirements of Requirement 13 and M8, the Permittee must continuously monitor opacity in the ductwork upstream of the bypass stack in accordance with the quality assurance and quality control requirements of 40 CFR 75 except that the existing monitoring locations immediately upstream of the bypass stack are acceptable. The COMS must provide for at least 90% data availability (annual average rolled monthly).

Opacity less than the following is indicative of proper operation of the ESPs and provides a reasonable assurance of compliance with the particulate matter emission limits:

<u>Exhaust Point</u>	<u>Maximum Opacity¹</u>
EU-2 Bypass Stack	20% (1-hour average)
EU-2 FGD Stack	30% (1-hour average)

¹ This range does not apply during the defined startup and shutdown periods, during planned maintenance or outage periods, load changes, and during manual rapping of the ESP. The 1-hour average applies to the clock hour recorded by the COMS. An hourly average may be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour) if data are unavailable as a result of the performance of calibration, quality assurance, or preventive maintenance activities.

If opacity is measured in two ducts for the same emission unit, the arithmetic average of the opacity measurements from each duct must be used to compare with the maximum opacity listed above.

An excursion is defined as any exceedance of the maximum opacity levels identified in the table above. For each excursion:

- (a) Inspect electrostatic precipitators within four hours. Report ESP field settings and a list of fields out of service.
- (b) If the exceedance occurs during FGD operation, inspect FGD system for proper operation (excess inlet particulate loading can affect FGD performance) within four hours. Report the numbers of spray headers in service.
- (c) Make necessary repairs as soon as practical.

- (d) Restore opacity levels to less than the maximum levels indicated above as expeditiously as practical in accordance with good air pollution control practices for minimizing emissions.
- (e) Notify SWCAA no later than the end of the next business day in accordance with R1.

M21. Coal Unloading Facility

SWCAA 11-2972 Condition 15(a)

This monitoring requirement applies to EU-4 only.

The Permittee must develop and maintain the following information for the Coal Unloading Facility:

- (a) The total amount of coal unloaded each calendar year.

M22. FGD Bleed Treatment Lime Storage Silo

SWCAA 05-2636 Condition 4(a) and 4(b)

This monitoring requirement applies to EU-4 only.

The Permittee must develop and maintain the following information for the FGD Bleed Treatment Lime Storage Silo:

- (a) The total number of hours the FGD Bleed Treatment Lime Storage Silo dust collector is actively vented must be recorded for each calendar year; and
- (b) The differential pressure across the FGD Bleed Treatment Lime Storage Silo dust collector must be recorded once per calendar month during loading.

M23. Journal Shop

SWCAA 08-2779 Condition 4(a)

This monitoring requirement applies to EU-8 only.

The Permittee must develop and maintain the following information for the Journal Shop:

- (a) The total amount of each welding rod type used in the Journal Shop must be recorded for each calendar year.

M24. Reserved

M25. SNCR System Monitoring

WAC 173-401-615(1)

This monitoring requirement applies to EU-2 only.

The Permittee must continuously monitor and record the following parameters related to operation of the SNCR system for each hour of operation:

- (a) The urea concentration and flow rate.

M26. Coal Plant Emergency Engine Monitoring

**40 CFR 63.6655
40 CFR 60.4214(b)
WAC 173-615(1)
SWCAA 400-075
SWCAA 400-115
SWCAA 16-3188 Condition 8**

This monitoring requirement applies to EU-9 and EU-10 only.

The Permittee must conduct the following monitoring for EU-9 and EU-10:

- (a) The Permittee must document and record each incidence of maintenance, maintenance checks, and repairs conducted to demonstrate compliance with the emissions-related maintenance requirements. Required maintenance activities are identified in Appendix C – Small Engine Maintenance Plan for Emergency Diesel Generator 1 (EU-9). [40 CFR 63.6655(e)]
- (b) The number of hours Emergency Diesel Generator 1 and Emergency Diesel Generator 2 are operated each calendar year must be recorded from the non-resettable hour meter. The Permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours were spent for non-emergency operation. [40 CFR 63.6655(f), 40 CFR 60.4214(b), SWCAA 16-3188 Condition 8(b)]
- (c) The sulfur content of the diesel burned in Emergency Diesel Generator 1 and Emergency Diesel Generator 2 must be determined and recorded for each fuel delivery. A fuel supplier certification or receipt may be used in lieu of new fuel testing. [SWCAA 16-3188 Condition 8(a)]
- (d) For the Emergency Diesel Generator 2 (EU-10), the Permittee must document and record each incidence of maintenance and repairs conducted to demonstrate compliance with the emissions-related maintenance requirements of 40 CFR 60.4211(a). The documentation must include a description of the maintenance and/or repair conducted and the hour meter reading on the engine at the time of the maintenance. [WAC 173-401-615(1)]

M27. Fire Pump Engine Monitoring

**WAC 173-401-615(1)
SWCAA 16-3188 Conditions 8(a) and 8(b)**

This monitoring requirement applies to EU-11 only.

The Permittee must conduct the following monitoring for the Fire Pump Engine:

- (a) The fuel sulfur content of the diesel burned in the Fire Pump Engine must be determined and recorded for each fuel delivery. A fuel supplier certification or receipt may be used in lieu of new fuel testing. [SWCAA 16-3188 Condition 8(a)]
- (b) The Permittee must document the total number of hours the Fire Pump Engine operates each year. [SWCAA 16-3188 Condition 8(b)]
- (c) For the Fire Pump Engine (EU-11), the Permittee must document and record each incidence of maintenance and repairs conducted to demonstrate compliance with the emissions-related maintenance requirements of 40 CFR 60.4211(a). The documentation must include a description of the maintenance and/or repair conducted and the hour meter reading on the engine at the time of the maintenance. [WAC 173-401-615(1)]

M28. Coal Unloading Facility Emergency Diesel Sump Pump Engine Monitoring

40 CFR 60.4211(a)

WAC 173-401-615(1)

SWCAA 11-2972 Conditions 15(b and c)

This monitoring requirement applies to EU-12 only.

- (a) The fuel sulfur content of the diesel burned in the Coal Unloading Facility Emergency Diesel Sump Pump Engine must be determined and recorded for each fuel delivery. A fuel supplier certification may be used in lieu of actual fuel testing. [SWCAA 11-2972 Condition 15(b)]
- (b) The Permittee must document the total number of hours the Coal Unloading Facility Emergency Diesel Sump Pump Engine operates each year using the non-resettable hour meter. [SWCAA 11-2972 Condition 15(c)]
- (c) The Permittee must document and record each incidence of maintenance and repairs conducted to demonstrate compliance with the emissions-related maintenance requirements of 40 CFR 60.4211(a). The documentation must include a description of the maintenance and/or repair conducted and the hour meter reading on the engine. [WAC 173-401-615(1)]

M29. Mercury Control System and Fly Ash Material Handling

SWCAA 11-2984 Condition 8

SWCAA 12-3016 Condition 8

This monitoring requirement applies to EU-4, EU-13, EU-14, EU-15, EU-16, EU-17, EU-18, EU-19, EU-20, and EU-21 only.

