EXHIBIT NO. ___(RG-11HC) DOCKET NO. UE-121373 WITNESS: ROGER GARRATT

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Petition of

PUGET SOUND ENERGY, INC.

for Approval of a Power Purchase Agreement for Acquisition of Coal Transition Power, as Defined in RCW 80.80.010, and the Recovery of Related Acquisition Costs Docket No. UE-121373

FIRST EXHIBIT (HIGHLY CONFIDENTIAL) TO THE PREFILED REBUTTAL TESTIMONY OF ROGER GARRATT ON BEHALF OF PUGET SOUND ENERGY, INC.

REDACTED VERSION

NOVEMBER 16, 2012

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Docket No. UE-121373 Puget Sound Energy, Inc.'s Petition for Approval of a Power Purchase Agreement for Acquisition of Coal Transition Power

PUBLIC COUNSEL DATA REQUEST NO. 056

"CONFIDENTIAL" Table of Contents

DR NO.	"CONFIDENTIAL" Material
056	Each of Attachments A through Attachment D to PSE's Response to Public Counsel Data Request No. 056 is HIGHLY CONFIDENTIAL per Protective Order in WUTC Docket No. UE-121373.
056	Attachment E to PSE's Response to Public Counsel Data Request No. 056 is CONFIDENTIAL per Protective Order in WUTC Docket No. UE-121373.

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Docket No. UE-121373
Puget Sound Energy, Inc.'s
Petition for Approval of a Power Purchase Agreement for
Acquisition of Coal Transition Power

PUBLIC COUNSEL DATA REQUEST NO. 056

PUBLIC COUNSEL DATA REQUEST NO. 056:

Please provide all information provided by TransAlta (the facility owner) to PSE (the purchasing electrical company) "for evaluating the costs and benefits associated with acquisition of coal transition power" as required by RCW 80.04.570(3).

Response:

Attached as Attachment A to Puget Sound Energy, Inc.'s ("PSE") Response to Public Counsel Data Request No. 056 is a copy of the first bid submitted by TransAlta Centralia LLC ("TransAlta Centralia") on October 31, 2011, in response to PSE's 2011 Request for Proposals (the "2011 RFP").

Attached as Attachment B to PSE's Response to Public Counsel Data Request No. 056 is a copy of the second bid submitted by TransAlta Centralia on October 31, 2011, in response to PSE's 2011 RFP.

Attached as Attachment C to PSE's Response to Public Counsel Data Request No. 056 is a copy of a data request submitted to TransAlta Centralia by PSE on November 23, 2011, in response to TransAlta Centralia's two bids in response to the 2011 RFP.

Attached as Attachment D to PSE's Response to Public Counsel Data Request No. 056 is a copy of the data request response submitted to PSE by TransAlta Centralia on December 9, 2011, in response to PSE's data request submitted on November 23, 2011.

Attached as Attachment E to PSE's Response to Public Counsel Data Request No. 056 is a copy of an email submitted to PSE by TransAlta Centralia on June 29, 2012. After receiving the response from TransAlta, PSE proposed adding a transmission contingency provision in the PPA to address the recently discovered transmission risk of increasing PSE's transfer capacity beyond 380 MW. TransAlta subsequently decided to forego the transmission contingency provision in lieu of capping the offered volumes to 380 MW.

Exhibit No. ___(RG-11HC) Page 3 of 206

Each of Attachments A through Attachment D to PSE's Response to Public Counsel Data Request No. 056 is HIGHLY CONFIDENTIAL per Protective Order in WUTC Docket No. UE-121373.

Attachment E to PSE's Response to Public Counsel Data Request No. 056 is CONFIDENTIAL per Protective Order in WUTC Docket No. UE-121373.

Exhibit No. ___(RG-11HC) Page 4 of 206

ATTACHMENT A to PSE's Response to Public Counsel Data Request No. 056

Pages 5-56 of RG-___(11HC) are Redacted per Protective Order in WUTC Docket No. UE-121373

Exhibit No. ___(RG-11HC) Page 57 of 206

ATTACHMENT 6 to PSE's Response to Public Counsel Data Request No. 056

Pages 58-103 of RG-___(11HC) are Redacted per Protective Order in WUTC Docket No. UE-121373

Exhibit No. ___(RG-11HC) Page 104 of 206

ATTACHMENT C to PSE's Response to Public Counsel Data Request No. 056

From: Maynard, Sheri L

Sent: Wednesday, November 23, 2011 2:11 PM

To: 'Brenda_Marshall@TransAlta.com'
Cc: 'Paul_Taylor@TransAlta.com'

Subject: PSE's All Source RFP

Attachments: 11RFP_data_request_centralia.xls

Good afternoon Brenda,

PSE's evaluation team is working through its evaluation of the resource offers received in response to its All Source RFP. We have prepared a set of data requests to help us better understand your proposal. Please see the attached Excel file.

Kind regards,

Sheri Maynard

Resource Coordinator
PSE Resource Acquisition
Tel. 425-462-3114 (int. 81-3114)
sheri.maynard@pse.com

Exhibit No. ___(RG-11HC) Page 106 of 206

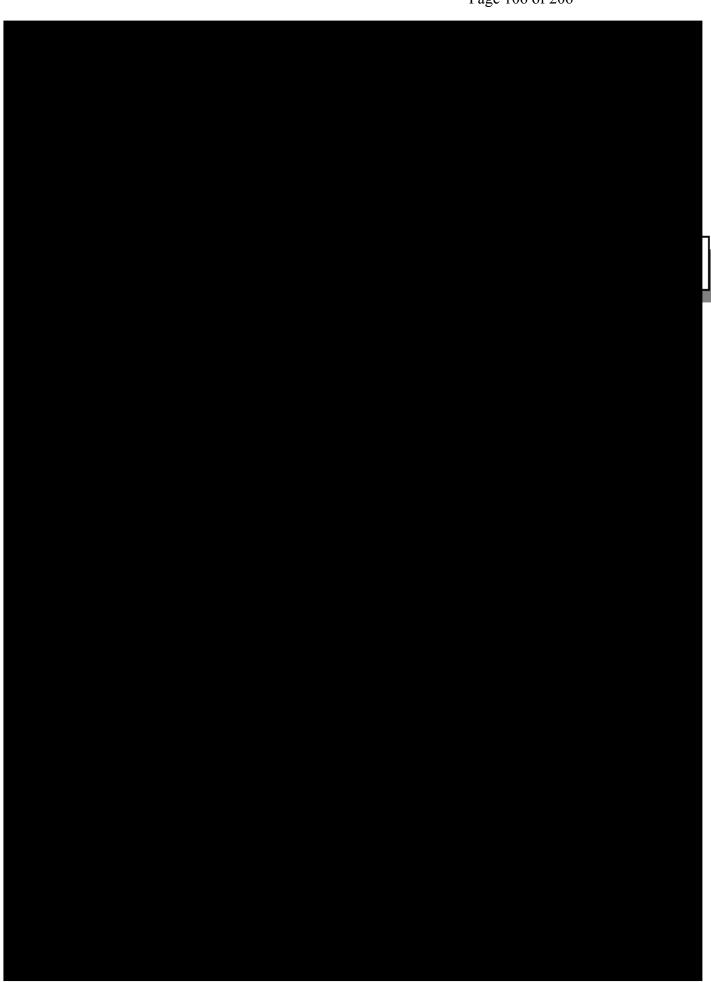


Exhibit No. ___(RG-11HC) Page 107 of 206

Exhibit No. ___(RG-11HC) Page 108 of 206

ATTACHMENT D to PSE's Response to Public Counsel Data Request No. 056

Pages 109-122 of RG-___(11HC) are Redacted per Protective Order in WUTC Docket No. UE-121373

Exhibit No. ___(RG-11HC) Page 123 of 206



Southwest Clean Air Agency

11815 NE 99th Street, Suite 1294 • Vancouver, WA 98682-2322 (360) 574-3058 • Fax: (360) 576-0925 www.swcleanair.org

October 26, 2011

Bob Nelson TransAlta Centralia Generation, LLC 913 Big Hanaford Road Centralia, Washington 98531

Re: <u>Issuance of PROPOSED Title V Air Operating Permit SW98-8-R3-A</u>

Dear Mr. Nelson:

The comment period for your draft Air Operating Permit (SW98-8-R3-A) expired on October 25, 2011. The proposed permit, dated October 26, 2011 has been submitted to Region 10 of the Environmental Protection Agency for the mandatory 45 day review period. Unless the Environmental Protection Agency objects, the final Air Operating Permit will be issued after the 45 day review period.

Copies of the Proposed Air Operating Permit and Title V Basis Statement, as well as SWCAA's response to TransAlta's comments, accompany this letter. In addition, copies of these documents will be available on SWCAA's website at www.swcleanair.org. If you have any questions or comments, please contact me at (360) 574-3058 ext. 131.

Sincerely,

Clint Lamoreaux
Air Quality Engineer

Attn: Brian Brazil

Tim Weber

enclosures

TransAlta Centralia Generation, LLC

Centralia Plant

Air Operating Permit

SW98-8-R3-A

PROPOSED: October 26, 2011

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

Exhibit No. ___(RG-11HC) Page 125 of 206

PLANT SITE: TransAlta

Centralia Plant

AIR OPERATING PERMIT #: SW98-8-R3-A

ISSUED TO: TransAlta Centralia Generation, LLC

913 Big Hanaford Road

Centra	lia, WA 98531		ig Hanaford Road alia, WA 98531
NATURE OF BUSIN	ESS:	Electric Energy Gene	ration
SIC CODE:		4911	
AIRS NUMBER:		53-041-10010	
ACID RAIN PROGRA PLANT NAM ORIS CODE: UNIT DESIGN		Centralia Plant 03845 BW21, BW22, 30, 40), 50, and 60
EFFECTIVE DATE:		XX To be Determine	d
EXPIRATION DATE	<i>:</i>	September 16, 2014	
RENEWAL APPLICA	ATION DUE:	September 16, 2013	
PERMIT ENGINEER REVIEWED BY:	: Clinton H. Lamoreaux, P.E. A	Air Quality Engineer	Date
	Paul T. Mairose, P.E. Chief E	Engineer	Date
APPROVED BY:	Robert D. Elliott, Executive I		Date
	Tioon D. Linou, Lacoutive I	21100101	240

TABLE OF CONTENTS

I.	Abbreviations	1
II.	Regulatory Basis	2
III.	Emission Unit Identification	5
IV.	Permit Provisions	7
V.	General Terms and Conditions	12
VI.	Operating Terms and Conditions	16
VII.	Monitoring Terms and Conditions	31
VIII.	Recordkeeping Terms and Conditions	50
IX.	Reporting Terms and Conditions	53
X.	Non-applicable Requirements	60
	Appendix A – Visual Emissions Evaluation Method (SWCAA Method 9)	
	Appendix B – Acid Rain Permit	
	Appendix C – Small Engine Maintenance Plan	

Air Operating Permit

I. ABBREVIATIONS

List of Common Abbreviations

Administrator EPA Region X Administrator

AOP Air Operating Permit

BAAQMD Bay Area Air Quality Management District (California)

BACT Best Available Control Technology

BHP Big Hanaford Project

CAM Compliance Assurance Monitoring (40 CFR 64)

CEM Continuous emission monitor

CEMS Continuous emission monitoring system

CFR Code of Federal Regulations

CO Carbon monoxide

DAHS Data Acquisition and Handling System EPA U.S. Environmental Protection Agency

EU Emissions unit

EU-# Refers to a specific emissions unit numbered "#"

°F Fahrenheit temperature, degrees

FCAA Federal Clean Air Act

G# Refers to a specific general term and condition numbered "#"

gr/dscf Grains per dry standard cubic foot

HAP Hazardous air pollutant IEU Insignificant emissions unit

IEU# Insignificant emissions unit numbered "#"

K# Refers to a specific recordkeeping term or condition (requirement) numbered "#"

lb/hr Pounds per hour

lb/MMBtu Pounds per million British thermal units

M# Refers to a specific monitoring term or condition (requirement) numbered "#"

MW Megawatts

 $\begin{array}{ll} MW_{ge} & Megawatts, gross electric \\ NO_X & Oxides of nitrogen \\ NSR & New source review \end{array}$

O₂ 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% O₂ Corrected to X% oxygen content

PTE Potential to emit

R# Refers to a specific reporting requirement numbered "#"

RACT Reasonably Available Control Technology

RCW Revised Code of Washington

Region 10 Region 10 of the U.S. Environmental Protection Agency

Req-# Applicable operating term or condition (requirement) numbered "#"

SO₂ 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 (AOP) is authorized under the procedures established in WAC 173-401 and Title V of the 1990 Federal Clean Air Act Amendments. The terms and conditions of this permit describe the emissions limitations, operating requirements, monitoring requirements, recordkeeping requirements, and reporting requirements for the permitted source.

Permit terms and conditions are divided into the following categories: General Terms and Conditions, Operating Terms and Conditions, Monitoring Terms and Conditions, Recordkeeping Terms and Conditions, and Reporting Terms and Conditions. As used in this permit, there is no distinction between "terms" and "conditions." As such, "condition" shall mean the same as "terms and conditions" as referred to in Title V of the 1990 Federal Clean Air Act Amendments. The conditions required under this permit are determined necessary to assure and provide for certification of compliance with applicable local, state, and federal air pollution regulations and standards.

A comprehensive list of the local, state, and federal air pollution requirements applicable to emissions units and other air pollution sources located at the Permittee's facility is provided in Sections V through IX. These requirements were determined applicable based on the equipment specifications and regulatory history of each emissions unit as described in the Basis Statement for this permit. These requirements are drawn from numerous regulations. The date of each requirement generally coincides with the most recent rulemaking activity. In some cases, there are multiple effective dates that reflect differences in federal versus state/local applicability. This situation is most notable with requirements that are in the Washington SIP. To clarify which version of a requirement is applicable to the facility, the effective dates of applicable requirements are presented in the following table.

