

TransAlta Centralia Mining, LLC

Centralia Mine

Title V Basis Statement

Issued: April 27, 2017

Southwest Clean Air Agency
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PERMIT #: SW01-12-R3

PREPARED FOR: TransAlta Centralia Mining, LLC
Centralia Mine
913 Big Hanaford Road
Centralia, WA 98531-9100

PLANT SITE: Centralia Mine
1015 Big Hanaford Road
Centralia, WA 98531-9100

PERMIT ENGINEER: Clint H. Lamoreaux, Air Quality Engineer

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I. GENERAL INFORMATION AND CERTIFICATION

1. Company Name: TransAlta Centralia Mining, LLC
2. Facility Name: Centralia Mine
3. Responsible Official: Mike Lydon, Mining Manager
4. Inspection Contact Person: Tim LeDuc
5. Unified Business Identification Number: 601-985-875
6. SIC / NAICS Number: 1221 / 21211

7. Basis for Title V Applicability:

The Centralia Mine is a support facility for, and under the same ownership and control as, the adjacent power plant (TransAlta Centralia Generation, LLC). The power plant has the potential to emit more than 100 tons/yr of sulfur dioxide, nitrogen oxides, PM₁₀, and carbon monoxide, all of which are criteria air pollutants listed under the Federal Clean Air Act, more than 100 tons/yr of volatile organic compounds (VOCs), and the potential to emit more than 25 tons/yr of all hazardous air pollutant (HAP) emissions combined, which are listed under Section 112 of the Clean Air Act. TransAlta Centralia Mining, LLC has requested that a separate Title V permit be issued for the mine and the power plant.

WAC 173-401-200(19)(b) states that fugitive emissions are not counted towards Title V applicability unless the facility belongs to one of the listed source categories. Fossil fuel boilers totaling more than two hundred fifty million British thermal units per hour heat input are one of the listed source categories. TransAlta Centralia Generation fits into this category. Fugitive emissions are counted towards Title V applicability from all emission units at the listed source. The listed source encompasses all emission units at the listed source and all emission units at support facilities that are part of the source; therefore fugitive emissions were quantified below for the Centralia Mine.

Facilitywide Potential To Emit Summary (Centralia Mine Only)

Pollutant	Emissions (tons per year)
Nitrogen oxides	173.25
Carbon monoxide	85.93
Volatile organic compounds	17.37
Sulfur dioxide	16.51
Particulate Matter	117.83
PM ₁₀	49.89
PM _{2.5}	24.37
Combined HAPs	0.12
Individual HAP	0.04

Potential emissions were calculated with the assumption that all engines operate 8,760 hours per year at full rated capacity unless restricted by a permit condition. Potential fugitive dust

emissions were estimated by multiplying 2009 emissions (the year with the highest fugitive dust since active mining ceased in 2006) by 120%.

8. Current Permitting Action:

This Title V Air Operating Permit is being issued in response to a Title V renewal application submitted by TransAlta Centralia Mining, LLC in accordance with the deadline contained in Air Operating Permit SW01-12-R2. The Air Operating Permit issued in response to TransAlta's renewal application has been updated as appropriate to reflect equipment retirements and the addition of a fine coal recovery facility.

9. Attainment Area:

The Centralia Mine is located in an area that is in unclassifiable or attainment for all criteria pollutants.

10. Facility Description:

The Centralia Mine began coal mining operations in 1971 and ceased mining on November 27, 2006. The mine continues to conduct year round ditching maintenance and water treatment with major reclamation activities carried out each year during the drier summer season. No future mining is currently permitted with the exception of continued reprocessing coal mine waste located in specific impoundments constructed for those waste materials (fine coal recovery). The disposal pits are being dredged and the fine coal recovered for use at the adjacent power plant as part of the mine reclamation. Fine coal recovery began in December 2014.

The Centralia Mine was purchased in May 2000 by TransAlta Centralia Mining, LLC (TCM). TCM operated the mine through November of 2006 at which time coal production ceased. The mine is located six miles northeast of the City of Centralia in Lewis County, Washington. The mine supplied coal to the adjacent Centralia Steam Electric Generating Plant (Power Plant), which is owned and operated by TransAlta Centralia Generation, LLC. A fence divides the power plant and mine properties.

The primary purpose of the mine was to produce coal for use at the Centralia Power Plant. The entire mine was best described as a series of related processes. These processes included land preparation, mining, coal processing, and maintenance and support activities related to these operations. While coal is no longer mined, many of the related activities are still conducted as part of the overall mine reclamation process. Note that the facility does not currently have coal processing capability other than fine coal recovery.

During the mining and reclamation processes, the primary pollutant is particulate matter emitted as fugitive dust.

Raw materials used at the mine include fuel for vehicles and pump engines, sandblast grit (when in operation) and miscellaneous chemicals for parts cleaning and other incidental activities.