The Permittee must conduct the monitoring indicated below for EU-13 through EU-21:

- (a) The total number of hours each emission unit associated with the mercury control project (SEA System 1, SEA System 2, Sorbent Silo 1, Sorbent Silo 2, Fly Ash Bin 11, Fly Ash Bin 12, Fly Ash Bin 14, Fly Ash Bin 14 Air Slide to Bin 11 Air Slide, Fly Ash Bin 14 to 6050 Air Slide) and the Fly Ash Weigh Bin is vented must be determined and logged for each calendar year.
- (b) The output of each baghouse leak detection system installed on the exhausts of Fly Ash Bin 11, Fly Ash Bin 12, and Fly Ash Bin 14 must be logged continuously.
- (c) Copies of operating and maintenance manuals for the pollution control equipment on SEA System 1, SEA System 2, Sorbent Silo 1, Sorbent Silo 2, Fly Ash Bin 11, Fly Ash Bin 12, Fly Ash Bin 14, Fly Ash Bin 14 Air Slide to Bin 11 Air Slide, Fly Ash Bin 14 to 6050 Air Slide, and the Fly Ash Weigh Bin must be maintained for reference purposes.
- (d) Maintenance activities (including filter replacements) that may affect emissions from SEA System 1, SEA System 2, Sorbent Silo 1, Sorbent Silo 2, Fly Ash Bin 11, Fly Ash Bin 12, Fly Ash Bin 14, Fly Ash Bin 14 Air Slide to Bin 11 Air Slide, Fly Ash Bin 14 to 6050 Air Slide, and Fly Ash Weigh Bin must be logged for each occurrence.

M30. Fly Ash Baghouses - Source Emission Testing Requirements

SWCAA 11-2984 Conditions 12, 13, and Appendix A

This monitoring requirement applies to EU-17, EU-18, and EU-19 only.

Source emissions testing of the Fly Ash Bin 11 Baghouse, Fly Ash Bin 12 Baghouse, and Fly Ash Bin 14 Baghouse must be conducted as described below. Initial source emissions testing of each baghouse was conducted in October 2011. Subsequent source emissions testing must be conducted

no later than the end of October every 5 years following the initial source emissions test. Source emissions tests conducted more than three months before the required due date will not satisfy the periodic source emission testing requirement without prior approval from SWCAA.

Testing for each constituent must consist of a minimum of three sampling runs of the duration specified below.

Constituent	Test Method or Equivalent ¹	Minimum Test Duration
Stack gas velocity, flow rate	EPA Methods 1 and 2	N/A
Stack gas dry molecular weight	EPA Method 3A (may assume ambient O ₂ and CO ₂ concentrations)	60 minutes
Stack gas moisture content	EPA Method 4	60 minutes
Particulate matter	EPA Method 5 or 17	60 minutes
Visible emissions	SWCAA Method 9	6 minutes

¹ The use of an alternate or equivalent test method must be pre-approved by SWCAA in writing.

A comprehensive test plan must be submitted to SWCAA for review and approval at least 10 business days prior to testing.

SWCAA personnel must be notified of the test date at least 5 days prior to the testing campaign so that they may be present during testing.

A complete record of operational parameters applicable to the testing, including but not limited to the operating status of the units being vented to the baghouse, leak detection system output, startups, and shutdowns must be kept during emissions testing to correlate operations with emissions and must be recorded in the final report of the test results.

Source operations during emissions testing must be representative of maximum intended operating conditions.

M31. Fly Ash Bin Baghouses – Compliance Assurance Monitoring

**40 CFR 64
WAC 173-401-615(4)**

This monitoring requirement applies to EU-17, EU-18 and EU-19 only.

In addition to the source emissions testing requirements of M33, the Permittee must utilize an Electrostatic Particle Detection (EPD) system to continuously monitor relative particulate matter concentration in the exhaust from the Fly Ash Bin 11 Baghouse, Fly Ash Bin 12 Baghouse, and Fly Ash Bin 14 baghouse.

The EPD system must provide for at least 90% data availability (annual average rolled monthly).

An EPD system output of less than the following alarm setpoints is indicative of proper operation of the baghouses and provides a reasonable assurance of compliance with the particulate matter emission limits:

Exhaust Point

Fly Ash Bin 11 Baghouse (EU-17)
Fly Ash Bin 12 Baghouse (EU-18)

Alarm Setpoint

100 pA (5-minute average)
100 pA (5-minute average)

An excursion is defined as any exceedance of the maximum output levels identified in the table above. For each excursion:

- (a) Cease operation of the affected baghouse as soon as practicable and operate only as necessary to effectuate trouble-shooting and repairs.
- (b) Make necessary repairs as soon as practical.
- (c) Notify SWCAA no later than the end of the next business day in accordance with R1.

Alarm setpoints may be modified based on the results of additional source emissions testing when the Permittee can demonstrate that the new alarm setpoint provides a reasonable margin of compliance with the particulate matter emission limit.

M32. Reserved

M33. Coal-Fired Boiler Tune-up and Startup/Shutdown Monitoring

40 CFR 63.10000(l, m)

40 CFR 63.10032(a)(1)

40 CFR 63.10032(f)

This monitoring requirement applies to EU-2 only.

- (a) To demonstrate compliance with the tune-up requirements in 40 CFR 63 Subpart UUUUU, the Permittee must document and keep records of each tune-up of EU-2. The records must document the date of each tune-up, all activities performed as part of the tune-up, and the results of NO_x, CO, and O₂ monitoring conducted as part of the tune-up. [40 CFR 63.10032(a)(1)]
- (b) To demonstrate compliance with the provisions related to startup and shutdown in 40 CFR 63 Subpart UUUUU, the Permittee must continuously monitor and record the following for EU-2) beginning April 16, 2015: [40 CFR 63.10000(l)]
 - (1) Distillate oil consumption;
 - (2) Coal consumption;
 - (3) Electricity generation;
 - (4) When steam generated by the boiler is in use for any purpose; and
 - (5) Operational status of each electrostatic precipitator, mercury emission control system, and flue gas desulfurization system.

The equipment used to monitor these parameters must be verified, operated, maintained, and quality assured. Monitoring system specifications or instruction or manufacturer's specifications may be relied upon to meet these requirements. [40 CFR 63.10000(m)]

M34. Auxiliary Boiler Tune-up Monitoring

40 CFR 63.7555, 63.7560

WAC 173-401-615(b)(2)

The Permittee must conduct the following monitoring and recordkeeping for the Auxiliary Boiler (EU-3):

- (a) The Permittee must document and keep records of each tune-up of EU-3. The records must document the date of each tune-up, all activities performed as part of the tune-up, and the results of NO_x, CO, and O₂ monitoring conducted as part of the tune-up. [40 CFR 63.7555(a)(1) (initial tune-up), WAC 173-615(b)(2) -- (subsequent tune-ups)]

- (b) The Permittee must maintain a copy of each notification and report submitted to comply with 40 CFR 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report submitted according to the requirements of 40 CFR 63.10(b)(2)(xiv); [40 CFR 63.7555(a)(1)] and
- (c) The Permittee must maintain a copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and fuel use records for the days the Auxiliary Boiler was operating. [40 CFR 63.7555(a)(3)]

The records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). The records must be maintained for five years following the date of each occurrence, measurement, maintenance, corrective action, report or record. Each record must be kept on site, or they must be accessible from on site, for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee may keep the records off site for the remaining three years. [40 CFR 63.7560]

**M35. Fine Coal Handling 40 CFR 60 Subpart Y Sections 60.255, 60.257, and 60.258(a)
SWCAA 14-3039 Condition 11(b)**

This monitoring requirement applies to EU-22 only.