Federal Regulations	SIP Federal Effective Date	Federal Effective Date
40 CFR 51	_	7/1/2010
40 CFR 52	_	7/1/2010
40 CFR 60	_	7/1/2010
40 CFR 61	_	7/1/2010
40 CFR 63	_	7/1/2010
40 CFR 63 Subpart ZZZZ	_	8/20/2010
40 CFR 64	_	7/1/2010
40 CFR 68	_	7/1/2010
40 CFR 72	_	7/1/2010
40 CFR 75		7/1/2010
40 CFR 82, Subparts B and F		7/1/2010
40 CFR 98		7/1/2010

State Regulations	SIP Federal Effective Date	State Effective Date
WAC 173-400-040(1)(a & b)	9/20/93	Renumbered -040(2)(a & b)
WAC 173-400-040(2)	_	4/1/2011
WAC 173-400-040(3)(a)	9/20/93	Renumbered -040(4)(a)
WAC 173-400-040(4)		4/1/2011
WAC 173-400-040(5) - Odors		4/1/2011

		Detrimental Emissions
WAC 173-400-040(5) –		renumbered to WAC 173-
Detrimental Emissions	9/20/93	400-040(6)
WAC 173-400-040(6) -	2.20.20	
Detrimental Emissions		4/1/2011
WAC 173-400-040(6) – Sulfur	9/20/93 (excludes 2 nd	Sulfur Dioxide renumbered
Dioxide	paragraph)	to WAC 173-400-040(7)
WAC 173-400-040(7) – Sulfur		
Dioxide	_	4/1/2011
WAC 173-400-040(7) –		Sulfur Dioxide renumbered
Concealment and Masking	9/20/93	to WAC 173-400-040(8)
WAC 173-400-040(8) –		
Concealment and Masking		4/1/2011
WAC 173-400-040(8)(a) –		Fugitive Dust renumbered
Fugitive Dust	9/20/93	to WAC 173-400-040(9)
WAC 173-400-040(9)(a) –		4/1/2011
Fugitive Dust		4/1/2011
	3/22/91 (excludes the	
	provision in (3) allowing	
	Ecology or SWCAA to utilize alternative O ₂	
	correction when more	
WAC 173-400-050(1 & 3) -	representative of normal	
3/22/91 SIP, 6/8/07 State Only	conditions)	4/1/2011
WAC 173-400-050(2)	3/22/91	4/1/2011
WAC 173-400-060	3/22/91	4/1/2011
WAC 173-400-075		4/1/2011
WAC 173-400-099	_	4/1/2011
WAC 173-400-105(1)	9/20/93	4/1/2011
WAC 173-400-105(3 & 4)	9/20/93	4/1/2011
WAC 173-400-105(5)(a)(i) &		
(5)(e)	9/20/93	4/1/2011
WAC 173-400-105(7 & 9)	<u>—</u>	4/1/2011
WAC 173-400-105(8)		4/1/2011
		4/1/2011 – Note will be
		superseded by WAC 173-
	0 (0 0 1 - 0	400-108/109 upon EPA
WAC 173-400-107	9/20/93	approval
WAC 173-400-110	9/20/93	4/1/2011
WAC 173-400-112	9/20/93	4/1/2011
WAC 173-400-114	_	4/1/2011
WAC 173-400-115		4/1/2011
WAC 173-400-120		4/1/2011
WAC 173-400-700		4/1/2011
WAC 173-406-106(3)(a)(i)		12/24/1994
WAC 173-406-106(4)		12/24/1994
WAC 173-401		10/17/2002

WAC 173-425	10/18/1990	4/13/2000
WAC 173-441	_	1/1/2011
WAC 173-460	_	2/14/1994
WAC 173-490	3/22/1991	2/2/1998

Local Regulations	SIP Federal Effective Date	Local Effective Date
SWCAA 400-040(1)(a)&(b)	9/21/1995	11/15/2009
SWCAA 400-040(2)	_	11/15/2009
SWCAA 400-040(3)	9/21/1995	11/15/2009
SWCAA 400-040(4)	_	11/15/2009
SWCAA 400-040(5)	9/21/1995	11/15/2009
. ,	9/21/1995(excludes section	
SWCAA 400-040(6)	040(6)(a)	11/15/2009
SWCAA 400-040(7)	9/21/1995	11/15/2009
SWCAA 400-040(8)(a)	9/21/1995	11/15/2009
	9/21/1995 (excludes the	
	provision in (3) allowing	
	Ecology or SWCAA to	
	utilize alternative O ₂	
	correction when more	
	representative of normal	
SWCAA 400-050(1)&(3)	conditions)	11/15/2009
SWCAA 400-050(2)	9/21/1995	11/15/2009
SWCAA 400-052	9/21/1995	
SWCAA 400-060	9/21/1995	11/15/2009
SWCAA 400-070	9/21/1995	11/15/2009
Note that the SIP approved version		
numbered (5) , (7) , and $(9) - (15)$. T		
renumbered SWCAA 400-070(8) in	the current version of SWCAA 400	
SWCAA 400-075		11/15/2009
SWCAA 400-081	9/21/1995	11/15/2009
SWCAA 400-091	9/21/1995	11/15/2009
SWCAA 400-100	9/21/1995	11/15/2009
SWCAA 400-101	11/21/1996	11/15/2009
SWCAA 400-105	9/21/1995	11/15/2009
SWCAA 400-105(5)(a)(i) &		
(5)(e)	9/21/1995	<u> </u>
SWCAA 400-105(4)(a)(i) &		
(4)(e)	_	11/15/2009
SWCAA 400-105(6 & 7)	_	11/15/2009
SWCAA 400-106(1)(a)	_	11/15/2009
SWCAA 400-107	9/21/1995	11/15/2009
SWCAA 400-109	11/21/1996	11/15/2009
SWCAA 400-110 (note that		
section (5) in the SIP is		
numbered Section (6) in the		
local-only version)	11/21/1996	11/15/2009

Local Regulations	SIP Federal Effective Date	Local Effective Date
SWCAA 400-111	11/21/1996	11/15/2009
SWCAA 400-112	11/21/1996	11/15/2009
SWCAA 400-114	11/21/1996	11/15/2009
SWCAA 400-115	_	11/15/2009
SWCAA 400-120		11/15/2009
SWCAA 400-130	_	11/15/2009
SWCAA 400-141	_	11/15/2009
SWCAA 400-151	9/21/1995	11/15/2009
SWCAA 400-171	9/21/1995	11/15/2009
SWCAA 400-270	9/21/1995	11/15/2009
SWCAA 425	_	8/1/2002
SWCAA 476	_	3/18/2001

Regulatory Orders / Permits	SIP Federal Effective Date	Local Effective Date
SWCAA 97-2057R1	_	2-26-1998
SWCAA 01-2403	_	2-27-2002
PSD-01-01 Amendment 2		6-11-2004
SWCAA 05-2636	_	11-23-2005
SWCAA 01-2350R4	_	1-18-2008
SWCAA 08-2779	_	3-12-2008
BART Order No. 6426	_	6-18-2010
SWCAA 11-2972	_	4-14-2011
SWCAA 11-2984		6-14-2011

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

III. EMISSIONS UNIT IDENTIFICATION

EU#	Generating Equipment	Emission Control
EU-1	Unit #1 Boiler (BW21) –	CO: Combustion controls
	688 MW (net), coal fired	NO _X : Combustion controls
		VOC: Combustion controls
		PM: Dual ESPs, wet scrubber
		SO ₂ : Wet scrubber
EU-2	Unit #2 Boiler (BW22) –	CO: Combustion controls
	688 MW (net), coal fired	NO _X : Combustion controls
		VOC: Combustion controls
		PM: Dual ESPs, wet scrubber
		SO ₂ : Wet scrubber
EU-3	Auxiliary Boiler – 170 MMBtu/hr, oil-	Fuel consumption limit
	fired	

EU#	Generating Equipment	Emission Control
EU-4	Material Handling (Coal Handling, Ash	<u>Coal Handling</u> – minimal emissions, no
	Handling, FGD Bleed Treatment Lime	controls necessary except use of wet
	Storage Silo, Limestone Ball Mill)	suppression at Coal Unloading Facilities
		Ash Handling – baghouse, wet suppression,
		and enclosure as appropriate
		FGD Bleed Treatment Lime Storage Silo –
		Baghouse
		<u>Limestone Ball Mill</u> – Wet process, full
		enclosure
EU-5	Turbine Lube Oil Mist Vent #1	Turbine Lube Oil Mist Eliminator #1
EU-6	Turbine Lube Oil Mist Vent #2	Turbine Lube Oil Mist Eliminator #2
EU-7	Combustion Turbine 30 – GE LM6000	CO: Oxidation catalyst
	with 105 MMBtu/hr of duct firing	NO _X : Selective catalytic reduction system
	capability	VOC: Oxidation catalyst
		PM: No controls
		SO ₂ : No controls
EU-8	Combustion Turbine 40 – GE LM6000	CO: Oxidation catalyst
	with 105 MMBtu/hr of duct firing	NO _X : Selective catalytic reduction system
	capability	VOC: Oxidation catalyst
		PM: No controls
		SO ₂ : No controls
EU-9	Combustion Turbine 50 – GE LM6000	CO: Oxidation catalyst
	with 105 MMBtu/hr of duct firing	NO _X : Selective catalytic reduction system
	capability	VOC: Oxidation catalyst
		PM: No controls
		SO ₂ : No controls
EU-10	Combustion Turbine 60 – GE LM6000	CO: Oxidation catalyst
	with 105 MMBtu/hr of duct firing	NO _X : Selective catalytic reduction system
	capability	VOC: Oxidation catalyst
		PM: No controls
		SO ₂ : No controls
EU-11	Black Stop Diesel Generator Engine –	Operating hours limit
	1,445 hp diesel engine	
EU-12	BHP Auxiliary Boiler –	Low-NO _X burners, no add-on controls
	20.9 MMBtu natural gas fired package	
	boiler	
EU-13	Journal Shop Welding	Journal Shop Baghouse
EU-14	Emergency Diesel Generator #1	None
EU-15	Emergency Diesel Generator #2	None
EU-16	Emergency Diesel Fire Pump	None
EU-17	Barge 5429 Engine (250 hp diesel	None
	engine, pre 2002)	
EU-18	Coal Unloading Facility Emergency	Ultra low sulfur fuel,
	Diesel Sump Pump Engine	EPA Tier 2 design, operating hours limit
EU-19	SEA System #1	Cartridge-style Fabric Filter
EU-20	SEA System #2	Cartridge-style Fabric Filter
EU-21	Sorbent Silo #1	Cartridge-style Fabric Filter

EU#	Generating Equipment	Emission Control
EU-22	Sorbent Silo #2	Cartridge-style Fabric Filter
EU-23	Fly Ash Bin 11	Baghouse
EU-24	Fly Ash Bin 12	Baghouse
EU-25	Fly Ash Bin 14	Baghouse
EU-26	Fly Ash Bin 14 Air Slide to Bin 11 Air	Cartridge-style Fabric Filter
	Slide	
EU-27	Fly Ash Bin 11 to Weigh Hopper Air	Cartridge-style Fabric Filter
	Slide	
EU-28	Fly Ash Bin 14 to 6050 Air Slide	Cartridge-style Fabric Filter

Collectively EU-1, EU-2, EU-3, EU-4, EU-5, EU-6, EU-13, EU-14, EU-15, EU-16, EU-17, EU-18, EU-19, EU-20, EU-21, EU-22, EU-23, EU-24, EU-25, EU-26, EU-27, & EU-28 comprise the "Coal Plant." EU-7, EU-8, EU-9, EU-10, EU-11, & EU-12 comprise the "Combustion Turbine Facility."

IV. PERMIT PROVISIONS

P1. Credible Evidence

40 CFR 51.212 40 CFR 52.12 40 CFR 52.33 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 shall preclude 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

The permittee is responsible for clearly identifying information that is considered proprietary and confidential prior to submittal to SWCAA. Requests for proprietary and confidential information shall be released only after legal opinion by SWCAA's legal counsel, and notice to the permittee of the intent to release or deny the release of information. [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 Administrator. [WAC 173-401-500(5)]

Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permittee or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205. [WAC 173-620(2)(e)]

P3. Permit Duration

WAC 173-401-610

This permit shall be valid for a fixed term of 5 years.

P4. Standard Provisions

WAC 173-401-620(2)

- (a) *Duty to comply*. The permittee must comply with all conditions of this Chapter 401 permit. Any permit noncompliance constitutes a violation of Revised Code of Washington (RCW) Chapter 70.94 and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- (b) *Need to halt or reduce activity not a defense*. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) *Permit actions*. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- (d) *Property rights*. This permit does not convey any property rights of any sort, or any exclusive privilege.
- (e) *Duty to provide information*. The permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the permitting authority copies of records required to be kept by the permittee or, for information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70.94.205.
- (f) *Permit fees*. The permittee shall pay fees in accordance with RCW 70.94.162 as a condition of this permit in accordance with the permitting authority's fee schedule. Failure to pay fees in a timely fashion shall subject the permittee to civil and criminal penalties as prescribed in RCW 70.94.430 and 70.94.431.
- (g) *Emissions trading*. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
- (h) *Severability*. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.
- (i) *Permit appeals*. This permit or any conditions in it may be appealed only by filing an appeal with the Pollution Control Hearings Board and serving it on the permitting authority within thirty days of receipt of the permit pursuant to RCW 43.21B.310. This provision for

Exhibit No. (RG-11HC)
Page 135 of 206
Air Operating Permit

TransAlta - Centralia Plant

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

(j) *Permit continuation*. This permit and all terms and conditions contained herein shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted.

P5. 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) shall not exceed the emissions thresholds specified in WAC 173-401-530(4) until this permit is modified pursuant to WAC 173-401-725.

P6. Federally Enforceable Requirements

WAC 173-401-625

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

P7. Permit Shield WAC 173-401-640

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements that are specifically identified in this permit as of the date of permit issuance. Nothing in this permit shall alter or affect the following:

- (a) The provisions of section 303 of the FCAA (emergency orders), including the authority of the Administrator under that section;
- (b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- (c) The applicable requirements of the acid rain program, consistent with section 408(a) of the FCAA;
- (d) The ability of EPA to obtain information from a source pursuant to section 114 of the FCAA; and
- (e) The ability of the permitting authority to establish or revise requirements for the use of reasonably available control technology (RACT) as defined in RCW 70.94.

P8. Emergency Provision

WAC 173-401-645

An "emergency" as defined in WAC 173-401-645(1) shall constitute an affirmative defense to an action brought for noncompliance with technology based emission limitations. The affirmative defense of emergency shall 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 the permitting authority 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.

P9. Permit Renewal, Expiration and Revocation

WAC 173-401-710

The permittee shall submit a complete permit renewal application to SWCAA no later than the date established in the permit. 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 shall remain in effect after the permit expires if a timely and complete permit application has been submitted. Operation under the terms and conditions of the expired permit will be allowed until SWCAA takes final action on the renewal application.

The permitting authority may revoke a permit only upon the request of the permittee or for cause. The permitting authority shall 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 shall include an explanation of the basis for the proposed action and afford the permittee/applicant an opportunity to meet with the permitting authority prior to the authority's final decision. A revocation issued under this section may be issued conditionally with a future effective date and may specify that the revocation will not take effect if the permittee satisfies the specified conditions before the effective date.

P10. Reopenings for Cause

WAC 173-401-730

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

(a) Additional applicable requirements become applicable to a major air operating permit source with a remaining permit term of 3 or more years. Such a reopening shall be

completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j);

- (b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit;
- (c) The permitting authority or Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
- (d) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

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

P11. Excess Emissions

WAC 173-400-107 SWCAA 400-107

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

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

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

(d) The owner or operator(s) actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs, or other relevant evidence.

V. GENERAL TERMS AND CONDITIONS

G1. Asbestos

40 CFR 61 Subpart M WAC 173-400-075 SWCAA 400-075 SWCAA 476

The permittee shall 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 shall 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, Subparts B and F

The permittee shall 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, shall promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.

G5. Certification WAC 173-401-520

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

Exhibit No. (RG-11HC)
Page 139 of 206
Air Operating Permit

G6. Inspection and Entry

WAC 173-401-630(2) WAC 173-400-105(3 & 4) SWCAA 400-105(3) SWCAA 400-106(1)(a)

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

- (a) Enter upon the permittee's premises where an air operating permit source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) As authorized by SWCAA 400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

G7. Schedule of Compliance

WAC 173-401-630(3)

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

G8. Permit Renewal, Expiration and Revocation

WAC 173-401-710

The permittee shall submit a complete permit renewal application to SWCAA no later than the date established in the permit. 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 shall remain in effect after the permit expires if a timely and complete permit application has been submitted. Operation under the terms and conditions of the expired permit will be allowed until SWCAA takes final action on the renewal application.

This permit expires on September 16, 2014. A renewal application is due on September 16, 2013 and a complete renewal application is due no later than March 16, 2014.

Exhibit No. (RG-11HC)
Page 140 of 206
Air Operating Permit

TransAlta - Centralia Plant

The permitting authority may revoke a permit only upon the request of the permittee or for cause. The permitting authority shall 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 shall include an explanation of the basis for the proposed action and afford the permittee/applicant an opportunity to meet with the permitting authority prior to the authority's final decision. A revocation issued under this section may be issued conditionally with a future effective date and may specify that the revocation will not take effect if the permittee satisfies the specified conditions before the effective date.

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.