Reclamation Activities

As noted above, the mine is currently not producing coal with the exception of the fine coal recovery project. Activities at the mine are limited in the winter months to ditch and road maintenance, primarily with small excavators and dozers. Movement of water from one location to another is done primarily with large electric pumps, however the facility does utilize several diesel powered pumps. During the drier summer months, reclamation activities are conducted to restore the terrain to the permitted post mining topography. These activities include ditch construction, overburden and spoil material handling, and topsoil placement. Some minor amounts of land clearing may occur on an infrequent, as-needed basis. Large hydraulic loaders and trucks are used to haul material for backfilling the mined pits up to final topography. The same fleet of equipment is used to move topsoil into place once the area has been graded to the final topographic configuration. The topsoil is spread and ripped with a fleet of various sized dozers ranging from D-6 to D-11 class. A single scraper is used on a limited basis to spread rock and move soil in specific instances. Other activities in the summer include pond cleanout with smaller excavators and articulating trucks.

Heavy equipment operations cause emissions of fugitive dust. Fugitive dust emissions are inventoried by SWCAA. Pollutant emissions due to the combustion of fuel in the mobile equipment is not regulated or inventoried by SWCAA.

As part of the mine reclamation, disposal pits are being dredged and the fine coal recovered for use at the adjacent power plant. Fine coal recovery began in December 2014.

Run of Mine Coal Processing

The Run-of-Mine (ROM) coal was previously processed and cleaned prior to delivery to the adjacent power plant. During the summer of 2010 and the spring of 2011, the two previously permitted processing plants (Jig and Heavy Media) and the adjacent coal lab were demolished. As such, TransAlta Centralia Mining currently is unable to process/clean ROM coal. If any future mining at the Centralia Mine site is conducted, new processing facilities will be required. Those facilities would need to be permitted under the New Source Review provisions prior to installation.

Maintenance and Support Activities

Maintenance and support activities at the Centralia Mine include equipment servicing, parts cleaning, spray coating, abrasive blasting, fuel storage, water pumping and welding activities.

11. SWCAA Air Discharge Permits and Consent Order:

The following table lists each Air Discharge Permit and Consent Order issued for this facility. Permits or Orders in bold contain no active requirements. The requirements may have been superseded, may have been of limited duration, or the equipment may have been removed.

<u>Number</u>	<u>App. #</u>	<u>Date Issued</u>	<u>Description</u>
94-1641	L-320	8/11/1994	Modification and partial replacement of coal crushing system

<u>Number</u>	<u>App. #</u>	<u>Date Issued</u>	<u>Description</u>
94-1641R1	L-338	6/28/1996	Modification of coal crushing and PM control systems
97-1995	L-348	4/11/1997	Installation of particulate filters to control emissions of PM from spray coating and sandblasting operations
97-1995R1	L-472	1/22/2001	Replacement of the PM filters in the sandblast booth with a Torit Downflow dust collector.
01-2332	L-477	2/21/2001	Replacement of ROM system. Expansion of Heavy Media plant
01-2332R1	L-494	4/23/2002	Removal of rotary crusher spray pressure requirement (crusher was enclosed)
03-2480	N/A	8/25/2003	Consent Order between SWCAA, TransAlta and Sterling Breen Crushing to resolve temporary use of crusher without NSR
03-2481	L-518	10/2/2003	Approval for installation of two new diesel engines, one for driving a water pump, one for driving a compressor on a portable drill rig
05-2625	L-563	9/6/2005	Approval for installation of two new diesel Cat C-9 engines to drive water pumps. Superseded 03-2481.
06-2698	L-589	10/30/2006	Approval for installation of the Southeast Packwood Spoils Sump Engine. Superseded 05-2625
07-2758	L-610	11/21/2007	Approval for installation of the Sump 84 Pump Engine. Superseded 06-2698
14-3093	L-668	4/30/2014	Installation of fine coal waste reprocessing equipment.

II. EMISSIONS UNIT DESCRIPTIONS

EU-1 Sandblast Booth (Retired)

EU-2 Parts Cleaning

EU-2 consists of approximately four 30-gallon tanks containing a petroleum-based solvent (Shellsol D60 or similar) used for parts cleaning. Shellsol D60 has a VOC content of 6.5 pounds per gallon. Volatile organic compounds are released from the surface of each tank to the ambient air.

EU-3 Smudge Pots

EU-3 consists of approximately 200 smudge pots firing #1 fuel oil that are used to mark the road in active areas where haul road beds change often and electric lighting is not available. The pots are primarily a source of carbon monoxide and particulate matter emissions.

EU-4 Spray Booth (Retired)**Diesel Engines**

The facility operates 11 stationary diesel engines used to drive water pumps. The table below lists these engines and how they are categorized for the purposes of 40 CFR 63 Subpart ZZZZ. Because all of the engines are subject to specific requirements found in Air Discharge Permits or 40 CFR 63 Subpart ZZZZ, they cannot be considered insignificant emission units. Note that the permittee also operates a number of small non-road engines (compressors, welders, pumps and light plants) that are not subject to the Air Operating Permit program.