The Permittee must perform initial performance testing of the coal processing and conveying equipment to demonstrate compliance with the opacity standard from 40 CFR 60.254. Testing must be conducted in accordance to the requirements in 40 CFR 60.8 and the methods identified in 40 CFR 60.257. [40 CFR 60.255(b)] Subsequent monitoring and performance testing must be conducted in accordance with either the schedule provided in 40 CFR 60.255(b)(2) or 40 CFR 60.255(f). All performance testing consists of monitoring emissions from each point using EPA Method 9 for 30 to 60 minutes. [40 CFR 60.257(a)]

40 CFR 60.255(b)(2) requires subsequent testing within 90 operating days of the date the previous performance test was required to be completed if any 6-minute average opacity reading in the previous performance test exceeds 5% opacity. If all 6-minute average opacity readings in the most recent performance test are less than 5%, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed. [40 CFR 60.255(b)(2)]

40 CFR 60.255(f), as a compliance alternative to 40 CFR 60.255(b)(2), requires that the Permittee either follow the steps listed in (a) – (c) below or utilize an approved site specific monitoring plan for a digital opacity compliance system as described in 40 CFR 60.255(f)(2). [40 CFR 60.255(f)]

- (a) Conduct a 15-second observation for each affected facility each operating day. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A-4 of 40 CFR Part 60, performance test must be conducted within 45 operating days. [40 CFR 60.255(f)(1)(i)]
- (b) Conduct a monthly visible observation of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible. [40 CFR 60.255(f)(1)(ii)]
- (c) Conduct a performance test using EPA Method 9 at least once every 5 calendar years. [40 CFR 60.255(f)(1)(iii)]

The Permittee must develop and maintain the following information:

- (d) The total amount of fine coal conveyed across Big Hanaford Road must be recorded for each calendar month. [40 CFR 60.258(a)(3)]
- (e) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, must be noted. [40 CFR 60.258(a)(1)]
- (f) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions must be noted. [40 CFR 60.258(a)(2)]
- (g) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions must be noted. [40 CFR 60.258(a)(2)]

M36. Acid Rain, RACT, and NSR CEMS Data Recordkeeping Requirements

40 CFR 75.57, 75.58, and 75.59

WAC 173-401-615(2)

SWCAA 97-2057R1 Sections 24, 26, 27 and 30

The Permittee must record and maintain for EU-2, a file of all measurements, data, reports, and other information required by this permit at the source in a readily accessible form suitable for inspection for at least five (5) years from the date of each record. This file must include all information required in 40 CFR Part 75.57 through 75.59 with the following:

- (a) SO₂ standard concentrations (dry @ 7% O₂) required by condition M8 of this permit. [SWCAA 97-2057R1 Section 27]
- (b) For SO₂ rolling 12-month mass emissions (not recorded hourly), as measured and reported from the certified primary monitoring system(s), certified redundant or non-redundant back-up monitoring system(s), or other approved method(s) of emissions determination: [SWCAA 97-2057R1 Sections 24, 26, and 27b]
 - (1) Tons of SO₂ emitted from all relevant stacks (including any emergency bypasses) for each rolling 12-month period; and
 - (2) All SO₂ emissions during startup, shut down, equipment out of service, and upset conditions must be recorded separately from normal operations.
- (c) Hourly average NO_x emission rate (lb/million Btu, rounded to nearest hundredth) adjusted for bias if necessary as provided for in 40 CFR 75.24(d), for those hours when the unit's generating load is 360 MW gross or greater. [SWCAA 97-2057R1 Section 30, WAC 173-401-615]

M37. 40 CFR 63 Subpart DDDDD Recordkeeping

40 CFR 63.7555

40 CFR 63.7560

The Permittee must record and maintain the following records for the Auxiliary Boiler (EU-3): [40 CFR 63.7555]

- (a) A copy of each notification and report submitted to comply with 40 CFR 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report submitted according to the requirements of 40 CFR 63.10(b)(2)(xiv); [40 CFR 63.7555(a)(1)] and
- (b) A copy of the federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent and fuel use records for the days the Auxiliary Boiler was operating. [40 CFR 63.7555(a)(3)]

The records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). The records must be maintained for five years following the date of each occurrence, measurement, maintenance, corrective action, report or record. Each record must be kept on site, or they must be accessible from on site, for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee may keep the records off site for the remaining three years. [40 CFR 63.7560]

M38. 40 CFR 60 Subpart Y Recordkeeping

**40 CFR 60.258
SWCAA 14-3093 Conditions 12 and 13**

The Permittee must record and maintain the following records for the Fine Coal Recovery equipment north of Big Hanaford Road:

- (a) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, must be noted. [40 CFR 60.258(a)(1)]
- (b) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions must be noted. [40 CFR 60.258(a)(2)]
- (c) The amount and type of coal processed each calendar month. [40 CFR 60.258(a)(3)]
- (d) Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, must be noted. [40 CFR 60.258(a)(5)]

With the exception of data recorded by an automated data acquisition system, all records must include the date and name of the person making each entry.

IX. 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. Pursuant to WAC 173-401-530(2)(c), reporting requirements are not applicable to IEUs unless specified.

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

Each report that is required to be submitted to the Department of Ecology or the EPA must also be submitted to SWCAA by the deadline specified in the applicable requirement for that report. For submissions made electronically to EPA electronically, the copy to SWCAA must be in a format approved by SWCAA. [WAC 173-401-615(3)]

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

Southwest Clean Air Agency
11815 NE 99th Street, Suite 1294
Vancouver, WA 98682-2322

Clean Air Act Compliance Manager
US EPA Region 10, Mail Stop: 20-C04
1200 Sixth Avenue, Suite 155
Seattle, WA 98101

Department of Ecology
Air Quality Program
PO Box 47600
Olympia, WA 98504-7600

Acid Rain Program address, unless otherwise instructed:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204J
Washington, DC 20460

R1. Deviations from Permit Conditions and CAM Excursions

40 CFR 60.7(b) - where applicable
40 CFR 64.9(a)(2)(i)
WAC 173-401-615(3)(b)
SWCAA 400-107
SWCAA 400-115 – where applicable
PSD-01-01 Amendment 2 Condition 22(d)(1)
Second Revision of BART Order No. 6426 Condition 8
SWCAA 97-2057R1 Sections 23, 28, 29, and 37
SWCAA 01-2403 Section 11(e)(1)
SWCAA 11-2984 Conditions 15 and 16
SWCAA 14-3093 Conditions 17 and 18
SWCAA 16-3188 Condition 12 and 13

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

Excess emission reports must contain the following information: [SWCAA 400-107]

- (a) Identification of the emission unit(s) involved;
- (b) A brief description of the event including identification of known causes;

- (c) Date, time and duration of the event;
- (d) For exceedances of non-opacity emission limitations, an estimate of the quantity of excess emissions;
- (e) Corrective action taken in response to the event; and
- (f) Preventive measures taken or planned to minimize future recurrence.

Reports of deviations from permit requirements must include: [WAC 173-401-615(3)(b)]

- (g) Whether or not the deviation is or was due to upset conditions;
- (h) The probable cause of the deviation; and
- (i) The corrective action taken, and when the corrective action was initiated.

Excess emissions, including opacity exceedances for startups, shut downs, upsets, and maintenance as described in M10, and any bypass upset (M12), must be reported to SWCAA during the current business day or next business morning and must be noted in the quarterly report. Permittee must submit a written report to SWCAA of any SO₂ emission control technology forced outage longer than 72 hours. Any bypass upset must be reported to SWCAA during the current business day or by the next business morning and must be documented to SWCAA within 5 days of the occurrence. An exceedance of the annual limitation is one 12-month period exceeding the tons per year SO₂ limitation of Requirement 16.

Excursions from CAM indicator ranges must be reported to SWCAA no later than the next business day. The report must include the duration and cause of the excursion (if known), and the corrective actions taken in response to the excursion.

In addition to the above requirements, excess NO_x or ammonia emissions due to malfunctions must be documented in writing and submitted to SWCAA and Ecology with the quarterly emission report. [Second Revision of BART Order No. 6426 Condition 8]

All reports must be submitted in writing (e.g. e-mail, facsimile or letter).