G10. Portable Sources

WAC 173-400-110(5) SWCAA 400-110(5) - [SIP Only] SWCAA 400-110(6) - [Local Only]

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

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

Exhibit No. (RG-11HC)
Page 141 of 206
Air Operating Permit

TransAlta - Centralia Plant

G11. Misrepresentation and Tampering

WAC 173-400-105(7 & 9) SWCAA 400-105(6 & 7)

- (a) The permittee shall not make any false material statement, representation or certification in any form, notice, or report.
- (b) The permittee shall not render inaccurate any monitoring device or method required under Chapter 70.94 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

G12. New Source Review

WAC 173-400-110 WAC 173-400-700 WAC 173-460 SWCAA 400-109 SWCAA 400-110 SWCAA 400-141

The permittee shall not construct or modify a source which is required to be reviewed under SWCAA 400, WAC 173-400, or WAC 173-460 without first receiving an approval or permit under such provisions. Portable sources may be exempt from this requirement if they fulfill the criteria described in **G10 - Portable Sources**.

G13. Replacement or Substantial Alteration of Emission Control Technology at an Existing Stationary Source

WAC 173-400-114 SWCAA 400-114

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

G14. Outdoor Burning

WAC 173-425 SWCAA 425

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

G15. Reporting of Emissions of Greenhouse Gases

WAC 173-441

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 shall prepare and submit greenhouse gas reports to Ecology in accordance with the provisions of WAC 173-441-050 for each affected facility.

VI. OPERATING TERMS AND CONDITIONS

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

Req. #	General Requirements	Emission Point	Monitoring
Req-1	Permittee shall not cause or permit any emission that exceeds 20% opacity for more than three minutes in any one hour.	Plantwide	M1
	Reference Method: SWCAA Method 9		
	[WAC 173-400-040(1)(a)&(b) - SIP only WAC 173-400-040(2)(a)&(b) (renumbered from -040(1) - State Only SWCAA 400-040(1)(a)&(b)]		
Req-2	Permittee shall 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.	Plantwide	M2, M4
	[WAC 173-400-040(3) - State Only SWCAA 400-040(2)]		
Req-3	Permittee shall take reasonable precautions to prevent the release of fugitive emissions from any emissions unit which is a source of fugitive emissions.	Plantwide	M3, M5
	[WAC 173-400-040(3)(a) - SIP Only WAC 173-400-040(4)(a) - State Only SWCAA 400-040(3)]		
Req-4	Permittee shall use recognized good practice and procedures to reduce odors to a reasonable minimum.	Plantwide	M4
	[WAC 173-400-040(5) State Only SWCAA 400-040(4) Local Only SWCAA 01-2350R4, Condition 7]		
Req-5	The permittee shall 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.	Plantwide	M4
	[WAC 173-400-040(5) - SIP Only WAC 173-400-040(6) – State Only SWCAA 400-040(5)]		

Req.#	General Requirements	Emission Point	Monitoring
Req-6	Permittee shall not cause or permit any emissions 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.	EU-1, EU-2, EU-3, EU-7,	M6, M7, M8
	Reference Method: 40 CFR 60 Appendix A Method 6C	EU-8, EU-9,	
	[WAC 173-400-040(6) – SIP Only WAC 173-400-040(7) – State Only SWCAA 400-040(6) SWCAA 97-2057R1, Sections 22 & 28(a)]	EU-10, EU-11, EU-12, EU-14,	
		EU-15, EU-16, EU-17 & EU-18	
Req-7	Permittee shall not cause or permit the installation or use of any means which conceals or masks an emission which would otherwise violate any provisions of SWCAA 400-040.	Plantwide	N/A
	[WAC 173-400-040(7) – SIP Only WAC 173-400-040(8) – State Only SWCAA 400-040(7)]		
Req-8	Permittee shall take reasonable precautions to prevent emissions of fugitive dust and operate the source to minimize emissions.	Plantwide	M3, M4
	[WAC 173-400-040(8)(a) – SIP Only WAC 173-400-040(9)(a) – State Only SWCAA 400-040(8)(a)]		
Req-9	Permittee shall not cause or permit emissions of particulate matter from a combustion or incineration emissions unit in excess of 0.1 gr/dscf of exhaust gas corrected to 7% oxygen.	EU-1, EU-2, EU-3, EU-7,	M2, M5, M7, M23
	Reference Method: 40 CFR 60 Appendix A Method 5	EU-8, EU-9,	
	[WAC 173-400-050(1 & 3) SWCAA 400-050(1 & 3)]	EU-10, EU-11, EU-12, EU-14,	
		EU-15, EU-16, EU-17 & EU-18	
Req-10	Permittee shall conduct emissions tests at least once every two calendar years to quantify emissions of NO _X , CO, PM, SO ₂ , or VOC where emissions of these pollutants from the combustion units are 100 tons per year or more.	EU-1 & EU-2	M7
	[SWCAA 400-052]		

Req. #	General Requirements	Emission Point	Monitoring
Req-11	Permittee shall 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.	Plantwide	M2, M5
	Reference Method: 40 CFR 60 Appendix A Method 5		
	[WAC 173-400-060		
	SWCAA 400-060]		
Req-12	Permittee shall conduct all abrasive blasting inside a structure designed to capture blast grit and overspray except for items too large to be reasonably handled indoors.	Plantwide	N/A
	[SWCAA 400-070(7)		
	SWCAA 400-070(8) (renumbered)]		

Req. #	Coal Plant Requirements	Emission Point	Monitoring
Req-13	Permittee shall install, calibrate, maintain, and operate continuous monitoring equipment for opacity for the bypass stacks of Unit #1 and Unit #2 in accordance with the requirements found in 40 CFR 51, App. P §3, 4, & 5 and 40 CFR 60 App. B – F as appropriate.	EU-1 & EU-2	M8
	[WAC 173-400-105(5)(a)(i) & (5)(e) SWCAA 400-105(5)(a)(i) & (5)(e) SWCAA 400-105(4)(a)(i) & (4)(e) – renumbered]		
Req-14	Permittee shall not cause or allow emissions of filterable particulate matter from the stack of Units #1 or #2 in excess of 0.010 gr/dscf of exhaust gas corrected to $7\% \ O_2$.	EU-1 & EU-2	M7, M9, M23
	Reference Method: 40 CFR 60 Appendix A Method 5 [SWCAA 97-2057R1 Section 34]		
Req-15	Permittee shall 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 shall not allow visible emissions to exceed 20% opacity for more than three minutes, in any one hour.	EU-1 & EU-2	M1, M8, M9
	Reference Method: SWCAA Method 9 [SWCAA 97-2057R1 Section 36]		
Req-16	Permittee shall not cause or allow total SO ₂ emissions from the stacks of Units #1 and #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.	EU-1, EU- 2, & EU-3	M8, M10, M12
	Reference Method: 40 CFR 75, Appendix A; 40 CFR 60 Appendix B Performance Specification 2 & 3; 40 CFR 60 Appendix F		
	[SWCAA 97-2057R1 Section 18]		

Req.#	Coal Plant Requirements	Emission Point	Monitoring
Req-17	Permittee shall not cause or allow any unit to emit SO_2 in excess of 250 ppm on a dry basis, corrected to 7% O_2 , 1-hour average except during startups, shutdowns and forced or planned outages of the SO_2 control system.	EU-1 & EU-2	M7, M8, M9
	Reference Method: 40 CFR 60 Appendix A Method 6C		
	[SWCAA 97-2057R1 Sections 21(a) and 28(a)]		
Req-18	During startups, shutdowns, and forced or planned outages of the SO ₂ control system, permittee shall not allow 1-hour average SO ₂ emissions from the affected unit(s) in excess of 1,000 ppm.	EU-1 & EU-2	M8, M9
	Reference Method: 40 CFR 60 Appendix A Method 6C		
	[SWCAA 97-2057R1 Section 21(b) and 21(c)]		
Req-19	The permittee shall schedule SO ₂ emission control system outages to the maximum extent possible during daily or weekly load reduction periods. No planned SO ₂ system outages shall occur from June 15 through September 15 of any year except when the applicable unit burns no fuel.	EU-1 & EU-2	M9
	[SWCAA 97-2057R1 Section 23]		
Req-20	Permittee shall: (1) hold SO ₂ Acid Rain allowances, as of the allowance transfer deadline, in the source's account (after deductions under §73.34(c)) not less than the total annual emissions of SO ₂ for the previous calendar year from the affected units at the source; and (2) comply with the applicable Acid Rain emissions limitation for SO ₂ . (See Appendix B Acid Rain Permit).	EU-1 & EU-2	M8
	Reference Method: 40 CFR 75		
	[40 CFR 72.9(c)(1) WAC 173-406-106(3)(a)(i)		
Req-21	The permittee shall forfeit ownership of SO ₂ 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.	EU-1 & EU-2	M8, M10
	Reference Method: 40 CFR 75		
	[SWCAA 97-2057R1 Section 28(f)]		
Req-22	The original stack for each unit may remain for bypass provided certified CEMs are maintained to monitor SO ₂ emissions from the bypass stack. If SO ₂ emissions from the existing stacks are not monitored by certified functioning CEMs, the permittee shall only use the existing stacks during extreme emergency conditions.	EU-1 & EU-2	M11
	[SWCAA 97-2057R1 Section 29]		

Req. #	Coal Plant Requirements	Emission Point	Monitoring
Req-23a	Emissions of nitrogen oxides from the two coal-fired boilers shall not exceed 0.24 lb/MMBtu, 30-day rolling average, both units averaged together for days (i.e. midnight to midnight) when either unit's generating load is 360MW gross or greater. In the event that during a given 30-day period, only one unit operated, the average of both units will be the 30 day average emission rate for the operating boiler.	EU-1 & EU-2	M8, M27
	For all operating hours, permittee shall not allow NO_X emissions in excess of 0.35 lb/million Btu, annual average, both units averaged together.		
	Reference Method: 40 CFR 75		
	[BART Order No. 6426 Section 1 SWCAA 97-2057R1 Section 30]		
Req-23b	Coal used shall be sub-bituminous coal from the Powder River Basin or other coal that will achieve similar emission rates.	EU-1 & EU-2	M27
	[BART Order No. 6426 Section 1.3]		
Req-24	NO_X emissions shall not exceed 0.40 lb/million Btu annual average for each unit (see Appendix B Acid Rain Permit).	EU-1 & EU-2	M8
	Reference Method: 40 CFR 75		
	[40 CFR 76.7(a)(1) WAC 173-406-106(4)]		
Req-25	Permittee shall not cause or allow carbon monoxide emissions in excess of 200 ppm, annual (calendar year) average, both units combined.	EU-1 & EU-2	M7
	Reference Method: Averaging of plant CO CEMS data as provided in M8		
	[SWCAA 97-2057R1 Section 39]		
Req-26	Permittee shall not cause or allow total annual fuel oil combusted in the auxiliary boiler in excess of 600,000 gallons per year.	EU-3	M12
	[SWCAA 97-2057R1 Section 45]		
Req-27	Permittee shall 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 SO ₂ , NO _x , and CO ₂ emissions from the scrubber stacks and all SO ₂ , NO _x , and CO ₂ emissions and opacity from the bypass stacks as required by 40 CFR 75.	EU-1 & EU-2	M8
	[40 CFR 75.10(a)]		

Req.#	Coal Plant Requirements	Emission Point	Monitoring
Req-28	At all times, including periods of startup, shutdown, and malfunction, the plant shall, 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.	EU-1 & EU-2	M7, M8
Req-29	[SWCAA 97-2057R1 Section 48] Opacity of emissions from the loading of fly ash trucks from the 6050 unloaders shall 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.	EU-4	M3
Req-30	[SWCAA 01-2403 Section 11(a)] Opacity of emissions from the Unit #1 and Unit #2 turbine lube oil mist eliminator stacks shall 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. [SWCAA 01-2403 Section 11(b)]	EU-5 & EU-6	M1
Req-32	Reserved Emissions of PM ₁₀ from the Coal Unloading Facility shall not exceed 2,411 pounds per year. Annual emissions shall be calculated using the methodology identified in Section V of the Title V Basis Statement. [SWCAA 11-2972 Condition 2]	EU-4	M2, M24
	Reserved		
Req-34	Opacity from all emission points within the Coal Unloading Facility shall 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. [SWCAA 11-2972 Condition 3]	EU-4	M2
	Reserved		
Req-36	Coal drop (transfer) points associated with the Coal Unloading Facility shall utilize a high pressure waster spray system to control fugitive dust during coal unloading and transfer operations. Water pressure at the spray/fog nozzles shall be maintained at 80 psig or greater during coal unloading and coal transfer operations. A functional pressure gauge shall be maintained onsite and a connection point provided for the gage for the purpose of demonstrating compliance with this pressure limit	EU-4	M2
	[SWCAA 11-2972 Condition 8]		
Req-37	Emissions of PM ₁₀ from the FGD Bleed Treatment Lime Storage Silo shall not exceed 0.005 grains per dry standard cubic foot (1-hour average).	EU-4	M2, M25
	Reference Method: 40 CFR 60 Appendix A Method 5 or 201A		
	[SWCAA 05-2636 Condition 1]		

Req.#	Coal Plant Requirements	Emission Point	Monitoring
Req-38	Opacity of emissions from the FGD Bleed Treatment Lime Storage Silo shall 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.	EU-4	M2
	[SWCAA 05-2636 Condition 2]		
Req-39	Opacity of emissions from the Journal Shop Baghouse shall 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.	EU-13	M2, M5
	[SWCAA 08-2779 Condition 1]		
Req-40a	The Journal Shop baghouse shall be operated to collect welding fume whenever welding activities are taking place in the Journal Shop. The Journal Shop baghouse shall be maintained in good repair and shall 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).	EU-13	M2, M5
	[SWCAA 08-2779 Condition 2]		
Req-40b	Effective May 3, 2013, the Permittee shall conduct the following maintenance for Emergency Diesel Generator 1, Emergency Diesel Generator 2 and the Emergency Diesel Fire Pump.	EU-14, EU-15, EU-16	M28
	 a. Change oil and filter every 500 hours of operation or annually, whichever comes first except as provided in 40 CFR 63.6625(i); b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. 		
	[40 CFR 63.6602 and Table 2c WAC 173-400-075]		
Req-40c	Effective May 3, 2013, the Permittee shall minimize the time Emergency Diesel Generator 1, Emergency Diesel Generator 2 and the Emergency Diesel Fire Pump spend at idle and minimize each engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.	EU-14, EU-15, EU-16	N/A
	[40 CFR 63.6602, 63.6625(h) and Table 2c WAC 173-400-075]		
Req-40d	Effective May 3, 2013, the Permittee shall operate and maintain Emergency Diesel Generator 1, Emergency Diesel Generator 2 and the Emergency Diesel Fire Pump according with the Small Engine Maintenance Plan detailed in Appendix C.	EU-14, EU-15, EU-16	M28
	[40 CFR 63.6625(e), 40 CFR 63.6640(a) and Table 6 WAC 173-400-075]		
Req-40e	Effective May 3, 2013, the Permittee shall install a non-resettable hour meter on Emergency Diesel Generator 1, Emergency Diesel Generator 2 and the Emergency Diesel Fire Pump if one is not already installed.	EU-14, EU-15, EU-16	M28
	[40 CFR 63.6625(f) WAC 173-400-075]		

Req.#	Coal Plant Requirements	Emission Point	Monitoring
Req-40f	At all times Emergency Diesel Generator 1, Emergency Diesel Generator 2, the Emergency Diesel Fire Pump, and the Barge 5429 Engine must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b), WAC 173-400-075]	EU-14, EU-15, EU-16, EU-17	M28
Req-40g	Effective May 3, 2013, Emergency Diesel Generator 1, Emergency Generator 2 and the Emergency Diesel Fire Pump 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. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [40 CFR 63.6640(f)(1)(ii)	EU-14, EU-15, EU-16	N/A
Req-40h	Effective May 3, 2013, you may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.	EU-14, EU-15, EU-16	M28
Req-40i	WAC 173-400-075] Effective May 3, 2013, the permittee shall operate and maintain the Barge 5429 Engine in accordance with Appendix C. When problems that could adversely affect emissions are encountered, they shall be corrected as soon as practical in accordance with good air pollution practices for minimizing emissions. [40 CFR 63.6625(e) WAC 173-400-075]	EU-17	M29