Engine Identification	Engine Horsepower	Construction Date	Subpart ZZZZ Category
Pump Engine #5453	275	2005	Existing non-emergency compression ignition engines $100 \leq \text{HP} \leq 500$ located at a major source of HAP emissions.
Pump Engine #5454	275	2005	
Sump 84 Pump Engine	225	2005	
5407	150	Pre 2002	
5419	150	Pre 2002	
5425	210	Pre 2002	
5450	210	Pre 2002	
5420	80	Pre 2002	Existing non-emergency compression ignition engines $< 100 \text{ HP}$ located at a major source of HAP emissions.
5421	90	Pre 2002	
5422	80	Pre 2002	
Southeast Packwood Spoils Sump Engine (CP-100 Sump Pump)	71	August 2006	New non-emergency compression ignition engine located at a major source of HAP emissions (only subject to 40 CFR 60 Subpart IIII)

EU-5 Pump Engine #5453

This engine is used to drive a water pump. Specific engine information is listed below:

Engine Make:	Caterpillar
Engine Model:	C9
Engine Serial Number:	CLJ08535
Engine Horsepower:	275 horsepower
Year Built:	2005
Fuel Type:	Diesel
Certification:	EPA Tier II non-road

EU-6 Pump Engine #5454

This engine is used to drive a water pump. Specific engine information is listed below:

Engine Make:	Caterpillar
Engine Model:	C9
Engine Serial Number:	CLJ08536

Engine Horsepower: 275 horsepower
 Year Built: 2005
 Fuel Type: Diesel
 Certification: EPA Tier II non-road

EU-7 Sump 84 Pump Engine

This engine is used to drive a water pump. The pump has been initially located at Sump 84. Specific engine information is listed below:

Engine Make: John Deere
 Engine Model: 6068H
 Engine Serial Number: 020535
 Engine Horsepower: 225 horsepower
 Built: 2005
 Fuel Type: Diesel
 Certification: EPA Tier III

EU-8 Southeast Packwood Spoils Sump Engine (CP-100)

This engine is used to drive a water pump. Specific engine information is listed below:

Engine Make: John Deere
 Engine Model: 4045D
 Engine Serial Number: 605949
 Engine Horsepower: 71 horsepower
 Built: August 2006
 Fuel Type: Diesel
 Certification: EPA Tier II marine (same specifications as EPA Tier II nonroad)

Table of Grandfathered Engines

EU #	Unit Identification	Engine Make/Model	Engine Horsepower	Construction Date
EU-9 (Retired)				
EU-10	5419	Caterpillar 3208	150	Pre 2002
EU-11	5425	Caterpillar 3306	210	Pre 2002
EU-12	5420	Isuzu B-4BG1	72	Pre 2002
EU-13	5421	Caterpillar 3304	90	Pre 2002
EU-14	5422	Isuzu B-4BG1	72	Pre 2002
EU-15 (Removed in 2014)				
EU-16 (Removed in 2014)				
EU-17 (Removed in 2013)				
EU-18	5407	Caterpillar 3208	150	Pre 2002
EU-19	5450	Caterpillar 3306	210	Pre 2002

EU-20 Fine Coal Recovery

The recovered coal passes through the following transfer points downstream of the centrifuge:

Transfer Point (TP)	Emission Control Notes
TP-01 (screen bowl centrifuge to clean coal collection conveyor)	Fully enclosed and in the process building
TP-02 (clean coal collection conveyor to 48" conveyor)	Fully enclosed
TP-03 (48" conveyor to conveyor over Big Hanaford Road)	Fully enclosed
TP-04 (transfer either to existing conveyor to directly feed power plant or transfer to fixed stacker for periods when the power plant is not running. A flop gate directs the flow.)	Fully enclosed
TP-05 (discharge from the stacking conveyor to clean coal stockpile – estimated to be 15% of total throughput)	High pressure suppression as necessary at stacker discharge.

Conveyor Descriptions

Conveyor from TP-01 to TP-02 (Clean Coal Collection Conveyor): This 24" conveyor passes through the process building wall and is covered, but not fully enclosed, where it exits the building.

Conveyor from TP-02 to TP-03: 48" conveyor running along the south side of Parking Lot #2. This conveyor is covered but not fully enclosed.

Conveyor from TP-03 to TP-04 (conveyor over Big Hanaford Road): This conveyor is fully enclosed with the exception of some portal sized openings and open sides for a short distance near the head and tail pulleys.

Conveyor from TP-04 to Power Plant: This is an existing conveyor that runs along the south side of the coal plant stockpile and feeds the power plant.

Conveyor to TP-04 to Stockpile: This is an existing stacker that was re-located to this fixed location. This is a 250' long enclosed conveyor with a downspout.

Note that the fine coal recovery process is subject to 40 CFR 60 Subpart Y "Standards of Performance for Coal Preparation and Processing Plants".