R2. Complaint Reports

WAC 173-401-615(3)

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

R3. Quarterly Reports

40 CFR 75.64 and 75.65

SWCAA 400-105(7) (Local Only)

WAC 173-401-615(3)

SWCAA 97-2057R1 Sections 27d, 43, and 45

SWCAA 01-2403 Section 11(c)

PSD-01-01 Amendment 2 Conditions 22(b and c)

Second Revision of BART Order No. 6426 Condition 8, 9.1.1, 9.1.2, and 9.2

The Permittee must submit to SWCAA by April 30th, July 31th, October 31th, and January 31th for the calendar quarter periods of January through March, April through June, July through September, and October through December, respectively, all of the information listed below. Information listed in paragraph (f) below must also be submitted to Ecology. All NO_x data must be submitted in an electronic format acceptable to SWCAA. [Second Revision of BART Order No. 6426 Condition 9.2] In addition, all NO_x and ammonia emission data, urea injection data, and excess NO_x or Permit No. SW98-8-R5-A

ammonia emissions resulting from malfunctions must also be reported to the Washington Department of Ecology no later than 30 days after the end of each calendar quarter [Second Revision of BART Order No. 6426 Condition 8].

- (a) Records of monthly plant inspections as described in conditions M2 through M4;
- (b) Sulfur content of the fuel oil used to fuel the auxiliary boiler (EU-3) and for startup of EU-2 as described in condition M7;
- (c) Hourly SO₂ concentration corrected to 7% O₂ (dry volume basis) as described in M9(e);
- (d) Tons of SO₂ emitted from all relevant stacks for each 12-month period, ending with the last day of each month in the quarter as described in M12;
- (e) The following information with respect to NO_x emissions:
 - (1) For each hour of operation for the coal-fired boiler, the average NO_x emission rate (lb/MMBtu to at least two significant figures);
 - (2) For each hour of operation for the coal-fired boiler, the average gross unit load (MW); and
 - (3) Average NO_x emission rate during the quarter and cumulative NO_x emission rate for the calendar year, (lb/MMBtu to at least two significant figures), for those hours when generating load is 360 MW gross or greater as described in M9(h)(2);
- (f) 30 day rolling average NO_x emission rate in lb/MMBtu for each operating day, and the tons of NO_x emitted per unit and combined during the current calendar year calculated in accordance with the Second Revision of BART Order No. 6426. NO_x emission rates must be reported with at least two significant figures. Cumulative tons of NO_x must be rounded to the nearest ton. [Second Revision of BART Order No. 6426 Conditions 9.1.1 and 9.1.2]
- (h) Estimated monthly average heating values (Btu/lb) for coal burned in EU-2;
- (i) Fuel oil consumption in each boiler (Unit 2 and auxiliary boiler) as described in M14;
- (j) Quarterly average CO concentration for EU-2 as described in M8;
- (k) Excess opacity based on 6 minute averaging periods must be reported with the time period clearly identified and a brief explanation as to the cause of the exceedance, or quarterly Method 9 test results must be reported if continuous opacity monitoring is not possible under stack conditions; and
- (l) All instances of deviation from permit requirements to be reported as described in condition R1 must be clearly identified.

Acid Rain. The Permittee's designated representative must electronically report the data and information required in accordance with 40 CFR 75.64 and must report excess emissions of opacity to SWCAA in accordance with 75.65.

R4. Semiannual Reports

**40 CFR 63.10(e)(3)(vi) as referenced by 40 CFR 63 Subpart UUUUU
40 CFR 63 Subpart ZZZZ Sections 63.6640(b), 63.6650
40 CFR 63 Subpart UUUUU Sections 63.10031(e)
40 CFR 64.9(a)(2)(ii)
SWCAA 400-075
WAC 173-401-615(3)**

Consistent with WAC 173-401-615(3) the Permittee must submit to SWCAA by September 15th and March 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 permit requirements must be clearly identified. The number, duration and cause of opacity monitor downtime incidents must be summarized in the semiannual report. For all EPA Method 9 or SWCAA Method 9 monitoring conducted during the semiannual period, a copy of the relevant opacity certification(s) must be submitted with the semiannual report. The semiannual report must contain a certification of any reports submitted during the semiannual period that have not already been certified. The certification must be consistent with WAC 173-401-520. In addition, a Responsible Official must certify that continuous emissions monitoring equipment, if used to quantify emissions of any non-Acid Rain pollutant, is capable of monitoring the emissions of that pollutant.

A separate semiannual report is not necessary if the Permittee elects to provide the above information and certification with each quarterly report.

R5. Annual Reports and Compliance Certification

**WAC 173-401-615(1)(b)
WAC 173-401-630(5)
SWCAA 11-2972 Conditions 19(a - c)
SWCAA 05-2636 Condition 8
SWCAA 08-2779 Condition 8(a)
SWCAA 11-2985 Condition 17(a)
SWCAA 16-3188 Condition 14(a)
SWCAA 14-3093 Condition 20(a - c)**

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

- (1) Identification of each term or condition of the permit that is the basis of the certification;
- (2) Statement of compliance status;
- (3) Whether compliance was continuous or intermittent;
- (4) Method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615;
- (5) Such other facts as SWCAA may require to determine the compliance status of the source;
- (6) The certification must also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR 64 (CAM) occurred; and
- (7) Such additional requirements as may be specified pursuant to Sections 114(a)(3) and 504(b) of the FCAA.

- (b) Coal Unloading Facility: The Permittee must submit by March 15th of the following year the following information for the period of January through December:
 - (1) The total amount of coal unloaded;
 - (2) The average moisture content of the coal unloaded (if this information is not provided, a conservative value of 2.7% must be assumed); and
 - (3) The total number of hours the Coal Unloading Facility Emergency Diesel Sump Pump Engine operated.

- (c) FGD Bleed Treatment Lime Storage Silo: The Permittee must report to SWCAA annually by March 15th for the previous calendar year the total number of hours the FGD Bleed Treatment Lime Storage Silo was actively vented.

- (d) Journal Shop: The Permittee must report to SWCAA annually by March 15th for the previous calendar year the total amount of each welding rod type used in the Journal Shop.

- (a) Filter Systems on Mercury Control System and Fly Ash Bins: The Permittee must report to SWCAA annually by March 15th for the previous calendar year the total number of hours each of the following units operated: SEA System 1, SEA System 2, Sorbent Silo 2, Fly Ash Bin 11, Fly Ash Bin 12, Fly Ash Bin 14, Fly Ash Bin 14 Air Slide to Bin 11 Air Slide, and Fly Ash Bin 14 to 6050 Air Slide.

- (b) Coal Plant Engines: The Permittee must report to SWCAA annually by March 15th for the previous calendar year the total number of hours the Fire Pump Engine, Emergency Diesel Generator 1 and Emergency Diesel Generator 2 operated.

- (c) Fine Coal Recovery Equipment: The following emission-related information must be reported to SWCAA by March 15th for the previous calendar year:
 - (1) The total amount of fine coal produced for each month of the calendar year;
 - (2) The total amount of fine coal transferred to the power plant stockpile; and
 - (3) If available, the average moisture content of the fine coal produced (if this information is not provided, a conservative value of 8% must be assumed).

R6. Emission Inventory Reports

WAC 173-400-105(1)
SWCAA 400-105
SWCAA 97-2057R1 Section 50
SWCAA 01-2403 Section 11(e)(3)
SWCAA 05-2636 Condition 8(b)
SWCAA 11-2972 Condition 19(d)
SWCAA 08-2779 Condition 8(b)
SWCAA 11-2985 Condition 17(b)
SWCAA 16-3188 Condition 14(b)
SWCAA 14-3093 Condition 20(d)

The Permittee must submit an inventory of annual emissions each year to SWCAA by March 15th of the following year in accordance with SWCAA 400-105 unless an alternate date is approved by SWCAA. The inventory must include stack and fugitive emissions of NO_x, SO₂, CO, VOC, PM, PM₁₀, PM_{2.5}, hazardous air pollutants, and toxic air pollutants identified in WAC 173-460.