Req.#	Coal Plant Requirements	Emission Point	Monitoring
Req-40j	Effective May 3, 2013, the permittee shall minimize the time the Barge 5429 Engine spends at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.	EU-17	N/A
	[40 CFR 63.6602, 63.6625(h) WAC 173-400-075]		
Req-40k	Effective May 3, 2013, carbon monoxide emissions from the Barge 5429 Engine shall not exceed 230 ppmvd @ 15% O ₂ .	EU-17	M30
	Reference Methods: As specified in Table 4 of 40 CFR 63 Subpart ZZZZ		
	Compliance with the carbon monoxide emission limit is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 of 40 CFR 63 Subpart ZZZZ.		
	[40 CFR 63.6602 & Table 2c WAC 173-400-075]		
Req-401	Emissions from the Coal Unloading Facility Emergency Diesel Sump Pump Engine shall not exceed:	EU-18	M31
	Pollutant Emission Limit		
	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		
	Annual emissions shall be calculated using the methodology identified in Section V of the Title V Basis Statement.		
	[SWCAA 11-2972 Condition 5]		
Req- 40m	Visible emissions from the Coal Unloading Facility Emergency Diesel Sump Pump Engine shall 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:	EU-18	M4
	(a) The engine has reached normal operating temperature; or(b) The engine has been operating for 15 minutes.		
- · ·	[SWCAA 11-2972 Condition 6]		2.55
Req-40n	The Coal Unloading Facility Emergency Diesel Sump Pump Engine shall only be fired on #2 diesel or better. The sulfur content of the fuel fired in the diesel engine shall not exceed 0.0015% by weight (15 ppm). A fuel certification from the fuel supplier may be used to demonstrate compliance with this requirement.	EU-18	M31
	[40 CFR 60.4207(b) SWCAA 11-2972 Condition 9]		

Req.#	Coal Plant Requirements	Emission Point	Monitoring
Req-40o	Operation of the Coal Unloading Facility Emergency Diesel Sump Pump Engine shall be limited to maintenance checks, readiness testing, and as necessary to provide emergency or backup pumping.	EU-18	N/A
	[SWCAA 11-2972 Condition 10]		
Req-40p	The Coal Unloading Facility Emergency Diesel Sump Pump Engine shall be operated no more than 200 hours per year. A nonresettable time totalizer shall be installed and used to measure hours of operation.	EU-18	M31
	[40 CFR 60.4209(a) WAC 173-400-115 SWCAA 400-115		
	SWCAA 11-2972 Condition 11]		
Req-40q	The exhaust from the Coal Unloading Facility Emergency Diesel Sump Pump Engine shall be discharged vertically. Any device that obstructs or prevents vertical discharge is prohibited.	EU-18	N/A
	[SWCAA 11-2972 Condition 12]		
Req-40r	Except as provided in 40 CFR 60.4211(g), the Coal Unloading Facility Emergency Diesel Sump Pump Engine shall be operated and maintained according to the manufacturer's written instructions and the permittee may only change those 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.	EU-18	M31
	[40 CFR 60.4211(a)		
	WAC 173-400-115		
	SWCAA 400-115		
	SWCAA 11-2972 Condition 13]		

Req. #	Coal	Plant Requirements		Emission Point	Monitoring
Req-40s	Emissions of filterable particulate stack associated with the mercury hour average) and the quantities in Generating Equipment 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 Fly Ash Bin 14 Fly Ash Bin 14 Fly Ash Bin 11 to Weigh Hopper Air Slide	e matter (PM, PM ₁₀ , and y control project shall n		EU-19, EU-20, EU-21, EU-22, EU-23, EU-24, EU-25, EU-26, EU-27, EU-28	M32, M33
	Fly Ash Bin 14 to 6050 Air Slide Annual emissions shall be calc Technical Support Document emission rates shall be deter available.	for this Air Discha mined from source	arge Permit. Short-term emission test data when		
Req-40t	Visible emissions from each emissions from each emissions from each emissions from each emission project shall not exceed zero per hour period as determined in according of SWCAA 400). This limit apprequipment.	rcent opacity for more ordance with SWCAA	part of the mercury control than 3 minutes in any one Method 9 (See Appendix A s well as fugitive leaks from	EU-19, EU-20, EU-21, EU-22, EU-23, EU-24, EU-25, EU-26, EU-27, EU-28	M1, M32, M33
Req-40u	Each pollution control device shat served by that control device maintained in good working order in a manner that minimizes emissing [SWCA]	is in operation. Eac er. Furthermore, contro	th control device shall be old devices shall be operated	EU-19, EU-20, EU-21, EU-22, EU-23, EU-24, EU-25, EU-26, EU-27, EU-28	M32

Req.#	Coal Plant Requirements	Emission Point	Monitoring
Req-40v	Exhaust from each emission unit shall be discharged vertically. Any device that	EU-19,	N/A
	obstructs or prevents vertical discharge is prohibited.	EU-20,	
		EU-21,	
	[SWCAA 11-2984 Condition 4]	EU-22,	
		EU-23,	
		EU-24,	
		EU-25,	
		EU-26,	
		EU-27,	
		EU-28	
Req-40w	Each baghouse and dust collector shall be equipped with a differential pressure	EU-23,	N/A
_	gauge capable of continuously measuring the pressure drop across filtration media	EU-24,	
	in the unit.	EU-25	
	[SWCAA 11-2984 Condition 5]		ļ

Req.#	Combustion Turbine Facility Requirements	Emission Point	Monitoring
Req-41	Permittee shall maintain and operate equipment in a manner consistent with good air pollution control practices for minimizing emissions.	EU-7 EU-8, EU-9,	N/A
	[40 CFR 60.11(d) WAC 173-400-115 SWCAA 400-115]	EU-10 & EU-12	
Req-42	Emissions of nitrogen oxides from each duct burner system shall not exceed 0.20 lb/MMBtu. Reference Method: 40 CFR 60 Appendix A Method 7E	EU-7, EU-8, EU-9, & EU-10	M13, M14, M15
	[40 CFR 60.44b WAC 173-400-115 SWCAA 400-115]		
Req-43	Permittee shall hold SO ₂ allowances not less than the total annual emissions of SO ₂ for the previous calendar year (see Appendix B Acid Rain Permit). Reference Method: 40 CFR 75	EU-7, EU-8, EU-9, & EU-10	M13, M16
	[40 CFR 72.9(c)(1) WAC 173-406-106(3)(a)(i)]		
Req-44	Emissions of carbon monoxide from each combustion turbine exhaust stack shall not exceed any of the following: 4.6 lb/hr (1-hour average); and 3.0 ppmvd @ 15% O ₂ (1-hour average).	EU-7, EU-8, EU-9, & EU-10	M13, M14, M15
	Reference Method: 40 CFR 60 Appendix A Method 10 [SWCAA 01-2350R4 Condition 1]		

Req. #	Combustion Turbine Facility Requirements	Emission Point	Monitoring
Req-45	Emissions of nitrogen oxides from each combustion turbine exhaust stack shall not exceed either of the following: 6.33 lb/hr (1-hour average); and 3.0 ppmvd @ 15% O ₂ (3-hour average). Emissions of nitrogen oxides from all combustion turbine exhaust stacks combined shall not exceed 23.1 lb/hr (24-hour average).	EU-7, EU-8, EU-9, & EU-10	M13, M14, M15
	Reference Method: 40 CFR 60 Appendix A Method 7E		
	[40 CFR 60.332(a)(1) WAC 173-400-115 SWCAA 400-115 PSD-01-01 Amendment 2 Condition 3]		
Req-46	Emissions of sulfur dioxide from each combustion turbine exhaust stack shall not exceed either of the following: 8.0 lb/hr (1-hour average) (from SWCAA 01-2350R4); and 0.015% by volume, dry basis, corrected to 15% O ₂ (from 40 CFR 60.333(a)).	EU-7, EU-8, EU-9, & EU-10	M13, M16
	Reference Method: Mass balance [40 CFR 60.333(a) WAC 173-400-115 SWCAA 400-115 SWCAA 01-2350R4 Condition 5]		
Req-47	Emissions of ammonia from each combustion turbine exhaust stack shall not exceed any of the following: 9.3 lb/hr (1-hour average); and 10 ppmvd @ 15% O ₂ (24-hour average).	EU-7, EU-8, EU-9, & EU-10	M13, M14
	Reference Method: BAAQMD Method ST-1B		
Req-48	[SWCAA 01-2350R4 Condition 3] Emissions of volatile organic compounds from each combustion turbine exhaust stack shall not exceed 0.75 lb/hr (1-hour average). Reference Method: 40 CFR 60 Appendix A Methods 18 and/or 25A	EU-7, EU-8, EU-9, & EU-10	M13, M14
	[SWCAA 01-2350R4 Condition 4]	LO-10	
Req-49	Emissions of filterable particulate matter and filterable particulate matter with an aerodynamic diameter smaller than 10 µm (PM ₁₀) from each combustion turbine exhaust stack shall not exceed either of the following: 0.009 lb/MMBtu (1-hour average); and 4.1 lb/hr (1-hour average). Combined emissions of filterable particulate matter from the exhaust stacks of all four combustion turbines shall not exceed 14.3 lb/hr.	EU-7, EU-8, EU-9, & EU-10	M13, M14, M22
	Reference Method: 40 CFR 60 Appendix A Method 5 or 201A		
	[PSD-01-01 Amendment 2 Conditions 6 & 9]		

Req. #	Combustion Turbine Facility Requirements	Emission Point	Monitoring
Req-50	Opacity from each combustion turbine exhaust stack shall 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. Opacity from each combustion turbine exhaust stack shall not exceed 5% averaged over 6 consecutive minutes as measured by 40 CFR 60, Appendix A, Method 9.	EU-7, EU-8, EU-9, & EU-10	M1
	[SWCAA 01-2350R4 Condition 2 PSD-01-01 Amendment 2 Condition 12]		
Req-51	Combustion turbine facilitywide emissions shall not exceed any of the following; 65.2 tons per year carbon monoxide (12-month rolling total); 14.0 tons per year volatile organic compounds (12-month rolling total); and 38.9 tons per year sulfur dioxide (12-month rolling total). [SWCAA 01-2350R4 Condition 7]	EU-7, EU-8, EU-9, EU-10 EU-11 & EU-12	M13, M14, M15, M21
Req-52	Nitrogen oxides emissions from each combustion turbine shall be controlled to the greatest extent possible by manipulating the ammonia feed rate until the introduction of additional ammonia results in excessive ammonia slip relative to NO_X reduction. This requirement applies when the arithmetic sum of the NO_X and ammonia concentrations in units of ppmvd @ 15% O_2 can be maintained below 5.0. Testing shall be conducted at least annually to determine the appropriate NO_X and ammonia target values. In the absence of written direction from SWCAA, the permittee shall operate the NO_X control system to minimize the arithmetic sum of NO_X and ammonia emissions on a concentration basis. Alternatively, SWCAA may use the test data to determine the appropriate NO_X and ammonia target values.	EU-7, EU-8, EU-9 & EU-10	M13, M17
Dag 52	[SWCAA 01-2350R4 Condition 12]	EU 7	N/A
Req-53	Natural gas is the only fuel approved for use by the BHP Auxiliary Boiler, combustion turbines and duct burners. For the purposes of this requirement, the definition of natural gas is the same as the definition in 40 CFR 72.2 in effect July 1, 2002. [SWCAA 01-2350R4 Condition 12	EU-7, EU-8, EU-9, EU-10 & EU-12	IVA
Req-54	PSD-01-01 Amendment 2 Condition 1] No fuel which contains sulfur in excess of 0.8 percent by weight shall be burned in the combustion turbines.	EU-7, EU-8, EU-9 & EU-10	M16
	[40 CFR 60.333(b) WAC 173-400-115 SWCAA 400-115]	EU-10	
Req-55	The concentration of ammonia in the aqueous ammonia solution used for the SCR systems shall be less than 20% by weight. [SWCAA 01-2350R4 Condition 17]	EU-7, EU-8, EU-9 & EU-10	M18
Req-56	The sulfur content of the fuel consumed by the Black Stop Diesel Generator Engine shall not exceed 0.05% by weight. Permittee may use a fuel certification from the fuel supplier as a means of demonstrating compliance with this requirement.	EU-11	M19
	[SWCAA 01-2350R4 Condition 14]		

Req. #	Combustion Turbine Facility Requirements	Emission Point	Monitoring
Req-57	Hours of operation of the Black Stop Diesel Generator Engine shall not exceed 500 hours in any 12 consecutive months. A nonresettable time totalizer shall be installed and used to measure hours of operation.	EU-11	M20
	[SWCAA 01-2350R4 Condition 15 PSD-01-01 Amendment 2 Conditions 2 & 14]		
Req-58	Operation of the Black Stop Diesel Generator Engine shall be limited to testing, maintenance, and use during grid-failure emergencies.	EU-11	M20
	Effective May 3, 2013, the Black Stop Diesel Generator 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. Required testing of such units should be minimized.		
	The Black Stop Diesel Generator Engine may be operated for up to 50 hours per year for facility maintenance purposes in accordance with 40 CFR 63.6640(f)(2)(iii) and SWCAA 01-2350R4 Condition 16.		
	[40 CFR 63.6640(f)(2)(ii) & (iii) WAC 173-400-075 SWCAA 01-2350R4 Condition 16]		
Req-59	Opacity from the exhaust stack of the Black Stop Diesel Generator Engine shall not exceed ten percent for more than three minutes in any one hour period as determined in accordance with SWCAA 400, Appendix A, Method 9 except during startup.	EU-11	M1
	[SWCAA 01-2350R4 Condition 9]		
Req-60	Emissions of nitrogen oxides from the Black Stop Diesel Generator Engine shall not exceed either of the following:	EU-11	M14, M20,
	32.2 lb/hr (12-month average); and 8.0 tons per year (12-month rolling total).		M22
	Reference Method: 40 CFR 60 Appendix A Method 7E		
	[PSD-01-01 Amendment 2 Condition 5]		
Req-61	Emissions of filterable particulate matter and filterable particulate matter with an	EU-11	M14, M22
	aerodynamic diameter smaller than 10 μ m (PM $_{10}$) from the Black Stop Diesel Generator Engine shall not exceed 0.94 lb/hr (24-hour average).		
	Reference Method: 40 CFR 60 Appendix A Method 5 or 201A		
	[PSD-01-01 Amendment 2 Conditions 8 & 11]		
Req-62	Emissions of nitrogen oxides from the BHP Auxiliary Boiler shall not exceed either of the following:	EU-12	M14, M21,
	0.025 lb/MMBtu (1-hour average); and		M22
	2.2 tons per year (12-month rolling total).		
	Reference Method: 40 CFR 60 Appendix A Method 7E		
	[PSD-01-01 Amendment 2 Condition 4]		

Req.#	Combustion Turbine Facility Requirements	Emission Point	Monitoring
Req-63	Emissions of filterable particulate matter and filterable particulate matter with an aerodynamic diameter smaller than 10 µm (PM ₁₀) from the BHP Auxiliary Boiler shall not exceed either of the following: 0.01 lb/MMBtu (1-hour average); and 0.7 tons per year (12-month rolling total). Reference Method: 40 CFR 60 Appendix A Method 5 or 201A [PSD-01-01 Amendment 2 Conditions 7 & 10]	EU-12	M14, M21, M22
Req-64	Emissions of carbon monoxide from the BHP Auxiliary Boiler shall not exceed any of the following: 50 ppmvd @ 3% O ₂ ; and 3.4 tons per year. Reference Method: 40 CFR 60 Appendix A Method 10 [SWCAA 01-2350R4 Condition 16]	EU-12	M14, M21, M22
Req-65	Within 90 days following the commencement of commercial operation, the permittee shall develop and maintain an O&M manual that identifies operational practices and procedures that constitute proper operation of the Black Stop Diesel Generator Engine, combustion turbines, and duct burners. [PSD-01-01 Amendment 2 Condition 23]	EU-7, EU-8, EU-9, EU-10, & EU11	N/A
Req-66	The permittee shall develop and submit for Ecology's approval a compliance plan for the nitrogen oxides emission limit from the combined heat recovery steam generator exhaust stacks. [PSD-01-01 Amendment 2 Condition 17]	EU-7, EU-8, EU-9, & EU-10	N/A

VII. MONITORING TERMS AND CONDITIONS

The permittee shall conduct each of the monitoring activities listed below. Each monitoring requirement is indexed according to the underlying requirement(s). Pursuant to WAC 173-401-530(2)(c), none of the following monitoring requirements apply to IEUs. Records of monitoring activities shall be maintained in accordance with Section VIII of this permit.