The first recovered coal was produced December 2, 2014. The first recovered coal was transported out of the building on the conveyors on December 3, 2014.

III. EXPLANATION OF INSIGNIFICANT EMISSIONS UNIT DETERMINATIONS

Each emission unit listed as insignificant in the permit has been reviewed by SWCAA to confirm its status. Emission units were determined to be insignificant as follows:

IEU-1 Large Storage Tanks

IEU-1 consists of two 50,000 gallon diesel storage tanks, three 20,000 gallon portable diesel storage tanks, two 15,000 gallon gasoline storage tanks (one of which has been decommissioned and is no longer in use), and one 12,000 gallon antifreeze tank. These tanks are insignificant according to WAC 173-401-530(4) because emissions are below the threshold levels set by that regulation. The 50,000 gallon diesel storage tank is the largest potential emitter of the tanks. Using the Tanks 4.0 emission estimation program supplied by the EPA, annual emissions from one 50,000 gallon diesel storage tank total less than 48 pounds per year. The insignificant emission unit threshold level designated by WAC 173-401-530(4) is 2.0 tons per year of volatile organic compounds.

IEU-2 Categorically Exempt Emission Units

IEU-2 consists of lubricating oil tanks, oxygen storage tanks, and portable drums and totes. All of these tanks are categorically defined as insignificant emission units in WAC 173-401-532.

IEU-3 Welding

IEU-3 consists of approximately 38 welding sources used throughout the mine. Welding operations are used to repair the large mining equipment. On average the welding operations consume between 5 and 25 pounds of welding rod or welding wire per day. Welding at the Centralia Mine is insignificant as defined by WAC 173-401-533(2)(i) because less than one ton of welding rod is consumed per day.

IEU-4 Space Heaters

IEU-4 consists of one or more 600,000 Btu/hr "salamander" space heaters. These units are insignificant as defined by WAC 173-401-533(2)(g) because they combust kerosene, #1 fuel oil, or #2 fuel oil and consume less than one million Btu of fuel per hour each.

IEU-5 Small Storage Tanks

IEU-5 consists of approximately six used motor oil tanks (200, 250, 300, 1,500 (2), and 10,000 gallons), one used gear oil tank (1,000 gallons), one stove oil tank (2,500 gallons), one small diesel tank (500 gallons), two kerosene tanks (350 and 500 gallons), three used antifreeze tanks (two 1,000 and one 3,700 gallons), and one or more propane tanks (<40,000 gallons). These storage tanks are all insignificant as defined by WAC 173-401-533 because of size or fluid composition.

IEU-6 Fugitive Emissions

IEU-6 consists of fugitive emissions of particulate matter from the active mining/reclamation areas, truck loading, haul road losses, scraper operation, newly reclaimed area, and truck dumping. These operations are classified as insignificant emission units by WAC 173-401-530(1)(d) because they generate only fugitive emissions.

IV. EXPLANATION OF SELECTED PERMIT PROVISIONS AND GENERAL TERMS AND CONDITIONS

P11. Unavoidable Excess Emissions

[SWCAA 400-107]

SWCAA 400-107 establishes criteria and procedures for determining when excess emissions are considered unavoidable. Excess emissions that are classified as unavoidable by the criteria in SWCAA 400-107 must be reported as excess emissions but are excused from penalty. Notification of excess emissions is required as soon as possible and shall occur no later than 48 hours following the excess emissions event. Excess emissions due to startup or shutdown conditions are considered unavoidable if the permittee meets several criteria, including adequately demonstrating the excess emissions could not have been prevented through careful planning and design. Excess emissions due to an upset or equipment malfunction are considered unavoidable if the permittee adequately demonstrates the upset event was not caused by poor or inadequate design, operation, maintenance, or other reasonably preventable condition, and the permittee takes appropriate corrective action that minimizes emissions during the event, taking into account the total emissions impact of that corrective action.

It is unlikely that any of the permittee's emission units can cause excess emissions due to startup, shutdown or scheduled maintenance.

G10. Portable Sources

[SWCAA 400-110(6) - local only, SWCAA 400-110(5) – SIP only, SWCAA 300-036 – local only]

SWCAA 400-110 establishes procedures for approving the operation of portable sources of air emissions that locate temporarily at project sites. These requirements apply to all portable sources of air contaminants. Common equipment subject to these conditions include emergency generators, engine-powered pumps, rock crushers, concrete batch plants, and hot mix asphalt plants that operate for a short time period at a site to fulfill the needs of a specific contract. Portable sources exempt from registration under SWCAA 400-101 are exempt from SWCAA 400-110 and not subject to the portable sources requirements. Among those categories listed in SWCAA 400-101 that are exempt are operations with potential to emit less than 1 ton per year of all criteria pollutants other than PM_{2.5}, and less than 0.5 tons per year of PM_{2.5}.