R7. Source Test Plans and Reports

40 CFR 63.7, 63.10007(a)

WAC 173-401-615(3)

SWCAA 97-2057R1, Section 42

PSD-01-01 Amendment 2 Conditions 22(a) and 22(d)(2)

SWCAA 11-2984, Appendix A

Second Revision of BART Order No. 6426 Condition 9.1.3

Permittee must meet the following requirements for source test reports:

- (a) Submit a comprehensive test plan to SWCAA for review and approval at least five business days prior to any periodic testing beyond CEMS monitoring required in condition M9 of this permit.
- (b) Notify SWCAA at least three days in advance of any testing of Boiler 2 (EU-2), and five days in advance of any testing of any other emission unit so that SWCAA personnel may be present during testing.
- (c) Provide test results from required emissions testing to SWCAA within 45 days following completion of testing. All gaseous emissions must, as a minimum, be reported in parts per million by volume, pounds per hour, and pounds per million Btu of heat input. Emissions data must be corrected to units of the applicable standard. Results of ammonia emission testing of the coal-fired boiler required by Second Revision of BART Order No. 6426 must also be submitted to Ecology.
- (d) For EU-2, include in the test report a summary of operating conditions for each test run to include, as a minimum:
 - (1) Estimated boiler heat input (million Btu/hr);
 - (2) Estimated fuel consumption rate (lb/hr);
 - (3) Air discharge flowrate in dry standard cubic feet;
 - (4) Exhaust temperature of emissions out the stack;
 - (5) Estimated sulfur content of coal;
 - (6) Estimated SO₂ reduction in percent, as a result of controls; and
 - (7) Unit load in megawatts on an hourly basis.
- (e) Each required source test report must include:
 - (1) A description of the source including manufacturer, model number and design capacity of the equipment, and the location of the sample ports or test locations;
 - (2) Time and date of the test and identification and qualifications of the personnel involved;
 - (3) A summary of results, reported in units and averaging periods consistent with the applicable emission standard or limit;
 - (4) A summary of control system or equipment operating conditions;
 - (5) A summary of production related parameters;
 - (6) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation;
 - (7) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation;
 - (8) Copies of field data and example calculations;
 - (9) Chain of custody information;
 - (10) Calibration documentation;
 - (11) Discussion of any abnormalities associated with the results; and
 - (12) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

All test reports must be submitted in electronic format.

R8. Acid Rain Notification of Certification and Recertification Test Dates and Applications and Other General Reporting Provisions **40 CFR 75.60, 75.61, and 75.63**

The Permittee or designated representative must submit written notification to EPA Region X and SWCAA of certification tests, recertification tests, and revised test dates as specified in 40 CFR 75.20 for CEMS in accordance with 40 CFR 75.61. The designated representative must submit applications and reports in accordance with 40 CFR 75.63.

The designated representative must comply with all Acid Rain Program reporting requirements in accordance with 40 CFR 75.60 and with the signatory requirements of 40 CFR 72.21.

R9. BART Order Milestone and Urea Injection Reports
Second Revision of BART Order No. 6426 Conditions 6 and 7

The Permittee must submit a letter to the Washington State Governor, Ecology, and SWCAA reporting achievement of each of the following milestones:

- (a) Compliance with the requirement to permanently cease burning coal in one coal fired boiler no later than December 31, 2020.
- (b) Compliance with the requirement to permanently cease burning coal in the second coal fired boiler no later than December 31, 2025.

Each letter must be submitted within 30 days of achieving each of the above milestones.

- (c) A letter reporting TransAlta used urea injection must be sent to Ecology and SWCAA within 30 days of the first urea injection occurring during each calendar year. The letter must contain, at a minimum, the dates of urea injection, urea concentration, and the urea injection rate. No letter is required for any calendar year in which no urea injection occurred.

R10. 40 CFR 63 Subpart DDDDD Reports for Auxiliary Boiler
40 CFR 63.7550(b) and (c), Table 9

Compliance Reports

The Permittee must submit the first compliance report to SWCAA covering the period from January 31, 2016 (the initial compliance date) through January 31, 2021. The first compliance report must be submitted by January 31, 2022. [40 CFR 63.7550(b)(1) and (2)]

Subsequent reports must be submitted every 5 years covering the subsequent 5-year periods from January 1 to December 31 and must be submitted by January 31st of the following year. [40 CFR 63.7550(b)(3) and (4)]

The compliance report must include the following for the Auxiliary Boiler: [40 CFR 63.7550(c)]

- (a) The company and facility name and address.
- (b) Identification of the boiler and the process it is used in and the fact that the unit is not subject to any emission limitations or process parameter limitations from 40 CFR 63 Subpart DDDDD.
- (c) The date of the report and the beginning and ending dates of the reporting period.
- (d) The total operating time during the reporting period.

- (e) The date of the most recent tune-up for EU-2. The date of the most recent burner inspection if it was delayed until the next scheduled or unscheduled shutdown.
- (f) A statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

R11. 40 CFR 63 Subpart UUUUU Reports and Notification

40 CFR 63.9

40 CFR 63.10

40 CFR 63 Subpart UUUUU Sections 63.10006(j), 63.10021, 63.10030, 63.10031 and Table 8

The Permittee must submit the reports required under 40 CFR 63.10031 for Unit 2 (EU-2) to the Administrator electronically, using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool as provided in 40 CFR 63.10021(f) in accordance with the submission requirements of 40 CFR 63.10031(f)(6). [40 CFR 63.10021(f), 40 CFR 63.10031(f)(6)]

A copy of each report required to be submitted to the EPA must also be submitted to SWCAA. A copy of each report submitted in electronic format to an EPA database (e.g. quarterly reports) must be submitted to SWCAA in an approved format. Each report must be submitted to SWCAA no later than the date the report must be submitted to the EPA. [40 CFR 63.13, WAC 173-401-615]

Hg Monitoring System

For the mercury continuous monitoring system, the Permittee must meet the electronic reporting requirements of Appendix A to 40 CFR 63 Subpart UUUUU. [40 CFR 63.10031(a)(1), Section 1 of 40 CFR 63 Subpart UUUUU Table 8, Appendix A to 40 CFR 63 Subpart UUUUU]

SO₂ Monitoring System

For the SO₂ CEMS, the Permittee must submit reports in accordance with 40 CFR 63.10031(a)(5). [40 CFR 63.10031(a)(5), Section 5 of 40 CFR 63 Subpart UUUUU Table 8]

Semiannual Compliance Reports

The Permittee must submit semiannual compliance reports in accordance with 40 CFR 63.10031(b). Each semiannual report must be submitted no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. The semiannual report must contain the information required in 40 CFR 63.10031(c)(1) through (10). All semiannual reports must be submitted as PDF files. The final semiannual compliance report must cover the reporting period from July 1, 2023, through December 31, 2023. [40 CFR 63.10031(b), 40 CFR 63.10031(c), 40 CFR 63.10031(d), 40 CFR 63.10031(f)(4), 40 CFR 63.10031(i), Section 9 of 40 CFR 63 Subpart UUUUU Table 8]

Quarterly Compliance Reports

Quarterly compliance reports must be submitted in accordance with 40 CFR 63.10031(g), starting with a report covering the first calendar quarter of 2024. Each quarterly report and the associated Appendix E information must be submitted no later than 60 days after the end of each calendar quarter. Quarterly reports must be submitted in XML format. For startup and shutdown event(s) that occur on or after January 1, 2024, the Permittee must use the ECMPS Client Tool to submit the information in 40 CFR 63.10031(c)(5) and 40 CFR 63.10020(e) along with each quarterly compliance report, in a PDF file, starting with a report for the first calendar quarter of 2024 (this information is part of the PDF format semiannual report prior to 2024). The startup and shutdown reports are due when the quarterly report is due (no later than 60 days after the end of each calendar quarter). The applicable data elements in 40 CFR 63.10031(f)(6)(i) through (xii) must be entered into ECMPS with each startup and shutdown report. [40 CFR 63.10031(d), 40