M1. Visible Emission Monitoring

WAC 173-401-615(1) - (for EU-3) PSD-01-01 Amendment 2 Condition 19 SWCAA 97-2057R1 Section 36 SWCAA 01-2403 Section 11(c) SWCAA 01-2350R4 Condition 18 SWCAA 11-2984 Condition 7

This monitoring requirement applies to Requirements 1, 15, 30, 40u, 50, and 59.

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

EU-4, EU-5, & EU-6: The permittee shall perform monthly inspections of fly ash loading from the 6050 unloaders and Unit #1 and Unit #2 turbine lube oil mist eliminators during daylight hours to identify any evidence of visible emissions violations. The inspections shall 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 shall consist of a survey to determine the presence or absence of excessive opacity, excessive fugitive dust, or evidence of excess emissions indicating that excessive emissions are occurring. Inspection of the turbine lube oil mist eliminator stacks shall 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 shall be filled out with the weather and operating conditions noted. A reasonable attempt shall 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 shall be read for an additional 6 minutes to a maximum total of 60 minutes or 13 readings in excess of the opacity standard. Whenever visible emissions in excess of the standard or excessive fugitive dust are observed during the monthly inspection, or any other time, the permittee shall initiate corrective action within 2 hours of observing excess visible emissions. Whenever excess emissions are observed or evidenced, the permittee shall 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. [SWCAA 01-2403 § 11(c)]

EU-7, EU-8, EU-9, & EU-10: At least 6 minutes of opacity observations shall be conducted each calendar month for EU-7, EU-8, EU-9, & EU-10 by a Certified Observer using the visible emissions evaluation method in Appendix A of this permit. [PSD-01-01 Amendment 2 Condition 19]

EU-7, EU-8, EU-9, EU-10, EU-11, EU-12, EU-19, EU-20, EU-21, EU-22, EU-23, EU-24, EU-25, EU-26, EU-27, & EU-28: The permittee shall perform monthly inspections of EU-7, EU-8, EU-9, EU-10, EU-11, EU-12, EU-19, EU-20, EU-21, EU-22, EU-23, EU-24, EU-25, EU-26, EU-27, & EU-28 during daylight hours to identify and prevent potential emissions violations. 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 shall determine the source of the emissions. The permittee shall initiate corrective action within 2 hours of observing the excess emissions. The permittee shall confirm whether the pertinent equipment is or is not experiencing a malfunction and that all relevant air pollution control equipment is operating properly. Within 24 hours of initial discovery, permittee shall resolve the operational problem, or notify SWCAA by the next working day of progress made in resolving the operational problem. [SWCAA 01-2350R4 Condition 18 for EU-7 through EU-12, SWCAA 11-2984 Condition 7 for EU-19 through EU-28]

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

Exhibit No. (RG-11HC)
Page 159 of 206
Air Operating Permit

TransAlta - Centralia Plant

M2. Particulate Matter Emissions Monitoring

SWCAA 01-2350R4 Condition 8 SWCAA 11-2972 Condition 14 SWCAA 05-2636 Condition 3 WAC 173-401-615(1)

This monitoring requirement applies to Requirements 2, 9, 11, 32, 34, 36, 37, 38, 39, and 40a.

The permittee shall perform monthly inspections of emission units EU-1 through EU-13 during daylight hours to identify potential particulate matter emissions violations. 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 shall determine the source of the emissions. The permittee shall initiate corrective action within 2 hours of observing particulate matter fallout or excess visible emissions. The permittee shall 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 shall 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 shall be visually inspected once per month when in operation to ensure proper function. Clogged or defective nozzles shall be replaced or repaired prior to subsequent operation. The operating pressure of the water spray system shall be measured during the monthly inspection.

M3. Fugitive Emissions Monitoring

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

This monitoring requirement applies to Requirements 3, 8, and 29.

The permittee shall perform monthly inspections of emission units EU-1 through EU-13 during daylight hours to identify any excess fugitive emissions including fugitive dust. Inspection of the fly ash unloading shall 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 shall verify the source of the emissions. The permittee shall 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

Exhibit No. (RG-11HC)
Page 160 of 206
Air Operating Permit

TransAlta - Centralia Plant

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.

M4. Complaint Monitoring

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

This monitoring requirement applies to Requirements 2, 4, 5, 8 and 40m.

The permittee shall record, and maintain record of, any air quality related complaints received by either the permittee or SWCAA. All complaints shall be investigated no later than one workday after the permittee has been notified, and those complaints subject to requirement M2 shall be addressed in a timely manner consistent with M2. Permittee shall 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, permittee shall resolve the subject of the complaint, or notify SWCAA by the next working day of progress made in resolving the complaint.

M5. Operations Monitoring

WAC 173-401-615(1)

This monitoring requirement applies to Requirements 3, 9, 11, 39, and 40a.

The permittee shall perform monthly inspections of emission units EU1 through EU13 during daylight hours to confirm that pollution control equipment is operating according to manufacturer specifications and/or consistent with good engineering and maintenance practices. Whenever nonstandard conditions are observed during the monthly inspection or any other time, the permittee shall initiate corrective action within 2 hours of observing an equipment problem. The permittee shall confirm whether the equipment is or is not experiencing a malfunction, and that all air pollution control equipment is operating properly. The permittee shall review maintenance records as necessary to monitor the operations of air pollution control equipment. Within 24 hours of initial discovery, permittee shall 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).

M6. Coal Plant SO₂ General Standard Monitoring

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

This monitoring requirement applies to Requirement 6 for EU-1, EU-2 and EU-3 only.

Monitoring to ensure compliance with Req-6 on a 60-minute average is described in M8. The permittee shall monitor, record, and maintain record of the sulfur content of coal combusted in the boilers of emission units EU-1 and EU-2. This monitoring shall 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 shall be used, as necessary, to verify SO₂ monitoring results required by M8. The permittee shall determine the sulfur content of the fuel oil used to fuel the

auxiliary boiler (EU-3) and for start up of EU-1 and EU-2 at a sufficient frequency that allows the sulfur content to be certified in each quarterly report.

M7. Coal Plant Stack Sampling Monitoring Requirements

SWCAA 400-052

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

This monitoring requirement applies to Requirements 6, 9, 10, 14, 17, 25, and 28 for EU-1 and EU-2 only.

The permittee shall conduct emissions testing of EU-1 and EU-2 at least once every two calendar years to quantify emissions of NO_X, CO, SO₂, and VOC. The permittee shall conduct emissions testing of EU-1 and EU-2 at least once every year to quantify emissions of particulate matter. A minimum of three test runs shall be performed at a minimum of 500 MW gross to establish that collected data are representative of normal operation. The use of continuous monitors shall be 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, shall be used for these emissions tests:

Pollutant:	\underline{NO}_{X}	<u>CO</u>	<u>PM</u>	$\underline{SO_2}$	<u>VOC</u>
EPA Test Method:	7E	10	5 & 202	6C	18, 25 or 25A

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

CO, dry @ 7% $O_2 = [(20.9 - 7) / (20.9 - O_2\%, dry)] * CO, dry @ actual <math>O_2\%$

The CO concentrations shall 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 shall be consistent with the SO_2 control technology selected and shall be appropriate for the stack conditions (i.e., wet or dry stack). Only the filterable fraction (as measured by EPA Method 5) shall be used for comparison with the permitted limit, however, the condensable portion shall continue to be measured and reported for emission inventory purposes. The PM result shall also be corrected to 7% O_2 .

M8. Coal Plant General Continuous Monitoring Provisions

40 CFR 75

WAC 173-400-105(5)(a)(i) & (5)(e) SWCAA 400-105(5)(a)(i) & (5)(e) SWCAA 400-105(4)(a)(i) & (4)(e) SWCAA 97-2057R1 Sections 21, 27a, 27b, 27c and 36

BART Order No.6426 Condition 6

This monitoring requirement applies to Requirements 6, 13, 15, 16, 17, 18, 20, 21, 23a, 24, 27, and 28 for EU-1 and EU-2 only.

The permittee shall monitor opacity, and SO₂, NO_X, and CO₂ emissions from EU-1 and EU-2 in accordance with 40 CFR Part 75.

(a) In addition to 40 CFR Part 75 requirements, the SO_2 CEMS with automated DAHS shall also record the SO_2 concentration (ppm) corrected to 7% O_2 , dry, consistent with SWCAA 400-050(3) with the use of an O_2 CEMS (consisting of an O_2 concentration monitor) with automated DAHS. The O_2 system measures and records O_2 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 SO_2 shall use the following method:

 SO_2 , dry @ 7% $O_2 = [(20.9 - 7) / (20.9 - O_2\%, dry)] * <math>SO_2$, dry @ actual $O_2\%$; [SWCAA 97-2057R1 §21 and §27a, WAC 173-400-040(6) and 173-400-050(3), and SWCAA 400-040(6) and 400-050(3)]

- (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, shall be performed a minimum of once per quarter to demonstrate compliance. [SWCAA 97-2057R1 §36]
- (c) 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 §27a]
- (d) The permittee shall 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 shall also meet this monitoring requirement. [40 CFR 75.10(d)(2); 40 CFR 51 Appendix P; SWCAA 97-2057R1 §36; WAC 173-401-615(1)]
- (e) Whenever a valid hour of SO₂ concentration, flow rate, and NO_X emissions rate data have not been measured and recorded, the permittee shall 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, WAC 173-400-040(6), 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) shall be used. For monitor out-of-service periods greater than four hours, data from an online coal analyzer, any as-burned coal analyses conducted by the permittee, and plant emission control system operating data shall be evaluated. The data or combination of data that best represents actual emissions shall 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 §27c]
- (f) To demonstrate compliance with the NO_X emission limit from the BART Order (No. 6426), the Permittee shall utilize the following missing data substitution procedures: (1) For a unit with less than 12 continuous hours of missing CEM data, the substituted hourly emission rate will be the higher of (a) the average of emissions during the hour before and the hour after the period of missing data or (b) the average of emissions from the previous 720 operating hours of quality-assured data. (2) For a unit with 12 or more continuous hours of missing CEM data, the substituted hourly emission rate will be based on the 90th percentile of the previous 720 operating hours of quality-assured data. (3) All substituted data and 30-day averages that include substitute data shall be identified. The missing data substitution procedures in this paragraph are in effect until superseded by a revision of BART Order No. 6426. [BART Order No.6426 Condition 6]

M9. Coal Plant Startup, Shut Down, and Outage Operation Procedures

SWCAA 97-2057R1 Sections 21b, 23, 25, 26, 28e, 37, and 38

This monitoring requirement applies to Requirements 14, 15, 17, 18, and 19 for EU-1 and EU-2 only.

During startup and shutdown of EU-1 and EU-2, emissions control equipment shall 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 WAC 173-400-107 and 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 WAC 173-400-107 and 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-18 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 SO_2 emission control technology outages and upsets, emissions in excess of the hourly SO_2 limitation are excused provided they satisfy the alternative SO_2 emission limits of Req-18 or they meet the burden of proof regarding unavoidable emissions in accordance with WAC 173-400-107 and SWCAA 400-107. Permittee shall demonstrate that a forced outage of the SO_2 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).

M10. Coal Plant SO₂ 12-Month Period Emission Evaluation

SWCAA 97-2057R1 Sections 26, 28c, and 28d

This monitoring requirement applies to Requirements 16 and 21 for EU-1, EU-2, and EU-3 only.

All hourly SO₂ emission data for startup, shutdown, upset and forced or planned emission control system outage periods shall 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 shall 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-16. Each exceedance of the rolling 12-month emission limitation, except as excused under WAC 173-400-107 and SWCAA 400-107, shall constitute a continuing violation for the days in the last month of the 12-month period. Each day of violation shall 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 shall 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.

M11. Coal Plant SO₂ Monitoring of Bypass Stacks

SWCAA 97-2057R1 Section 29

This monitoring requirement applies to Requirement 22 for EU-1 and EU-2 only.

Any bypass through the bypass stacks that is not monitored by a certified functional CEMS for SO_2 is considered an upset condition and shall be reported consistent with requirement R1. All SO_2 emissions discharged from a bypass stack shall be included in the calculation of emissions for determining compliance with the annual limit.

M12. Coal Plant Fuel Oil Usage Evaluation

SWCAA 97-2057R1 Sections 43 and 45

This monitoring requirement applies to Requirements 16 and 26a for EU-1, EU-2 and EU-3.

Permittee shall monitor fuel oil usage in the boilers. The auxiliary boiler (EU-3) shall have a separate fuel meter to monitor the total amount of fuel consumed in that boiler. Emissions of SO₂ from the auxiliary boiler shall be included when evaluating the 10,000 tons per year emission limit in Req-16. Emissions shall be calculated based on fuel consumption and fuel sulfur content.

M13. Combustion Turbine Facility Continuous Emission Monitoring Requirements

40 CFR 75

PSD-01-01 Amendment 2 Condition 15

SWCAA 01-2350R4 Conditions 19, 21, 22(c), 21(d), and Appendix B

This monitoring requirement applies to Requirements 42, 43, 44, 45, 46, 47, 48, 49, 51, and 52 for EU-7, EU-8, EU-9, & EU-10 only.