SWCAA 400-036 provide provisions under which SWCAA can approve operation of portable sources that do not have a valid air discharge permit issued by SWCAA, but do have a valid approval issued by another Washington authority. A portable rock crushing facility would be one of the more common examples of a source that could utilize these provisions.

V. EXPLANATION OF OPERATING TERMS AND CONDITIONS**Req. 1-7 General Standards for Maximum Emissions**

[SWCAA 400-040]

SWCAA 400-040 establishes maximum emission standards for various air contaminants. These requirements are general standards that apply to all sources of air contaminants. Therefore, these requirements apply to all emission units at the source, both EU and IEU. Pursuant to WAC 401-530(2)(c), the permit does not contain any testing, monitoring, recordkeeping, or reporting requirements for IEUs except those specifically identified by the underlying requirements.

Req-6 prohibits any concealment or masking. At present, the permittee does not operate any equipment capable of masking emissions, therefore monitoring is limited to the annual compliance certification.

Req. 8 Emission Standards for General Process Units

[SWCAA 400-060]

SWCAA 400-060 establishes maximum particulate matter emission standards for general process units. These requirements apply to all general process units at the source, both EUs and IEUs. Pursuant to WAC 401-530(2)(c), the permit does not contain any testing, monitoring, recordkeeping, or reporting requirements for IEUs except those specifically identified by the requirements as applying to IEUs.

EPA Method 5 is listed as the Reference Method test for Req-8. However, EPA Method 5 currently has no applicability to TransAlta's facility because there are currently no general process units configured with a point source exhaust. In the past, the only emission unit configured with a point source exhaust was the spray booth. The sandblasting booth was not configured to exhaust to the ambient air but could have been so configured. Even though both the spray booth and sandblast booth have been retired, this requirement was retained in case any other general process unit came on-site or an IEU was reconfigured.

Req. 9 Emission Standards for Certain Source Categories - Abrasive Blasting

[SWCAA 400-070(8)]

SWCAA 400-070 establishes emission standards for seven specific source categories. The requirements of SWCAA 400-070(8) apply due to the potential use of abrasive blasting for equipment maintenance. SWCAA 400-070(8) requires that abrasive blasting be conducted inside a booth or structure designed to capture the blast grit, overspray, and removed material, except for blasting of outdoor structures and items too large to be reasonably handled inside an enclosure. Outdoor blasting is to be performed with either steel shot or an abrasive material containing less than 1 percent by mass material that would pass through a No. 200 sieve. Precautions to minimize emissions, such as enclosure of the area being blasted with tarps, are to be used for outdoor blasting. The Centralia Mine has retired their blast booth because they no longer found the need to conduct abrasive blasting after the end of active mining operations. For this reason monitoring is limited to the annual compliance certification.

Req. 10 - 19 Air Discharge Permit for Diesel Engines
[SWCAA 07-2758]

Air Discharge Permit 07-2758 approved the installation of the Sump 84 Pump Engine and carried forward the requirements for diesel engines from Air Discharge Permit 06-2698. Air Discharge Permit 06-2698 approved the installation of the Southeast Packwood Spoils Sump Engine and carried forward the requirements for diesel engines from Air Discharge Permit 05-2625. Air Discharge Permit 05-2625 approved the installation of two new diesel engines at the facility and carried forward requirements established in SWCAA 03-2481. Air Discharge Permits 03-2481, 05-2625, 06-2698, and 07-2758 established emission and operating limits below levels where add-on emission control equipment would be required to meet BACT.

Req. 19 - 20 Engine Requirements Originating from 40 CFR 60 Subpart IIII
[40 CFR 60 Subpart IIII]

40 CFR 60 Subpart IIII established emission limitations and operating requirements for "new" compression ignition engines. The only applicable unit at this facility is the Southeast Packwood Spoils Sump Engine. All of the applicable requirements for this engine have been included in the Air Operating Permit. Note that both Air Discharge Permit 07-2758 and Subpart IIII limit the sulfur content of the diesel fuel burned in this unit.

Req. 21 - 25 Engine Requirements Originating from 40 CFR 63 Subpart ZZZZ
[40 CFR 63 Subpart ZZZZ]

40 CFR 63 Subpart ZZZZ established emission limitations and operating requirements for various categories of reciprocating engines. The engines at this facility fall into two categories of engines regulated by Subpart ZZZZ. All of the applicable requirements for these engines have been included in the Air Operating Permit. One requirement requires that engines be maintained "according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions." The permittee submitted a maintenance plan for their stationary diesel engines to SWCAA on March 16, 2011. The portions of the maintenance plan relevant to engine emissions are applicable requirements and are listed in Req-22.

Req. 26 - 33 Fine Coal Recovery
[40 CFR 60 Subpart Y and SWCAA 14-3093]

The applicable provision of 40 CFR 60 Subpart Y for coal processing were included in Air Discharge Permit 14-3093 for the fine coal recovery facility. It should be noted that although Condition 3 of Air Discharge Permit 14-3093 applies the opacity limit on a 1-hour average basis, Subpart Y appears to apply the limitation on a 6-minute average, therefore the Title V permit language clarifies that the standard applies on a 6-minute average basis.