CFR 63.10031(f)(4), 40 CFR 63.10031(g), 40 CFR 63.10031(i), Sections 11 and 12 of 40 CFR 63 Subpart UUUUU Table 8]

PM Source Test Reports

For each filterable particulate matter source test conducted to satisfy the testing requirements of 40 CFR 63 Subpart UUUUU completed prior to January 1, 2024, the Permittee must submit a PDF test report in accordance with 40 CFR 63.10031(f)(6). Each report must be submitted to EPA no later than 60 days after the date on which the testing is completed. For each test completed on or after January 1, 2024, in accordance with 40 CFR 63.10031(g), the Permittee must submit the applicable reference method information in sections 17 through 31 of appendix E to 40 CFR 63 Subpart UUUUU along with the quarterly compliance report for the calendar quarter in which the test was completed. [40 CFR 63.10031(f), Section 6 of 40 CFR 63 Subpart UUUUU Table 8]

RATA Reports

For each RATA of an Hg or SO₂ monitoring system completed prior to January 1, 2024, the Permittee must submit a PDF test report in accordance with 40 CFR 63.10031(f)(6), no later than 60 days after the date on which the test is completed. For each SO₂ or Hg RATA completed on or after January 1, 2024, the Permittee must submit the applicable reference method information in sections 17 through 31 of appendix E to this subpart prior to or concurrent with the relevant quarterly emissions report. [40 CFR 63.10031(f)(1), Section 7 of 40 CFR 63 Subpart UUUUU Table 8]

Tune-Up Reports

Prior to January 1, 2024, the Permittee must report the tune-up date electronically, in a PDF file, in the semiannual compliance report, as specified in 40 CFR 63.10031(f)(4) and (6) and, if requested by the Administrator, in hard copy, as specified in 40 CFR 63.10031(f)(5). On and after January 1, 2024, the Permittee must report the tune-up date electronically in the quarterly compliance report, in accordance with 40 CFR 63.10031(g) and section 10.2 of appendix E to 40 CFR 63 Subpart UUUUU. The tune-up report date is the date when tune-up requirements in paragraphs (e)(6) and (7) of 40 CFR 63.20021 are completed. [40 CFR 63.10021(e)(9), 40 CFR 63.10031(c)(4)]

Notifications

The Permittee must submit notifications for Unit 2 as required by 40 CFR 63.10030. [40 CFR 63.10030, Section 7.2.2 of Appendix A to 40 CFR 63 Subpart UUUUU]

The Permittee must submit notification to SWCAA of the date required SO₂ and Hg RATAs are scheduled to begin at least 60 calendar days before the RATA is scheduled to begin. [40 CFR 63.8(e), 40 CFR 63.9(g)(1), 40 CFR 63.10030(a), 40 CFR 63 Subpart UUUUU Table 9]

The Permittee must submit a Notification of Intent to conduct each filterable particulate matter performance test to SWCAA at least 30 days before the performance test is scheduled to begin. [40 CFR 63.9(e) as modified by 40 CFR 63 Subpart UUUUU Table 9, 40 CFR 63.10030(a), 40 CFR 63.10030(d)]

Within 60 days of completing each Subpart Y EPA Method 9 performance evaluation, owners or operators must submit the results to the following address: United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711. In addition, all EPA Method 9 performance results must be submitted to SWCAA within 45 days of test completion.

X. NON-APPLICABLE REQUIREMENTS**WAC 173-401-640(2)**

The following table lists all federal, state, and/or local requirements that might reasonably apply to the Permittee, but are deemed nonapplicable after review by SWCAA. In accordance with WAC 173-401-640, the Permittee is provided a permit shield for not complying with the requirements described below where they have been identified to be non-applicable to specific emission units. Certain subsections describe requirements that may apply to the Permittee but are not "applicable requirements" for the purposes of the Air Operating Permit program and therefore will not be included in an Air Operating Permit.

N1. Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971 (Subpart D)**40 CFR 60.40 et seq.
SWCAA 400-115**

Subpart D applies to all fossil-fuel-fired steam generating units for which construction, modification, or reconstruction is commenced after August 17, 1971, and that have a maximum design heat input rate of greater than 250 million Btu per hour. The coal fired boiler at this source has a design heat input greater than 250 million Btu per hour, but commenced construction with signing of a construction contract on December 23, 1968 prior to August 17, 1971, and has not undergone modification that would trigger the requirement since. Therefore, this regulation is not applicable.

N2. Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978 (Subpart Da)**40 CFR 60.40a et seq.
SWCAA 400-115**

Subpart Da applies to all electric utility steam generating units for which construction, modification, or reconstruction is commenced after September 18, 1978, and that have a maximum design heat input from fossil fuel greater than 250 million Btu per hour. The coal-fired boiler at this source has a design heat input greater than 250 million Btu per hour, but commenced construction with signing of a construction contract on December 23, 1968 (prior to September 18, 1978) and has not undergone modification that would trigger the requirement since. Therefore, this regulation is not applicable.

N3. Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (Subpart Db)**40 CFR 60.40b et seq.
SWCAA 400-115**

Subpart Db applies to all steam generating units that commence construction, modification, or reconstruction after June 19, 1984, and that have a heat input capacity from fuels combusted in the steam generating unit of greater than 100 million Btu per hour. The auxiliary boiler in the coal plant has a heat input capacity greater than 100 million Btu per hour, but commenced construction with signing of a construction contract on December 23, 1968 (prior to June 19, 1984), and has not undergone modification that would trigger the requirement since. Therefore, this regulation is not applicable to EU-3.

N4. Standards of Performance for Nonmetallic Mineral Processing Plants (Subpart OOO)
40 CFR 60.670 et seq.
SWCAA 400-115

Subpart OOO establishes particulate matter and opacity limitations and initial testing requirements for applicable units. The limestone ball mill is an applicable unit because it was built after August 31, 1983 (installed new ~2001), is a fixed unit with a capacity of greater than 25 tons per hour (the unit is rated at 40 tons per hour), and is used to reduce the size of limestone (a listed non-metallic mineral). The Limestone Ball Mill is fully enclosed (the process equipment is sealed and located within a building) and water is injected at the upstream end of the ball mill, therefore the ball mill is not a potential source of particulate matter emissions. Even though this emission unit is not a potential source of emissions, the initial compliance tests were conducted on October 24, 2007, therefore the initial testing requirements are no longer applicable.

N5. Prevention of Significant Deterioration, Review of Major Stationary Sources and Major Modifications - Source Applicability and Exemptions
40 CFR 52.21(i)

This section applies to all major stationary sources and major modifications with respect to each regulated pollutant, except as otherwise provided in this section. Requirements of this section do not apply to a particular major stationary source or major modification if construction commenced on the source or modification before August 7, 1977. The coal-fired boiler at this source commenced construction with signing of a construction contract on December 23, 1968 (prior to August 7, 1977) and, except for construction of the combustion turbine facility in 2001-2002, this facility has not since undergone modification that would trigger the requirement. Therefore, this regulation is not applicable to EU-2 or EU-3.

N6. Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers
40 CFR 63.400 et seq.
SWCAA 400-075

Subpart Q applies to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals on or after September 8, 1994. The cooling towers at this facility do not use chromium-based water treatment chemicals; therefore this requirement is not applicable.

N7. Emission Standards for Combustion and Incineration Units
SWCAA 400-050(3)

SWCAA 400-050(3) prohibits emissions of carbonyls from any incinerator in excess of 100 ppm total carbonyls as measured by applicable sampling methods. Pursuant to SWCAA 400-030(58), an incinerator is defined as "...a furnace used primarily for the thermal destruction of waste." The primary purpose of the coal-fired boiler at this source is the production of steam for

generation of electric energy and not the destruction of waste; therefore, this regulation is not applicable.