A CEMS shall be installed on each combustion turbine exhaust stack to monitor NO_X , CO, NH_3 , and O_2 emissions as follows:

- (a) The permittee shall install and maintain a system for monitoring the concentration and emission rate of NO_X and the concentration of O_2 from each combustion turbine exhaust stack in accordance with the requirements and specifications found in the following regulations:
 - 40 CFR 60 Appendix B Performance Specification 2 "Specifications and Test Procedures for SO₂ and NO_x Continuous Emission Monitoring Systems in Stationary Sources"
 - 40 CFR 60 Appendix B Performance Specification 3 "Specifications and Test Procedures for O₂ and CO₂ Continuous Emission Monitoring Systems in Stationary Sources"
 - 40 CFR 60 Appendix F "Quality Assurance Procedures"
 - 40 CFR 75 Continuous Emissions Monitoring

Notwithstanding the requirements in the above regulations, the following exceptions apply:

- The quarterly audit requirements of 40 CFR 60 Appendix F do not apply to the NO_X CEMS.
- The linearity check specified in 40 CFR 75 may be used in lieu of the cylinder gas audit detailed in 40 CFR 60 Appendix F for the O₂ CEMS.
- Relative Accuracy Test Audits (RATAs) shall be conducted at least once for every four operating quarters or eight calendar quarters, whichever comes first. RATAs shall be completed no later than 720 operating hours after the end of the fourth operating quarter or eighth calendar quarter, whichever comes first. An operating quarter is any quarter in which the combustion turbine is operated for 168 or more hours.
- (b) The permittee shall install and maintain a system for monitoring the concentration and emission rate of CO from each combustion turbine exhaust stack in accordance with the requirements and specifications found in the following regulations and the relative accuracy criteria below:
 - 40 CFR 60, Appendix B Performance Specification 4A "Specifications and Test Procedures for Carbon Monoxide Continuous Emission Monitoring Systems in Stationary Sources"
 - 40 CFR 60, Appendix F "Quality Assurance Procedures"

Notwithstanding the requirements in the above regulations, the following exceptions apply:

- Relative Accuracy Test Audits (RATAs) shall be conducted at least once for every four operating quarters or eight calendar quarters, whichever comes first. RATAs shall be completed no later than 720 operating hours after the end of the fourth operating quarter or eighth calendar quarter, whichever comes first. An operating quarter is any quarter in which the combustion turbine is operated for 168 or more hours.
- The quarterly audit specified in 40 CFR 60 Appendix F need not be conducted in any quarter in which the associated combustion turbine operated less than 168 hours (RATAs excepted).
- The criteria for excessive audit inaccuracy in section 5.2.3(2) is replaced by a maximum audit inaccuracy of 1.0 ppm.
- (c) The permittee shall install and maintain a system for monitoring or determining the concentration and emission rate of NH₃ from each combustion turbine exhaust stack in accordance with the requirements and specifications found in 40 CFR 60, Appendix F "Quality Assurance Procedures" and 40 CFR 60, Appendix B Performance Specification 2 with the following exception:

In lieu of a full annual relative accuracy test audit (RATA), the permittee may perform a relative accuracy audit (RAA) using the results of the annual NH₃ source test. If this option is chosen, the average of the results from each source test run shall be compared to the average NH₃ concentration determined by the CEMS during the same time period. The average relative accuracy of the CEMS shall not exceed 20% of the reference method data or 1.0 ppmvd @ 15% O₂, whichever is less stringent. The relative accuracy during each sampling period shall be determined according to the following equation:

$$RA = 100* \left| \frac{(C_{RM} - C_{CEMS})}{C_{RM}} \right|$$

Where: C_{RM} = Reference method concentration C_{CEMS} = CEMS concentration

- Relative Accuracy Test Audits (RATAs) or RAAs shall be conducted at least once
 for every four operating quarters or eight calendar quarters, whichever comes first.
 RATAs shall be completed no later than 720 operating hours after the end of the
 fourth operating quarter or eighth calendar quarter, whichever comes first. An
 operating quarter is any quarter in which the combustion turbine is operated for 168
 or more hours.
- The quarterly audit specified in 40 CFR 60 Appendix F need not be conducted in any quarter in which the associated combustion turbine operated less than 168 hours (RATAs excepted).
- (d) The table below contains a summary of the relative accuracy test audit requirements. Requirements originating from the Acid Rain Program may change, therefore those elements of this table are provided for informational purposes only.

<u>Pollutant</u>	RATA/RAA Units	Performance Requirement
NO_X	lb/MMBtu (Acid Rain)	$RM - CEMS mean \pm 0.015 lb/MMBtu$
NO_X	ppmvd @ 15% O ₂	$RA \le 20\%$ of RM or 0.3 ppmvd @ 15% O_2
O_2	% vd	$RA \le 1.0\% O_2$
CO	ppmvd @ 15% O ₂	$RA \le 20\%$ of RM or 0.3 ppmvd @ 15% O_2
NH_3	ppmvd @ 15% O ₂	$RA \le 20\%$ of RM or 1.0 ppmvd @ 15% O_2

(e) Relative accuracy test audit reports shall be submitted to SWCAA within 45 days of test completion and shall include all of the source test information required in R7 of this permit.

The following hourly average CEMS/data acquisition system (DAS) data shall be collected for each combustion turbine:

- (1) NO_X emission concentration (ppmvd @ 15% O₂);
- (2) NO_X emission rate (lb/hr);
- (3) CO emission concentration (ppmvd @ $15\% O_2$);
- (4) CO emission rate (lb/hr);
- (5) NH_3 emission concentration (ppmvd @ 15% O_2);
- (6) NH_3 flow to the SCR system (lb/hr);
- (7) O_2 concentration (dry volume percent);
- (8) Turbine and duct burner fuel consumption (MMBtu/hr); and
- (9) Turbine gross output and net facility electrical output (megawatts).

The following information shall be continuously monitored and recorded daily:

- (10) Differential pressure across each catalyst bed; and
- (11) Flue gas temperature immediately upstream and downstream of each catalyst bed.

M14. Combustion Turbine Facility Source Testing Requirements

WAC 173-400-115 SWCAA 400-115 PSD-01-01 Amendment 2 Conditions 16 & 18 SWCAA 01-2350R4 Condition 25, Appendices A & D

This monitoring requirement applies to Requirements 42, 44, 45, 47, 48, 49, 51, 60, 61, 62, 63, and 64 for EU-7, EU-8, EU-9, EU-10, EU-11, & EU-12 only.

Combustion Turbine Source Testing Requirements:

(a) An initial source test to quantify emissions of NO_X, CO, NH₃, PM, and VOCs from each combustion turbine exhaust stack was conducted in October 2002. Subsequent source tests of the combustion turbines shall be conducted along the following schedule:

	Test Method or		Test
Constituent	<u>Equivalent¹</u>	Minimum Schedule	Duration
Stack gas velocity	EPA Methods 1 and 2	Every 1-2 years ²	N/A
O ₂ and CO ₂	EPA Method 3 or 3A	Every 1-2 years ²	N/A
Moisture	EPA Method 4	Every 1-2 years ²	1 hour
Filterable particulate matter	EPA Method 5	1 turbine every 5 yrs ⁴	3 hours
Nitrogen oxides	EPA Method 7E	Every 1-2 years ²	1 hour
Opacity of emissions	EPA Method 9	Every 1-2 years ²	6 minutes
Carbon monoxide	EPA Method 10	Every 1-2 years ²	1 hour
Volatile Organic Compounds	EPA Method 25A/18 ³	1 turbine every 5 yrs ⁴	1 hour
Condensable particulate matter	EPA Method 202	1 turbine every 5 yrs ⁴	3 hours
Ammonia	BAAQMD Method ST1B	Every 1-2 years ²	1 hour

Testing for each constituent shall consist of a minimum of three sampling runs of the duration specified above. Relative Accuracy Test Audit (RATA) sampling runs for NO_X and CO may be used to comply with the source testing requirements (i.e. 3 21-minute RATA runs = 1 source test run).

BHP Auxiliary Boiler and Black Stop Diesel Generator Engine Testing Requirements:

(b) An initial source test to quantify emissions of NO_X, CO, and PM from the BHP Auxiliary Boiler was conducted on October 18, 2002. Subsequent source tests of the BHP Auxiliary Boiler shall be conducted every two years, no later than the end of December. The first test along this schedule was due no later than December 2004. Tests conducted more than three months before the required due date will not satisfy the periodic source testing requirement without approval from SWCAA.

Performance monitoring of the BHP Auxiliary Boiler shall be conducted at least once each calendar year in which source emissions testing is not conducted. Performance monitoring shall consist of at least 5 minutes of CO, NO_X , and O_2 monitoring of the boiler exhaust using a calibrated electrochemical cell combustion analyzer in accordance with the Appendix D of SWCAA 01-2350R4.

An initial source test to quantify emissions of NO_X , CO, and PM from the Black Stop Diesel Generator Engine was conducted on July 12, 2002. Subsequent source tests of the Black Stop Diesel Generator shall be conducted every two years or every 500 hours of operation, whichever is less frequent.

The following test methods and durations shall be used for testing of the BHP Auxiliary Boiler and the Black Stop Diesel Generator Engine:

Constituent	Test Method or Equivalent ¹	Minimum Test Duration
Stack gas velocity	EPA Methods 1 and 2	N/A
O_2 and CO_2	EPA Method 3 or 3A	N/A
Moisture	EPA Method 4	1 hour
Filterable particulate matter	EPA Method 5	1 hour
Nitrogen oxides	EPA Method 7E	1 hour
Carbon monoxide	EPA Method 10	1 hour
Condensable particulate matter	EPA Method 202	1 hour

Testing for each constituent shall consist of a minimum of three sampling runs of the duration specified above.

M15. Combustion Turbine Facility Startup, Shut Down, and Outage Operation Procedures PSD-01-01 Amendment 2 Condition 20 SWCAA 01-2350R4 Condition 10

This monitoring requirement applies to Requirements 42, 44, 45, and 51 for EU-7, EU-8, EU-9, EU-10, EU-11, and EU-12 only.

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

² Periodic source testing shall be conducted at least once for every four operating quarters or eight calendar quarters, whichever comes first. Source testing shall be completed no later than 720 operating hours after the end of the fourth operating quarter or eighth calendar quarter, whichever comes first. An operating quarter is any quarter in which the combustion turbine is operated for 168 or more hours.

³ The use of Method 25A with a "methane cutter" is acceptable to determine the VOC concentration. Alternatively, methane and ethane concentrations measured by Method 18 may be subtracted from the total hydrocarbon concentration measured by Method 25A to determine the VOC concentration. When using Method 25A, results shall be reported as propane.

⁴ Source testing shall be completed no later than the end of December consistent with the period provided in the table. Initial particulate matter source testing of the combustion turbines was conducted in 2002; the first test along this schedule is due no later than December 2007. Tests conducted more than three months before the required due date will not satisfy the periodic source testing requirement without approval from SWCAA.

The short-term (with 24-hour or shorter averaging times) emission concentration and mass emission rate limits do not apply during startup and shutdown events. Emissions during startup and shutdown events shall be counted towards compliance with the annual facilitywide emission limits. The combustion turbine startup period ends 60 minutes after fuel was first combusted by the combustion turbine.

Emissions during the startup and shutdown events shall be determined from CEMS data if emissions are within the measurement range of the CEMS, vendor supplied emission factors, source test data, or others methods approved by SWCAA.

M16. Combustion Turbine Facility SO₂ General Standard Monitoring

40 CFR 75.11(d)(2) WAC 173-400-115 SWCAA 400-115 SWCAA 01-2350R4 Condition 22(j)

This monitoring requirement applies to Requirements 43, 46 and 54 for EU-7, EU-8, EU-9, and EU-10 only.

The permittee shall calculate hourly SO₂ emission rates in accordance with 40 CFR Part 75 Appendix D. For pipeline natural gas, an emission factor of 0.0006 lb/MMBtu may be used to calculate emissions. For natural gas that does not qualify as pipeline natural gas, SO₂ emissions shall be calculated using equation D1-h of 40 CFR 75 and the results of fuel sulfur content monitoring as provided in 40 CFR 75, Appendix D, Section 2.3.

M17. Combustion Turbine NO_X Control System Testing

SWCAA 01-2350R4 Condition 27 & Appendix C

This monitoring requirement applies to Requirement 52 for EU-7, EU-8, EU-9, and EU-10 only.

The permittee shall conduct testing of each combustion turbine SCR system at least annually when the arithmetic sum of the NO_X and ammonia concentrations in units of ppmvd @ 15% O_2 can be maintained below 5.0 to adjust and assess the target NO_X emission and ammonia slip values. The plant CEMS may be used to collect NO_X and ammonia data.

Test Procedure:

- (a) The turbine shall be operated at a full-load condition during the testing. The SCR system shall be used to target a NO_X exhaust concentration of 2.5 ppmvd @ 15% O₂.
- (b) The ammonia and NO_X concentrations shall be monitored for at least 15 minutes after the exhaust concentrations have stabilized (< 5% or 0.1 ppm change in concentration per minute).
- (c) The SCR system shall be used to target an incrementally lower NO_X concentration of 2.4 ppmvd @ 15% O_2 and data shall be collected as in (b).
- (d) Testing continues in this fashion, targeting incrementally lower NO_X concentrations until ammonia slip exceeds 5.0 ppmvd @ 15% O₂ or no further NO_X reductions can be achieved.

M18. Ammonia Certification

SWCAA 01-2350R4 Conditions 17 & 22(i)

This monitoring requirement applies to Requirement 55 for EU-7, EU-8, EU-9, and EU-10 only.

The permittee shall maintain an analysis of the ammonia concentration in each ammonia shipment. A certification from the ammonia supplier satisfies this requirement.

M19. Black Stop Diesel Generator Engine Fuel Certification

SWCAA 01-2350R4 Condition 14

This monitoring requirement applies to Requirement 56 for EU-11 only.

The permittee shall maintain an analysis of the sulfur content of each shipment of fuel oil for the Black Stop Diesel Generator Engine. A certification from the fuel supplier satisfies this requirement.

M20. Black Stop Diesel Generator Engine Hours Monitoring

SWCAA 01-2350R4 Condition 15 & 22(e) PSD-01-01 Amendment 2 Condition 14 WAC 173-401-615(1)

This monitoring requirement applies to Requirements 57, 58, and 60 for EU-11 only.

The permittee shall install a non-resetable time totalizer to measure hours of operation of the Black Stop Diesel Generator Engine. The permittee shall record the hours of operation of the Black Stop Diesel Generator Engine once per month.

Effective May 3, 2013, the Permittee shall 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 each year.

M21. BHP Auxiliary Boiler Fuel Consumption

40 CFR 60.48c(g)(2) SWCAA 01-2350R4 Condition 22(f)

This monitoring requirement applies to Requirements 51, 62, 63, and 64 for EU-12 only.

The permittee shall monitor and record the total fuel consumption by the BHP Auxiliary Boiler each month.

M22. Maintenance Activities Monitoring

SWCAA 01-2403 Section 11(c) SWCAA 01-2350R4 Conditions 22(g & h)

This monitoring requirement applies to Requirements 49 and 60, 61, 62, 63, and 64 for EU-4, EU-5, EU-6, EU-7, EU-8, EU-9, EU-10, EU-11, and EU-12 only.

The permittee shall document each occurrence of maintenance and repairs to the fly ash unloading pugmill, turbine lube oil mist eliminators, combustion turbines, BHP Auxiliary Boiler, and Black Stop Diesel Generator Engine that may affect emissions. Each occurrence of maintenance and repairs to emission control systems and CEMS shall be documented.

M23. Particulate Matter Compliance Assurance Monitoring for BW21 and BW22

40 CFR 64

WAC 173-401-615(4)

This monitoring requirement applies to Requirements 9 and 14 for EU-1 and EU-2 only.

In addition to the opacity monitoring requirements of Requirement 13 and M8, the permittee shall continuously monitor opacity in the ductwork upstream of the bypass stacks 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 stacks are acceptable. The COMS shall 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:

Exhaust Point	Maximum Opacity ¹
EU-1 Bypass Stack	20% (1-hour average)
EU-1 FGD Stack	30% (1-hour average)
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.

If opacity is measured in two ducts for the same emission unit, the arithmetic average of the opacity measurements from each duct shall 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:

- 1. Inspect electrostatic precipitators within four hours. Report ESP field settings and a list of fields out of service.
- 2. 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.
- 3. Make necessary repairs as soon as practical.
- 4. Notify SWCAA no later than the end of the next business day in accordance with R1.

M24. Coal Unloading Facilities

SWCAA 11-2972 Condition 15(a)

This monitoring requirement applies to Requirement 32 for EU-4 only.

Exhibit No. ___(RG-11HC)
Page 172 of 206
Air Operating Permit

TransAlta - Centralia Plant

The permittee shall develop and maintain the following information for the Coal Unloading Facility:

a. The total amount of coal unloaded each calendar year.

M25. FGD Bleed Treatment Lime Storage Silo

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

This monitoring requirement applies to Requirement 37 for the FGD Bleed Treatment Lime Storage Silo (EU-4) only.

The permittee shall 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 shall be recorded for each calendar year; and
- b. The differential pressure across the FGD Bleed Treatment Lime Storage Silo dust collector shall be recorded once per calendar month during loading.