VI. EXPLANATION OF OBSOLETE AND FUTURE REQUIREMENTS

1. Obsolete Air Discharge Permits

SWCAA Air Discharge Permit 94-1641 was issued on August 11, 1994 in response to Air Discharge Permit (ADP) Application L-320. ADP Application L-320 requested approval to modify and partially replace the coal crushing system. SWCAA Air Discharge Permit 94-1641 was superseded by Air Discharge Permit 94-1641R1 on June 28, 1996 in response to ADP Application L-338. ADP Application L-338 requested approval to modify the dust suppression system because of operational problems with the original system. Air Discharge Permit 94-1641R1 is obsolete because the affected equipment was removed in 2011.

SWCAA Air Discharge Permit 97-1995 was issued on April 11, 1997 in response to ADP Application L-348. ADP Application L-348 requested approval to modify the existing spray coating and sandblasting ventilation systems. SWCAA Air Discharge Permit 97-1995 was superseded by Air Discharge Permit 97-1995R1 on November 22, 2000 in response to ADP Application L-472. ADP Application L-472 requested approval to replace the existing sandblast booth box filtration system with a more efficient cartridge filtration system.

SWCAA Air Discharge Permit 01-2332 was issued on February 21, 2001 in response to ADP Application L-477. ADP Application L-477 requested approval to add new coal processing equipment. The new coal processing equipment would eventually replace the Jig Processing Plant and associated rotary-crusher and coal handling equipment. SWCAA Air Discharge Permit 01-2332 was superseded by Air Discharge Permit 01-2332R1 on April 23, 2002 in response to ADP Application L-494. ADP Application L-494 requested the removal of emission limits and monitoring requirements related to the new rotary crusher because complete enclosure of the unit had rendered these conditions obsolete. Air Discharge Permit 01-2332R1 is obsolete because the affected equipment was removed in during the summer of 2010 and the spring of 2011.

SWCAA Air Discharge Permit 03-2481 was issued on October 2, 2003 in response to ADP Application L-518. ADP Application L-518 requested approval to add two new diesel engines to the facility. Air Discharge Permit 03-2481 was superseded by Air Discharge Permit 05-2625 on September 6, 2005 in response to ADP Application L-563. ADP Application L-563 requested approval to add two new diesel engines used to drive water pumps. The requirements from Air Discharge Permit 03-2481 were carried forward in Air Discharge Permit 05-2625. Air Discharge Permit 05-2625 was superseded on October 30, 2006 by Air Discharge Permit 06-2698 in response to ADP Application L-563. ADP Application L-563 requested approval to install the Southeast Packwood Spoils Sump Engine. The requirements from Air Discharge Permit 05-2625 were carried forward in Air Discharge Permit 06-2698. ADP Application L-610 requested approval to install the Sump 84 Pump Engine. Air Discharge Permit 07-2758 approved the installation of the Sump 84 Pump Engine and carried forward the requirements for diesel engines from Air Discharge Permit 06-2698.

2. Future Requirements

No future requirements are anticipated.

VII. EXPLANATION OF MONITORING TERMS AND CONDITIONS

M1. Visible Emission Monitoring

This monitoring requirement is used to provide a reasonable assurance of compliance with the applicable requirements drawn from SWCAA 400, SWCAA 07-2758, and SWCAA 14-3093. With the exception of the requirements drawn from SWCAA 14-3093, these requirements do not directly establish any specific regime of monitoring or recordkeeping. Consequently, SWCAA has implemented monitoring and recordkeeping requirements under the "gap filling" provisions of WAC 173-401-615.

M1 requires a survey of EU-20 to identify potential visible emissions. If emissions are not apparent during the initial survey, it is highly unlikely that the source is violating particulate matter or opacity standards and it is unnecessary to perform a formal Method 9 opacity observation. Visible emissions from the remaining emission units are unlikely and/or are only addressed by generally applicable requirements; therefore opacity observations have only been required when indicated by a complaint if otherwise unusual emissions are observed.

EU-3 consists of lighting pots combusting kerosene. It is possible for kerosene combustion to produce limited opacity, but based on past observations of this source it is highly unlikely that opacity in excess of the 20% standard could be achieved, and therefore opacity observations have only been required when indicated by a complaint if otherwise unusual emissions are observed. In addition, the lighting pots of EU-3 are re-fueled frequently and already under daily observation for re-fueling and maintenance purposes.

M2. Complaint Monitoring

This monitoring requirement is used to provide a reasonable assurance of compliance with the applicable requirements drawn from SWCAA 400, and SWCAA 14-3093. These requirements do not directly establish any specific regime of complaint monitoring or recordkeeping. Consequently, SWCAA has implemented monitoring and recordkeeping requirements under the "gap filling" provisions of WAC 173-401-615. M3 is designed to assure compliance through prompt complaint response and corrective action whenever necessary.