N8. Registration Program **SWCAA 400-100**

The Permittee is an air operating permit source. Pursuant to SWCAA 400-100(1)(b) air operating permit sources are exempt from the registration requirements of SWCAA 400-100.

N9. Requirements for Sources in a Maintenance Plan Area **SWCAA 400-111**

The Permittee is not located in a maintenance plan area for any criteria pollutant. Therefore, this regulation is not applicable.

N10. Requirements for New Sources in Nonattainment Areas **SWCAA 400-112**

The Permittee is not located in a nonattainment area for any criteria pollutant. Therefore, this regulation is not applicable.

N11. Bubble Rules **SWCAA 400-120**

The Permittee has not requested an emission bubble for any regulated pollutant. Therefore, this regulation is not applicable.

N12. Acquisition and Use of Emission Reduction Credits **SWCAA 400-130**

The Permittee has neither sought nor been issued emission reduction credits (ERCs). Therefore, this regulation is not applicable.

N13. State-Only Greenhouse Gas Requirements – Applicable if Triggered
RCW 80.80 and WAC 173-407

WAC 173-407 (Part II) (effective July 20, 2008) establishes a greenhouse gas emission standard and attendant monitoring, recordkeeping, reporting and, if necessary, sequestration requirements. The requirements of WAC 173-407 (Part II) are based on RCW 80.80 which was modified by Senate Bill 5769 (effective July 22, 2011). In accordance with the modified requirements, this facility must meet specific greenhouse gas emission limits by December 31, 2020 for one boiler and December 31, 2025 for the second boiler unless the Washington Department of Ecology determines that a requirement of state or federal law or regulation requires the installation of selective catalytic reduction (SCR) technology on one or both of the boilers. It is assumed that the boilers will comply with the greenhouse gas standards by being retired. If SCR is not required, then no further requirements of the rule apply. If SCR must be installed then the greenhouse gas requirements of the rule would apply to the Permittee's facility if:

- (a) The facility or a unit is upgraded; or
- (b) The existing facility or a unit is subject to a new long-term financial commitment.

An "upgrade" means any modification made for the primary purpose of increasing the electric generation capacity of a baseload electric generation facility or unit.

A "long-term financial commitment means:

- (a) Either a new ownership interest in baseload electric generation or an upgrade to a baseload electric generation facility; or
- (b) A new or renewed contract for baseload electric generation with a term of five or more years for the provision of retail power or wholesale power to end-use customers in this state.

"New ownership interest" means a change in the ownership structure of a baseload power plant or a cogeneration facility or the electrical generation portion of a cogeneration facility affecting at least:

- (a) Five percent of the market value of the power plant or cogeneration facility; or
 - (b) Five percent of the electrical output of the power plant or cogeneration facility.
- The above thresholds apply to each unit within a multi-unit generation facility.

The greenhouse gas emission standard in WAC 173-407 Part II is based only on the authority of RCW 80.80. Requirements originating only from RCW 80.80 are not "applicable requirements" as defined in WAC 173-401; therefore these requirements would not be included in the Permittee's Air Operating Permit. These requirements would be enforced by the Washington Department of Ecology outside of the Air Operating Permit Program.

N14. Federal Greenhouse Gas Reporting Requirements

40 CFR 98

The EPA GHG reporting rule was finalized September 22, 2009. In the preamble EPA responds to a question regarding whether it is an applicable requirement for the purposes of Title V:

"As currently written, the definition of "applicable requirement" in 40 CFR 70.2 and 71.2 does not include a monitoring rule such as today's action, which is promulgated under CAA sections 114(a)(1) and 208.

These requirements will be enforced directly by the USEPA outside of the Air Operating Permit Program."

N15. State Only Mercury Emission Limits for EU-1 and EU-2

May 25, 2010 Settlement Agreement Between Ecology and TransAlta

A Settlement Agreement between the Washington Department of Ecology and TransAlta signed on May 25, 2010 by the Washington Department of Ecology provides for agreed actions to limit mercury emissions from EU-1 and EU-2. These provisions do not implement RCW 70.94 or any other regulation that is an "applicable requirement" for the purposes of WAC 173-401. Although the Permittee is bound by the conditions of the Agreed Order while it is in effect, those conditions cannot be included in the Air Operating Permit.

**N16. National Emission Standards for Hazardous Air Pollutants for Source Category:
Gasoline Dispensing Facilities**

**40 CFR Part 63.11110 et seq.
Subpart CCCCCC, SWCAA 400-075**

The Permittee operates a gasoline storage tank that is used to fuel vehicles at the facility. Subpart CCCCCC would apply to this unit if it was located at an area source of HAP emissions. This regulation is not applicable in this instance because the Permittee's facility is a major source of HAPs and Subpart CCCCCC only applies to equipment located at an area source of HAPs.

N17. Standards of Performance for Coal Preparation Plants

**40 CFR Part 60.250 et seq.
Subpart Y, SWCAA 400-115**

Subpart Y establishes emission limits and operating requirements for coal preparation and processing plants with a capacity of more than 200 tons per day of coal. The definition of coal includes coal refuse for facilities constructed after May 27, 2009. This regulation is applicable to the fine coal processing activities that span the TransAlta Centralia Mining and TransAlta Centralia Generation facilities.

SWCAA has determined that the existing coal storage piles at TransAlta Generation are not subject to 40 CFR 60 Subpart Y because TransAlta Generation is a separate source that is not included in the coal preparation plant for the purposes of Subpart Y. 40 CFR 60.250(a) states that Subpart Y applies to affected facilities in coal preparation and processing plants. In the preamble of the October 10, 2009 Federal Register Notice for the final Subpart Y standards, EPA writes that they have distinguished the "coal preparation plant" from other operating areas with the following definition from EPA's Office of Water: "The term "coal preparation plant" means a facility where coal is subjected to cleaning, concentrating, or other processing or preparation in order to separate coal from its impurities and then is loaded for transit to a consuming facility."

In addition, the coal storage pile will not be "new," "reconstructed," or "modified" as defined in 40 CFR 60.

APPENDIX A

VISIBLE EMISSIONS 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, 2002.

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 emissions 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**ACID RAIN PERMIT****Acid Rain Permit No. SW-ARP-1-R3**

Issued to: Centralia Plant
Operated by: TransAlta Centralia Generation, LLC
Address: 913 Big Hanaford Road
Centralia, WA 98531
ORIS code: 03845
Affected units at source: BW21 (Unit 1)
BW22 (Unit 2)
Effective: This Acid Rain permit, as part of the Centralia Plant Title V permit, will become effective upon the effective date of the Title V permit (SW-98-8-R5). The Acid Rain Permit has a permit term ending on October 14, 2024. Acid Rain Permit SW-ARP-1-R2-A is superseded in its entirety by this Acid Rain Permit.

Acid Rain Permit Contents

- 1) Statement of Basis
- 2) SO₂ allowances allocated under this permit and NO_x 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.
- 4) The permit applications 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."

1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with Washington Administrative Code (WAC) 173-406 "Acid Rain Regulation" and WAC 173-401 "Operating Permit Regulation," the Southwest Clean Air Agency issues this permit pursuant to WAC 173-406 and WAC 173-401. 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).

2) SO₂ Allowance Allocations and NO_x Requirements for Each Affected Unit

		pre 2019 ^a	2019	2020	2021	2022	2023	2024
BW21 (Unit 1)	Acid Rain NO _x limit (lb/MMBtu) annual average		0.40	0.40	0.40	0.40	0.40	0.40
BW22 (Unit 2)	Acid Rain NO _x limit (lb/MMBtu) annual average		0.40	0.40	0.40	0.40	0.40	0.40
Facilitywide	SO ₂ allowances held	268,395 ^a	32,981 ^b	34,981 ^b	39,481 ^b	39,481 ^b	39,481 ^b	39,481 ^b

This Acid Rain Permit must 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).

Table Footnotes

^a This column lists the number of allowances from prior years that have not been utilized.