M26. Journal Shop

SWCAA 08-2779 Condition 4(a)

This monitoring requirement applies to EU-13 only.

The permittee shall develop and maintain the following information for the Journal Shop:

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

M27. BART Order Coal Sampling and Analysis Requirements

BART Order No.6426 Condition 6

This monitoring requirement applies to Requirements 23a and 23b for EU-1 and EU-2 only.

The permittee shall conduct coal sampling and analysis as described below:

- a. Coal nitrogen and sulfur content shall be determined by sampling coal conveyed by the transfer belt between the coal pile and the coal silos. An alternate location that provides a better representation of the coal fired by the boilers may be proposed to Ecology by TransAlta for approval.
- b. A sample of coal for nitrogen and sulfur content analysis shall be taken at least once per week when at least one coal fired boiler is in operation. The sample shall be taken following ASTM Method D2234/D2234M-07.
- c. Coal nitrogen and sulfur content shall be determined using ASTM Method D3176-89) as reapproved in 2002). Note, other ASTM methods related to sample collection and preparation may need to be followed in order to perform this test.
- d. As an alternative to coal nitrogen and sulfur content testing at the plant, certified results of testing by the coal mine operator of coal actually sent to the Centralia Power Plant may be used. Testing frequency shall be no less frequent than required above.

M28. Coal Plant Emergency Engine Monitoring

40 CFR 63.6655 WAC 173-400-075

This monitoring requirement applies to Requirements 40b, 40d, 40e, 40f, and 40h for EU-14, EU-16, and EU-16 only.

Effective May 3, 2013, the permittee shall conduct the following monitoring for EU-14, EU-15, and EU-16:

- a. The Permittee shall 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. [63.6655(e)]
- b. The number of hours the engine is operated each calendar year shall be recorded from the non-resettable hour meter. The Permittee shall 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. [63.6655(f)]

M29. Barge 5429 Engine Monitoring Requirements

WAC 173-401-615

This monitoring requirement applies to Requirement 40i for EU-17 only.

Effective May 3, 2013, the permittee shall conduct the following monitoring for the Barge 5429 Engine:

- a. The permittee shall document and record each incidence of inspection, maintenance, and repairs conducted in accordance with the permittee's emissions related maintenance plan referenced in Requirement 40i.
- b. The permittee shall maintain a non-resettable hour meter on the Barge 5429 Engine and document the date and hour meter reading each time an inspection, maintenance, or repair activity is conducted.

M30. Subpart ZZZZ Performance Testing Requirements

40 CFR 63.6612(a), Table 4, Table 5 40 CFR 63.6620(i) WAC 173-400-075 WAC 173-401-615

This monitoring requirement applies to Requirement 40k for EU-17 only.

The permittee shall conduct the testing as indicated below for the Barge 5429 Engine:

a. The permittee shall conduct an initial performance test for the Barge 5429 Engine no later than October 30, 2013. Each performance test shall consist of three 1-hour long test runs to quantify CO emissions using the methodology listed in Table 4 of 40 CFR 63 Subpart

ZZZZ. [§63.6612(a)] Note that the Administrator may approve the use of a test conducted as early as May 3, 2011 to comply with this requirement. [§63.6612(b)]

- b. The engine percent load during the initial performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. [§63.6620(i)]
- c. The initial performance test must be repeated as soon as practical after replacement of an exhaust catalyst, engine rebuild, or engine overhaul. Note that an engine that is rebuilt or overhauled to the extent that the activity meets the definition of "reconstruction" in 40 CFR 63.2, then the engine will be subject to requirements as a new or reconstructed source. New or reconstructed non-emergency compression ignition engines with a site rating of less than or equal to 500 horsepower located at major HAP sources comply with 40 CFR 63 Subpart ZZZZ by complying with the applicable requirements of 40 CFR 60 Subpart IIII. [WAC 173-401-615]
- d. Subsequent testing shall be conducted at least once every 8,760 hours of operation using the methodology listed in Table 4 of 40 CFR 63 Subpart ZZZZ. [WAC 173-401-615]

M31. Coal Unloading Facility Emergency Diesel Sump Pump Engine Monitoring

SWCAA 11-2972 Conditions 15(b & c) WAC 173-401-615(1)

This monitoring requirement applies to Requirements 401, 40n, 40p, and 40r for EU-18 only.

- a. The fuel sulfur content of the diesel burned in the Coal Unloading Facility Emergency Diesel Sump Pump Engine shall 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 shall 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 shall 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). [WAC 173-401-615(1)]

M32. Mercury Control System and Fly Ash Material Handling

SWCAA 11-2984 Condition 8

This monitoring requirement applies to Requirements 40s, 40t, and 40u for EU-19, EU-20, EU-21, EU-22, EU-23, EU-24, EU-25, EU-26, EU-27, and EU-28 only.

The permittee shall conduct the testing as indicated below for EU-19 through EU-28:

- 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 Air Slide to Bin 11 Air Slide, Fly Ash Bin 11 to Weight Hopper Air Slide, Fly Ash Bin 14 to 6050 Air Slide) is vented shall 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 shall 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 Air Slide to Bin 11 Air Slide, Fly Ash Bin 11 to Weight Hopper Air Slide, and Fly Ash Bin 14 to 6050 Air Slides shall 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 Air Slide to Bin 11 Air Slide, Fly Ash Bin 11 to Weight Hopper Air Slide, and Fly Ash Bin 14 to 6050 Air Slide shall be logged for each occurrence.

M33. Fly Ash Baghouses - Monitoring and Source Emission Testing Requirements

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

This monitoring requirement applies to Requirements 40s and 40t for EU-23, EU-24, and EU-25 only.

A baghouse leak detection system shall be installed downstream of the Fly Ash Bin 11 Baghouse, Fly Ash Bin 12 Baghouse, and Fly Ash Bin 14 Baghouse. Each leak detection system shall be installed, operated, and maintained in accordance with the requirements in 40 CFR 60.256(c)(1) (found in Subpart Y). Baghouse leak alarms shall be addressed in accordance with the requirements in 40 CFR 60.256(c)(3). For the purposes of this requirement, the "Administrator" referenced in 40 CFR 60.256(c) is SWCAA. This requirement is superseded by the Compliance Assurance Monitoring Plan required by 40 CFR 64 when the plan is approved by SWCAA.

Source emissions testing of the Fly Ash Bin 11 Baghouse, Fly Ash Bin 12 Baghouse, and Fly Ash Bin 14 Baghouse shall be conducted as described below. Initial source emissions testing of the each baghouse shall be conducted no later than the end of October 2011. Subsequent source emissions testing shall 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 shall consist of a minimum of three sampling runs of the duration specified below.

		Minimum Test
Constituent	Test Method or Equivalent ¹	Duration
Stack gas velocity, flow rate	EPA Methods 1 and 2	N/A
Stack gas dry molecular	EPA Method 3A (may assume	
weight	ambient O ₂ & 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

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

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

SWCAA personnel shall 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 shall be kept during emissions testing to correlate operations with emissions and shall be recorded in the final report of the test results.

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

VIII. RECORDKEEPING TERMS AND CONDITIONS

All monitoring records shall be maintained in a readily accessible form for a minimum period of five years. Pursuant to WAC 173-401-530(2)(c), none of the recordkeeping requirements apply to IEUs. The permittee shall maintain records of required monitoring per M1 through M33 as follows as applicable:

K1. General Recordkeeping

WAC 173-401-615(2) SWCAA 97-2057R1 Sections 26 and 29 SWCAA 11-2972 Condition 15 SWCAA 05-2636 Condition 4 SWCAA 08-2779 Condition 4(b)

Permittee is required to keep the following records as applicable:

- (a) Inspections & Certifications
 - (i) The date, place, and time of activity;
 - (ii) Who conducted the inspection or certification;
 - (iii) The operating conditions existing at the time of the activity;
 - (iv) Compliance status of each monitored requirement as described in Sections VI and VII of this permit; and
 - (v) Corrective action taken in response to permit deviations and when action initiated.

(b) Complaints

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

Air Operating Permit

TransAlta - Centralia Plant

(c) Upset Conditions

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

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

Coal Unloading Facilities [SWCAA 11-2972 Condition 15(d)]

(iii) Upset conditions that cause excess emissions from the coal unloading facilities shall be recorded for each occurrence.

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

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

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

(iv) Upset conditions that cause excess emissions from the Journal Shop shall be recorded for each occurrence.

(d) Sampling and Emissions Testing

- (i) The date sampling was performed;
- (ii) The entity that performed the sampling;
- (iii) The analytical techniques used to take the sample;
- (iv) The operating conditions existing at the time of sampling or measurement to include, as a minimum for emission point source testing:
 - (1) Heat input into furnace (million Btu/hr) (EU-1 and EU-2);
 - (2) Fuel consumption rate (lb/hr);
 - (3) Air discharge flowrate (dry standard cubic feet);
 - (4) Exhaust temperature of emissions out the stack;
 - (5) Sulfur content of coal (EU-1 and EU-2);
 - (6) SO₂ reduction in percent, as a result of controls (EU-1 and EU-2); and
 - (7) Unit load on an hourly basis (megawatts);
- (v) The date analyses were performed;
- (vi) The entity that performed the analyses;
- (vii) The analytical techniques or methods used;
- (viii) The results of such analyses;
- (ix) Compliance status of each monitored requirement as described in Sections VI and VII of this permit; and
- (x) Corrective action taken in response to permit deviations and when action initiated.
- (e) General Recordkeeping (parameter logging requirements, design parameters, etc.)
 - (i) The date and time the data was collected (as applicable); and
 - (ii) The relevant parameters or data.

K2. Continuous Emission 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 SWCAA 01-2350R4 Condition 21

The permittee shall record and maintain for emission units EU-1, EU-2, EU-7, EU-8, EU-9, & EU-10 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 shall include all information required in 40 CFR Part 75.57 through 75.59 with the following:

Coal Plant

- (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]
 - (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 shall 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 a unit's generating load is 360 MW gross or greater, both units averaged together. [SWCAA 97-2057R1 Section 30]

Combustion Turbine Facility

The file shall include hourly averages of the following data for each combustion turbine exhaust stack (EU-7, EU-8, EU-9, & EU-10):

- (d) NO_X (ppmvd @ 15% O₂);
- (e) NO_X (lb/hr);
- (f) CO (ppmvd @ 15% O₂);
- (g) CO (lb/hr);
- (h) NH₃ (ppmvd @ 15% O₂);
- (i) NH₃ flow to SCR system (lb/hr);
- (j) O₂ concentration (dry volume percent);
- (k) Turbine and duct burner fuel consumption (MMBtu/hr); and
- (l) Turbine gross output and facility net electrical output (megawatts).

K3. NSPS Duct Burner Recordkeeping Requirements (Subpart Db)

40 CFR 60.49b(d) WAC 173-400-115 SWCAA 400-115 SWCAA 01-2350R4 Condition 22(l) The permittee shall record and maintain the following records for each duct burner system for EU-7, EU-8, EU-9, & EU-10:

- (a) The total amount of fuel burned each day; and
- (b) The 12-month annual capacity factor calculated at the end of each calendar month.

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.

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

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

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

U.S. EPA Region X Air Operating Permits 1200 Sixth Avenue, ATW-107 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 173-400-107
WAC 173-400-115 – where applicable
WAC 173-401-615(3)(b)
SWCAA 400-107
SWCAA 400-115 – where applicable
PSD-01-01 Amendment 2 Condition 22(d)(1)
SWCAA 97-2057R1 Sections 23, 28, 29, and 37
SWCAA 01-2403 Section 11(e)(1)
SWCAA 01-2350R4 Conditions 29(a & b)

SWCAA 11-2984 Conditions 15 and 16

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

Excess emission reports shall contain the following information:

- (a) Identification of the emission unit(s) involved;
- (b) A brief description of the event;
- (c) Duration of the event; and
- (d) Anticipated corrective action to prevent or minimize excess emissions, if any.

Upon request by the Agency, the owner(s) or operator(s) of the "source" shall submit a full written report describing the known causes, the corrective actions taken, and the preventive measures implemented to minimize or eliminate the chance of recurrence.

Reports of deviations shall include:

- (a) Whether or not the deviation is due to upset conditions;
- (b) The probable cause of the deviation; and
- (c) 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 M9, and any bypass upset (M11), shall be reported to SWCAA during the current business day or next business morning and shall be noted in the quarterly report. Permittee shall submit a written report to SWCAA of any SO₂ emission control technology forced outage longer than 72 hours. Any bypass upset shall be reported to SWCAA during the current business day or by the next business morning and shall 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 shall be reported to SWCAA no later than the next business day. The report shall include the duration and cause of the excursion (if known), and the corrective actions taken in response to the excursion.

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

R2. Complaint Reports

WAC 173-401-615(3)

SWCAA 01-2350R4 Condition 29(c)

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

R3. Quarterly Reports

40 CFR 75.64 & 75.65

Exhibit No. ___(RG-11HC)
Page 181 of 206
Air Operating Permit

TransAlta - Centralia Plant

WAC 173-401-615(3) SWCAA 97-2057R1 Sections 27d, 43, and 45 SWCAA 01-2403 Section 11(c) SWCAA 01-2350R4 Conditions 29(d – k) PSD-01-01 Amendment 2 Conditions 22(b & c) BART Order No.6426 Condition 6

<u>Coal Plant</u>: The permittee shall submit to SWCAA by April 30^{th} , July 31^{st} , October 31^{st} , and January 31^{st} for the calendar quarter periods of January through March, April through June, July through September, and October through December, respectively, the information listed below. In addition, all NO_X emission data, coal sampling results, and NO_X emission control system malfunctions shall also be reported to the Washington Department of Ecology:

- (a) Records of monthly plant inspections as described in conditions M1 through M4;
- (b) Sulfur content of the fuel oil used to fuel the auxiliary boiler (EU-3) and for startup of EU-1 and EU-2 as described in condition M6;
- (c) Hourly SO₂ concentration corrected to 7% O₂ as described in M8(a);
- (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 M10;
- (e) Average NO_X emission rate during the quarter and cumulative NO_X emission rate for the calendar year, both units averaged together (lb/million Btu, rounded to the nearest hundredth), for those hours when a unit's generating load is 360 MW gross or greater as described in K2(c);
- (f) 30 day rolling average NO_X emission rate in lb/MMBtu and tons of NO_X emitted during the current calendar year. Any malfunctions of the NO_X emission control systems must be documented in writing. All time periods that include substituted data shall be clearly identified. (BART Order No. 6426)
- (g) Estimated monthly average heating values (Btu/lb) for coal burned in the boilers of EU-1 and EU-2;
- (h) Fuel oil consumption in each boiler (Unit #1, Unit #2, and auxiliary boiler) as described in M12;
- (i) Quarterly average CO concentration for each boiler as described in M7;
- (j) Excess opacity based on 6 minute averaging periods shall 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 shall be reported if continuous opacity monitoring is not possible under stack conditions;
- (k) All instances of deviation from permit requirements to be reported as described in condition R1 shall be clearly identified; and
- (l) The nitrogen and sulfur content results of weekly coal sampling and analyses shall be reported as follows: [BART Order No. 6426]
 - (1) The report shall include the date each coal sample is taken, the nitrogen and sulfur content of each coal sample analyzed, the running average content and the maximum and minimum concentrations found during the calendar quarter.
 - (2) After the first year of sampling, the report shall include rolling annual averages for nitrogen and sulfur content plus the maximum and minimum concentrations in the prior year.