M3. Diesel Engines Operations Monitoring

This monitoring requirement is used to provide a reasonable assurance of compliance with the applicable requirements drawn from SWCAA 07-2758, 40 CFR 60 Subpart IIII, and 40 CFR 63 Subpart ZZZZ. These requirements do not directly establish any specific regime of fuel sulfur content monitoring or recordkeeping. Consequently, SWCAA has implemented fuel sulfur content monitoring and recordkeeping requirements for pump engines 5453 and

5454, the Sump 84 Pump Engine, and the Southeast Packwood Spoils Sump Engine under the "gap filling" provisions of WAC 173-401-615.

Where Subpart ZZZZ requires that certain maintenance activities be undertaken every 500-1,000 hours or annually, whichever comes first, it does not include any provision for monitoring hours of operation. SWCAA has required the permittee to document the hour meter reading at each incident of maintenance and repairs under the "gap filling" provisions of WAC 173-401-615. Since maintenance activities must occur at least once per year, this means that at least once per year there will be written documentation of the number of hours of operation between maintenance events. Also, at any time after the first maintenance event, the permittee or the inspector can compare the hour meter reading for an engine to the hour meter reading during the last maintenance event to determine whether the maintenance schedule is being met.

M4. Subpart ZZZZ Performance Testing Requirements

This monitoring requirement consists of applicable requirements found in 40 CFR 60 Subpart ZZZZ. Only the category of engines subject to numerical emission limits require performance testing. For the existing non-emergency compression ignition engines $100 \leq \text{HP} \leq 500$ horsepower, only an initial performance test is required by Subpart ZZZZ. EPA determined that subsequent performance testing was not justified in the rule to demonstrate compliance with the numerical emission limits in this size category. Subsequent performance testing is required only if engines are rebuilt or overhauled, or if an exhaust catalyst is replaced because these activities can affect the emission rates from the engine. In EPA's February 17, 2010 response to comments on proposed revisions to Subpart ZZZZ, EPA wrote:

"EPA believes that it is appropriate to require testing for stationary engines that have been rebuilt or overhauled even though the engines may only normally be required to conduct an initial performance test and no subsequent testing. The rebuilding or overhaul of the engine may change the combustion characteristics of the engine."

In a separate section EPA wrote:

"As the commenters noted, the rule does not specify a time for conducting a performance test after a catalyst change. However, the performance test after a catalyst change should be conducted as soon as possible to demonstrate that the engine is still in compliance with the applicable standards."

40 CFR 63 Subpart ZZZZ requires only an initial performance test for existing non-emergency compression ignition engines ≤ 500 horsepower because subsequent testing was not considered worthwhile for engines in this size category. For larger engines, performance tests must be completed every 3 years or 8,760 hours of operation, whichever comes first. It appears that EPA has determined that this testing frequency is adequate to provide a reasonable assurance of compliance with more stringent limitations on engines over 500 horsepower. SWCAA added periodic testing of engines subject to numeric emission limits under the "gap filling" provisions of WAC 173-401-615 because

combustion characteristics could change with usage and no other surrogate measure of compliance was available. Because operating hours are being monitored, SWCAA chose the more flexible option of testing each applicable engine at least once every 8,760 hours of operation without including the 3 year deadline. SWCAA does not expect that combustion characteristics will degrade significantly when the engines are not operating.

M5. Subpart Y Visual Observation Requirements

This monitoring requirement consists of applicable monitoring requirements found in 40 CFR 60 Subpart Y and SWCAA 14-3093 for the Fine Coal Recovery Facility. The initial performance testing has been completed. Fine coal recovery at this facility is a fully enclosed process of separating waste coal from a water slurry, and the equipment with the potential to generate dust is handling equipment (conveyors and drop points) downstream of the separation equipment. This requirement provides a reasonable assurance of compliance with general requirements to control fugitive dust.

VIII. EXPLANATION OF RECORDKEEPING TERMS AND CONDITIONS

K1. Basic Recordkeeping

This condition contains recordkeeping requirements from SWCAA 14-3093, SWCAA 07-2758), and 40 CFR 60.7 (applies to required inspections and opacity observations for the Fine Coal Recovery facility), and general recordkeeping requirements of WAC 173-401-615(2). Recordkeeping requirements were separated into Sections (a) through (e) to organize the requirements.

K2. Fine Coal Recovery Recordkeeping

This condition contains all the recordkeeping requirements for the Fine Coal Recovery Facility from 40 CFR Subpart Y and SWCAA 14-3093.

K3. 40 CFR 63 Subpart ZZZZ Recordkeeping

This condition contains the specific recordkeeping requirements for the stationary engines subject to 40 CFR 63 Subpart ZZZZ. This requirement applies to all of the engines at this facility except EU-8. In accordance with 40 CFR 63.6590(c)(7), the Southeast Packwood Spoils Sump Engine (EU-8) is not subject to these requirements because it is a newer engine that must comply with Subpart ZZZZ by complying with 40 CFR 60 Subpart IIII.