^b The number of allowances actually held by an affected source in a unit account may differ from the number allocated by the U.S. EPA. Pursuant to 40 CFR 72.9(c)(i) and WAC 173-406-106(3)(a)(i), this unit is required to hold SO₂ 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. All allowances for this facility are held in the "facility" account.

3) Comments, Notes and Justifications

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

4) Permit Application

The permit renewal application is attached.

Standard Requirements**Permit Requirements**

(1) The designated representative of the Centralia Plant and each affected unit at the Centralia Plant must:

- (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; 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 Centralia Plant and each affected unit at the Centralia Plant must:
- (i) Operate the units 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 Centralia Plant and each affected unit at the Centralia Plant must 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 must be used to determine compliance by the source or units, as appropriate, 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 do not affect the responsibility of the owners and operator to monitor emissions of other pollutants or other emissions characteristics at the units under other applicable requirements of the Act, applicable requirements of Title 173 WAC and other provisions of the operating permit for the Centralia Plant.

Sulfur Dioxide Requirements

- (1) The owners and operator of the Centralia Plant and each affected unit at the Centralia plant must:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the Centralia Plant; 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 constitutes a separate violation of the Act.
- (3) An affected unit will 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); 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).
- (4) Allowances must be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance must 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, or WAC 173-406-105 and no provision of law limits 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 Centralia Plant and each affected unit at the Centralia Plant must comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year must submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year must:
 - (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 Centralia Plant and each affected unit at the Centralia Plant 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.
- (2) The designated representative of the Centralia Plant and each affected unit at the Centralia Plant must submit the reports required under the Acid Rain Program, including those under 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, or WAC 173-406-105, including

any requirement for the payment of any penalty owed to the United States, will be subject to enforcement pursuant to section 113(c) of the Act and by the permitting authority pursuant to Revised Code of Washington (RCW) 70.94.431 and RCW 70.94.435.

- (2) Any person who knowingly makes any false, material statement in any record, submission, or report under the Acid Rain Program is 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 70.94.430.
- (3) No permit revision excuses any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) The Centralia Plant and each affected unit at the Centralia Plant must meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to the Centralia Plant (including a provision applicable to the designated representative of an affected source) also applies to the owners and operators of the Centralia Plant and to the affected units at the Centralia Plant.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) also applies to the owners and operators of such unit.
- (7) Each violation of a provision of WAC 173-406-100 through 173-406-950 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, is 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 may be interpreted 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 affected 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 source can hold; provided, that the number of allowances held by the source do 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.

<p>TransAlta Centralia Generation LLC Facility (Source) Name (from STEP 1)</p>

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STEP 3**Read the standard requirements.****Permit Requirements**

- (1) The designated representative of each affected source and each affected unit at the source 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
 - (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 and operators of each affected source and each affected unit at the source 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 each affected source and each affected unit at the source 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 source or unit, as appropriate, 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 operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; 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 40 CFR 72.6(a)(2); 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 40 CFR 72.6(a)(3).
- (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 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such 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 source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

TransAlta Centralia Generation LLC Facility (Source) Name (from STEP 1)

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STEP 3, Cont'd.**Excess Emissions Requirements**

- (1) The designated representative of an affected source 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 source 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 source and each affected unit at the source 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 certificate 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 an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I 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 or 72.8, 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.
- (2) Any person who knowingly makes a 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.
- (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) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 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.

TransAlta Centralia Generation LLC
Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.

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 72.8 shall be construed as:

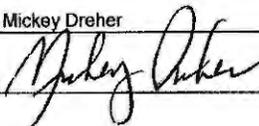
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source 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.

STEP 4

Certification

Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Mickey Dreher
Signature	
Date	August 30, 2018

APPENDIX C

SMALL ENGINE MAINTENANCE PLAN

The maintenance program described below has been developed to cover maintenance instructions for Stationary Small (less than 500 HP) Reciprocating Internal Combustion Engines on the TransAlta Centralia Generation site. The current engines that fit into this category are: PMP-06 at ECUF (EU-12), Unit 1 Emergency diesel Gen-01 (EU-9), Unit 2 Emergency diesel Gen-02 (EU-10), and the Fire Pump Engine (EU-11). This maintenance program is required to meet the federal standard requirements of 40 CFR 63 and Title 5.

For units in regular or continuous operation the following checks will be conducted daily when operating:

1. Check engine oil level
2. Check coolant level
3. Check fuel filter water separator bowl-drain as needed
4. Check air cleaner dust unloader if equipped
5. Check air cleaner restriction indicator gage
6. Conduct walk around inspection
7. Check lamps if equipped
8. Check and note grease and oil accumulations

At a maximum two week interval, perform (see note below) and document this inspection on the Small Stationary Engine Inspection Form developed for this purpose. Assure that all information is complete including: the date of inspection; name and employee number of inspector; run time hours at time of inspection; indication of completion of each inspection point; identification of each item needing attention found during inspection; additional comments as necessary.

For units in standby mode, at a maximum two week interval, a prestart up inspection will be done for the above mentioned units and will consist of the following inspection points:

1. Check engine oil level
2. Check coolant level
3. Check fuel filter water separator bowl-drain as needed
4. Check air cleaner dust unloader if equipped
5. Check air cleaner restriction indicator gage
6. Conduct walk around inspection
7. Check lamps if equipped
8. Check and note grease and oil accumulations

After completing the prestart up inspection perform an engine startup. Operate engine for greater than 15 but no more than 30 minutes (see note below). Upon startup and again upon completion of operation perform a visual inspection of engine to identify leaks from pressurized systems. Document this inspection on the Small Stationary Engine Inspection Form developed for this purpose (still in development). Assure that all information is complete including: the date of inspection; name and employee number of inspector; run time hours at time of inspection; indication of completion of each inspection point; identification of each item needing attention found during inspection; additional comments as necessary. This form will be completed, submitted for review and sent to the Environmental Department for filing. Copies of these documents will be retained for 5 years.

Operating Maintenance Note: In accordance with manufacturers recommendations, whenever possible units that are running, or idle and started for maintenance testing, should be loaded to a minimum of 50% of rated load for the maintenance checks. Because this is not possible without exceptional effort and exceptional risk to plant operations, these requirements have been removed from the requirements of engines which power emergency equipment at TransAlta Centralia Generation.

At 500 operating hours or every 12 months a PM and inspection will be performed that will include the following items:

1. Check manual belt tensioner and belt wear;
2. Change engine oil and replace oil filter;
3. Check crankcase ventilation system;
4. Check air intake hoses, connections, and system;
5. Replace fuel filter elements;
6. Check automatic belt tensioner and belt wear;
7. Check engine electrical ground connection;
8. Check cooling system – add coolant as needed;
9. Conduct cooling solution analysis – add SCAs as required;
10. Pressure test cooling system;
11. Check engine speeds;

Completion of this maintenance will be documented in the PM database. A copy of the completed PM will be submitted to the Environmental Department for filing.

At 2,000 operating hours or every 24 months a PM and inspection will be performed that will include the following items:

1. Check crankshaft vibration damper;
2. Flush and refill cooling system;
3. Test thermostats;
4. Check and adjust engine valve clearances;
5. Test glow plugs;
6. Check fuses;
7. Bleed fuel system; and
8. Replace fan and alternator belts;

Completion of this maintenance will be documented in the PM database. A copy of the completed PM will be submitted to the Environmental Department for filing.

Note the above maintenance schedule has been developed to provide the minimum operational maintenance tests required for the engine side of machines driven by Stationary Small (less than 500 HP) Reciprocating Internal Combustion Engines per 40 CFR 63. Additional testing for the load portion of these machines may be required by other federal, state, regional or local requirements. In these cases, operating time limits of 40 CFR 63 (a maximum of 100 hours for maintenance testing of emergency machines) still apply.