<u>Combustion Turbine Facility</u>: The permittee shall submit the following information to SWCAA no later than 31 days following the end of each quarter of the calendar year:

- (m) Records of monthly plant inspections as described in conditions M1, M2, and M3;
- (n) The hours of operation and quantity of fuel burned by each combustion turbine;
- (o) The annual capacity factor for each set of duct burners for each month of the quarter;
- (p) The number of hours the Black Stop Diesel Generator Engine operated;
- (q) The quantity of fuel burned by the BHP Auxiliary Boiler;
- (r) The quantity of ammonia used by each SCR system;
- (s) The results of all natural gas fuel sulfur content monitoring;
- (t) The quantity of NO_X, CO, NH₃, PM, VOCs and SO₂ emitted for each month of the reporting period, the total for the reporting period, and the 12-month rolling total;
- (u) All CEMS/DAS data required by M13;
- (v) Identification of any days during which NO_X CEMS data is not available;
- (w) An explanation for any missing NO_X CEMS data;
- (x) A description of any modifications to the NO_X CEMS that could affect the ability of the system to comply with 40 CFR 60 Appendix B Performance Specifications 2 or 3; and
- (y) The results of any/all CEMS drift tests and cylinder gas audits conducted during the quarter.

<u>Acid Rain</u>. The permittee's designated representative shall electronically report the data and information required in accordance with 40 CFR 75.64 and shall report excess emissions of opacity to SWCAA in accordance with 75.65.

R4. Semi-annual Reports

40 CFR 63.6650(f) 40 CFR 64.9(a)(2)(ii) WAC 173-400-075 WAC 173-401-615(3)

Consistent with WAC 173-401-615(3) the permittee shall submit to SWCAA by October 15th and April 15th for the six month periods January through June and July through December respectively, a report on the status of all monitoring requirements. All instances of deviation from permit requirements shall be clearly identified. The number, duration and cause of opacity monitor downtime incidents shall be summarized in the semi-annual report. For all EPA Method 9 or SWCAA Method 9 monitoring conducted during the semi-annual period, a copy of the relevant opacity certification(s) shall be submitted with the semi-annual report. The semi-annual report shall contain a certification of any reports submitted during the semi-annual period that have not already been certified. The certification shall be consistent with WAC 173-401-520. In addition, a Responsible Official shall certify that continuously installed monitoring equipment, if used to quantify emissions of any non-Acid Rain pollutant, is capable of monitoring the emission concentration of that pollutant.

A separate semi-annual 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

40 CFR 72.90 & 75.60 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)

- (a) <u>Annual Compliance Certification:</u> The permittee shall 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 shall submit by March 15th of the following year the following information for the period of January through December:
 - (i) Identification of each term or condition of the permit that is the basis of the certification;
 - (ii) Statement of compliance status;
 - (iii) Whether compliance was continuous or intermittent;
 - (iv) Method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615;
 - (v) Such other facts as SWCAA may require to determine the compliance status of the source;
 - (vi) The certification shall 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
 - (vi) Such additional requirements as may be specified pursuant to Sections 114(a)(3) and 504(b) of the FCAA.

- (b) <u>Coal Unloading Facilities:</u> The permittee shall submit by March 15th of the following year the following information for the period of January through December:
 - (i) The total amount of coal unloaded at each coal unloading facility;
 - (ii) The average moisture content of the coal unloaded (if this information is not provided, a conservative value of 2.7% shall be assumed); and
 - (iii) The total number of hours the Coal Unloading Facility Emergency Diesel Sump Pump Engine operated.
- (c) <u>FGD Bleed Treatment Lime Storage Silo:</u> The permittee shall 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) <u>Journal Shop:</u> The permittee shall 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.
- (e) <u>Gasoline Storage Tank:</u> The permittee shall report to SWCAA annually by March 15th for the previous calendar year the total amount of gasoline loaded into the Gasoline Storage Tank. If gasoline throughput is 10,000 gallons or more for the calendar year, the permittee shall include the monthly throughput with the report.
- (f) Filter Systems on Mercury Control System and Fly Ash Bins: The permittee shall 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, Fly Ash Bin 11 to Weigh Hopper Air Slide, and Fly Ash Bin 14 to 6050 Air Slide.

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 01-2350R4 Condition 29(n) SWCAA 08-2779 Condition 8(b) SWCAA 11-2985 Condition 17(b)

The permittee shall 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 shall 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.

Air Operating Permit

TransAlta - Centralia Plant

R7. Source Test Reports

WAC 173-401-615(3) SWCAA 97-2057R1, Section 42 SWCAA 01-2350R4, Appendix A PSD-01-01 Amendment 2 Conditions 22(a) and 22(d)(2) SWCAA 11-2984, Appendix A

Permittee shall meet the following requirements for source test reports:

- (a) For emission testing at the coal plant, 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 M8 of this permit. For emission testing at the combustion turbine facility, submit a comprehensive test plan to SWCAA for review and approval at least ten business days prior to source testing.
- (b) Notify SWCAA at least three days in advance of any testing of Boiler #1 or Boiler #2 (EU-1 or 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 shall, as a minimum, be reported in parts per million by volume, pounds per hour, and pounds per million Btu of heat input. Emissions data shall be corrected to units of the applicable standard.
- (d) For EU-1 and EU-2, include in the test report a summary of operating conditions for each test run to include, as a minimum:
 - (i) Estimated heat input into furnace (million Btu/hr);
 - (ii) Estimated fuel consumption rate (lb/hr);
 - (iii) Air discharge flowrate in dry standard cubic feet;
 - (iv) Exhaust temperature of emissions out the stack;
 - (v) Estimated sulfur content of coal;
 - (vi) Estimated SO₂ reduction in percent, as a result of controls; and
 - (vii) Unit load in megawatts on an hourly basis.
- (e) Each required source test report shall include:
 - (i) 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;
 - (ii) Time and date of the test and identification and qualifications of the personnel involved:
 - (iii) A summary of results, reported in units and averaging periods consistent with the applicable emission standard or limit;
 - (iv) A summary of control system or equipment operating conditions;
 - (v) A summary of production related parameters;
 - (vi) A description of the test methods or procedures used including all field data, quality assurance/quality control procedures and documentation;
 - (vii) A description of the analytical procedures used including all laboratory data, quality assurance/quality control procedures and documentation;
 - (viii) Copies of field data and example calculations;
 - (ix) Chain of custody information;
 - (x) Calibration documentation;
 - (xi) Discussion of any abnormalities associated with the results; and
 - (xii) A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

All test reports shall 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 shall 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 shall submit applications and reports in accordance with 40 CFR 75.63.

The designated representative shall 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.

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 listed below in subsections 1-15 where they have been identified to be non-applicable to specific emission units. Subsections 16-18 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.

1. 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., WAC 173-400-115, 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 boilers at this source have 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 have not undergone modification that would trigger the requirement since. Therefore, this regulation is not applicable.

2. 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., WAC 173-400-115, 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 boilers at this source have 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 have not undergone modification that would trigger the requirement since. Therefore, this regulation is not applicable.

3. Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (Subpart Db) 40 CFR 60.40b et seq., WAC 173-400-115, 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. This regulation is applicable to the heat recovery steam generators installed on each combustion turbine (EU-7, EU-8, EU-9, & EU-10).

4. Standards of Performance for Nonmetallic Mineral Processing Plants (Subpart OOO) 40 CFR 60.670 <u>et seq</u>., WAC 173-400-115, 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.

5. 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 shall 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 boilers 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, have not since undergone modification that would trigger the requirement. Therefore, this regulation is not applicable to EU-1, EU-2, or EU-3.

6. Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers 40 CFR 63.400 et seq., WAC 173-400-075, 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.

7. Emission Standards for Combustion and Incineration Units WAC 173-400-050(2), SWCAA 400-050(2)

WAC 173-400-050(2) prohibits emissions of carbonyls from any incinerator in excess of 100 ppm total carbonyls as measured by applicable sampling methods. Pursuant to WAC 173-400-

030(34), an incinerator is defined as "...a furnace used primarily for the thermal destruction of waste." The primary purpose of the coal-fired boilers 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.

8. Registration Program WAC 173-400-099, SWCAA 400-100

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

9. 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.

10. Requirements for New Sources in Nonattainment Areas WAC 173-400-112, SWCAA 400-112

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

11. Bubble Rules WAC 173-400-120, SWCAA 400-120

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

12. 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.

13. National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines 40 CFR Part 63.6080 et seq., Subpart YYYY

The combustion turbines at the Big Hanaford Combustion Turbine Facility (EU7, EU8, EU9, & EU10) are affected sources for the purposes of Subpart YYYY. However, existing combustion turbines (engines that commenced construction on or before January 14, 2003) are not subject to any requirements of the rule, including initial notification. Construction of the combustion turbines at this facility was commenced in 2001 and completed in 2002, therefore none of the combustion turbines at this facility are subject to any requirements of this rule.

15. National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR Part 63.6580 et seq., Subpart ZZZZ

Subpart ZZZZ is applicable to EU-11 (Black Stop Diesel Generator Engine), EU-14 (Emergency Diesel Generator #1), EU-15 (Emergency Diesel Generator #2), and EU-16

(Emergency Diesel Fire Pump). All applicable requirements of this regulation have been included as conditions of this Air Operating Permit. The following discussion was included here because there is a reporting requirement of Subpart ZZZZ that might appear to be applicable to the emergency engines at the coal plant, but which SWCAA has determined is not applicable.

40 CFR 63.6650 infers that semiannual compliance reports are required for existing emergency CI engines with a site rating of less than 500 horsepower. However, all such reporting was removed from Table 7 (which summarized the requirements of this section) in an update of the rule on 8/20/10. It would seem inappropriate to require emergency engines subject to no numeric emission or operating limit to submit semi-annual compliance status reports. Further evidence that EPA did not intend to impose semi-annual compliance reporting on these engines can be found in EPA's response to comments on the proposed rule. In a memorandum dated February 17, 2010 from Melanie King to EPA Docket EPA-HQ-OAR-2008-0708, EPA wrote:

"EPA agrees with the commenter that semiannual compliance reporting, and other types of reporting required under the General Provisions of 40 CFR part 63 are not appropriate for area sources that are not subject to numerical emission standards. EPA believes that recording information and maintaining records will provide EPA with assurance that facilities are meeting the work/management practices and other requirements applicable to their existing stationary engines. Further, EPA believes it is appropriate [to] extend the same approach to any sources that are not subject o numerical emission standards, including existing stationary CI engines less than 100 HP and existing stationary emergency CI engines..."

For the reasons described above, SWCAA had determined that the semiannual compliance reporting described in 63.6650 is not applicable to the emergency engines at the coal plant.

16. 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.

17. 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."

18. 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.

19. Standards of Performance for Coal Preparation Plants 40 CFR Part 60.250 et seq., Subpart Y, WAC 173-400-115, SWCAA 400-115

Subpart Y is not applicable to any coal handling operations at TransAlta Centralia Generation because no breaking, crushing, screening, wet or dry cleaning, and thermal drying is conducted at the site.

20. 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.

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 <u>Position</u>

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 <u>Attached Steam Plumes</u>

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

Exhibit No. (RG-11HC)
Page 193 of 206
Air Operating Permit

TransAlta - Centralia Plant

approximate distance from the emission outlet to the point in the plume at which the observations are made.

2.3.2 <u>Detached Steam Plumes</u>

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 <u>Recording Observations</u>

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 # SW-ARP-1-R1

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)

30 (Combustion Turbine 30) 40 (Combustion Turbine 40) 50 (Combustion Turbine 50) 60 (Combustion Turbine 60)

Effective: This Acid Rain permit, as part of the Centralia Plant Title V permit,

became effective upon the effective date of the Title V permit (SW-98-8-R3). The Acid Rain Permit shall have a permit term ending on September 16, 2014. Acid Rain Permit SW-ARP-1-R0-B 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						
		2009 ^a	2009	2010	2011	2012	2013	2014
BW21 (Unit #1)	Acid Rain NO _X limit (lb/MMBtu) annual average		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	
30 (Combustion Turbine 30)	Acid Rain NO _X limit		N/A ^c	N/A ^c	N/A ^c	N/A ^c	N/A ^c	
(Combustion Turbine 40)	Acid Rain NO _X limit		N/A ^c	N/A ^c	N/A ^c	N/A ^c	N/A ^c	
50 (Combustion Turbine 50)	Acid Rain NO _X limit		N/A ^c	N/A ^c	N/A ^c	N/A ^c	N/A ^c	
60 (Combustion Turbine 60)	Acid Rain NO _X limit		N/A ^c	N/A ^c	N/A ^c	N/A ^c	N/A ^c	
Facilitywide	SO ₂ allowances held	2,701 ^a	1,690 ^b	19,481 ^b	34,481 ^b	24,481 ^b	34,481 ^b	34,481 ^b

This Acid Rain Permit shall not be construed to exempt or exclude an affected unit from compliance with any other provisions of the Clean Air Act consistent with 40 CFR 72.9(h) and WAC 173-406-106(8). Additional requirements for this facility include those contained in Air Discharge Permit SWCAA 97-2057R1, Air Discharge Permit SWCAA 01-2350R4, and PSD-01-01 Amendment 2.

Table Footnotes

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

Since this unit is not a coal-fired unit, there are no applicable acid rain NO_X emission limits and a Phase II NO_X permit application is not required. A NO_X limitation is included in PSD-01-01 Amendment 2.

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

- (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 shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under WAC 173-406-103(1)(b); 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 shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7, 40 CFR 72.8, WAC 174-406-104, or WAC 173-406-105 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such an authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the Centralia Plant and each affected unit at the Centralia Plant shall 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 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

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

- 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and
- (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of the Centralia Plant and each affected unit at the Centralia Plant shall 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, shall be subject to enforcement pursuant to section 113(c) of the Act and by the permitting authority pursuant to Revised Code of Washington (RCW) 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 shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001 and by the permitting authority pursuant to RCW 70.94.430.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) The Centralia Plant and each affected unit at the Centralia Plant shall 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) shall also apply 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) shall also apply 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, shall be a separate violation of the Act.

Effect on Other Authorities

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

Exhibit No. (RG-11HC) Page 199 of 206

TransAlta - Centralia Plant

Air Operating Permit

- (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, 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.



United States Environmental Protection Agency Acid Rain Program

OMB No. 2060-0258

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.				
This submission is: 🔲 new	revised	X for Acid Rain permit renewal		

STEP 1

Identify the facility name, State, and plant (ORIS) code.

TransAlta Centralia Generation LLC	Washington	3845
Facility (Source) Name	State	Plant Code

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

а	b
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)
00384500BW21	Yes
00384500BW22	Yes
003845000030	Yes
003845000040	Yes
003845000050	Yes
003845000060	Yes
	Yes
	Yes
a a	Yes
lt.	Yes
,	Yes
ė.	Yes
	Yes

	Acid Rain - Page 2
TransAlta Centralia Generation LLC Facility (Source) Name (from STEP 1)	

Permit Requirements

STEP 3

Read the standard 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 Bain emissions limitations and emissions.
- 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)
- (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).

	Acid Rain - Page 3
TransAlta Centralia Generation LLC	555
Facility (Source) Name (from STEP 1)	

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

- (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.

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;

-	Acid Rain - Page 4
TransAlta Centralia Generation LLC Facility (Source) Name (from STEP 1)	

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

- (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.
- (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.

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

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

Acid Rain - Page 5

Effect on Other Authorities, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

STEP 3, Cont'd.

(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.

Certification

STEP 4 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 Doug Jackson	
Signature Down	Date 65 03/09
	,

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-05 on trailer (seasonally stationary), PMP-06 at ECUF (EU-18), 5429 barge (EU-17) (mobile but used year round in the same location), Unit 1 Emergency diesel Gen-01 (EU-14), Unit 2 Emergency diesel Gen-02 (EU-15), and the Emergency diesel fire pump (EU-16). This maintenance program is required to meet the federal standard requirements of 40 CFR 63 and Title 5. This maintenance plan must be fully implemented by May 3, 2013.

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 & 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 & 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, & 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.