IX. EXPLANATION OF REPORTING TERMS AND CONDITIONS

R1. Deviations from Permit Conditions

This reporting section is taken directly from 40 CFR 63.6640 (Subpart ZZZZ), WAC 173-401-615(3), SWCAA 400-107, SWCAA 07-2758, and SWCAA 14-3093. The permittee is required to report all permit deviations no later than 30 days following the end of the month

during which the deviation is discovered. Permit deviations due to excess emissions from all units except EU-2 (parts cleaning) and EU-3 (smudge pots) must be reported to SWCAA as soon as possible. SWCAA may request a full report of any deviation if determined necessary. These deviations are also reported in each semi-annual report.

R2. Complaint Reports

The permittee is required to report all complaints to SWCAA within three business days of receipt to ensure prompt complaint response. This reporting section is based on WAC 173-401-615(3).

R3. Semi-annual Reports

The permittee is required to provide a report on the status of all monitoring records and provide a certification of all reports on a semi-annual basis. Semi-annual reporting and certification of monitoring records is required by WAC 173-401-615(3). The semi-annual report provides information on the status of all required monitoring. The actual results (e.g. measured pressure drops, opacity readings, etc.) do not need to be submitted unless specifically required by the permit.

40 CFR 63.6650 requires semi-annual submittal of a compliance report for specific classifications of "existing" engines. Until SWCAA receives delegation of 40 CFR 63 Subpart ZZZZ, these compliance reports must be submitted to EPA Region 10 as well as SWCAA.

A Responsible Official must certify all reports required by the Title V permit.

R4. Annual Reports and Compliance Certification

Annual Compliance Certification: The permittee is required to report and certify compliance with all permit terms and conditions on an annual basis. Annual compliance certification is required by WAC 173-401-630(5). Any reports of deviations from permit conditions or certifications of intermittent compliance need to be accompanied by an explanation.

Annual Report: The contents of the annual report are specified. All of the report elements are used to calculate annual emissions.

R5. Emission Inventory Reports

The permittee is required to report an inventory of emissions from the source, and certify compliance with all permit terms and conditions on an annual basis. The annual emissions inventory must be submitted to SWCAA by March 15th for the previous calendar year as provided in SWCAA 400-105. A complete emissions inventory includes quantifiable emissions from all EUs described in Section II and the IEUs described in Section III. Emissions from equipment comprising IEUs 2, 4, and 5 may not be quantifiable. The majority of the emissions from this facility are fugitive and are emitted from IEU-6. Emissions from non-road mobile engines are not addressed by this permit or inventoried.

Other non-road engines (e.g. portable welders and light poles) are not addressed by this permit.

R6. Source Test Reports

This reporting section is taken from SWCAA 400-106. This requirement applies to performance testing of the Fine Coal Recovery Facility required by 40 CFR 60 Subpart Y and carbon monoxide testing of engines conducted to satisfy 40 CFR 63 Subpart ZZZZ. The permittee must report test results within 45 days of test completion to allow timely review by SWCAA. Operating conditions must be included to relate emissions to the method of operation.

R7. Subpart ZZZZ Notification Requirements

This reporting section summarizes the reporting requirements of 40 CFR 63 Subpart ZZZZ as it applies to the permittee's engines. Until EPA delegates enforcement of Subpart ZZZZ to SWCAA, all notifications must be sent to EPA as well as SWCAA.

As required by 40 CFR 63.6645(a) and 40 CFR 63.9(b), initial notification is required for the Permittee's engines that are existing non-emergency compression ignition engines $100 \leq \text{HP} \leq 500$. In accordance with 40 CFR 63.9(b)(1)(iii):

"Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under § 63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph."

The Permittee has submitted Air Discharge Permit applications for all of the engines that would be required to provide initial notification. For each application, SWCAA has developed an Air Discharge Permit and shared these permits with EPA Region 10; therefore all initial notification requirements have been satisfied.

X. COMPLIANCE HISTORY

The following Notices of Violation (NOV) were issued since the beginning of the last full permit term (January 10, 2012).

NOV#	Date Issued	Notes
5265	10/21/2014	This NOV was issued for late submittal (by 4 days) of the semi-annual report required by 40 CFR 63 Subpart ZZZZ for the first half of 2014.

XI. APPENDICES

Appendix A contains the method by which visible emissions from the permittee's operations are to be evaluated when performing required monitoring.

Appendix B contains the manufacturer's emissions-related maintenance requirements for the Southeast Packwood Spoils Sump Engine (CP-100). 40 CFR 60.4211 requires that this engine be operated in accordance with these requirements.

XII. PERMIT ACTIONSAir Operating Permit SW01-12-R1

- | | |
|--|--------------------|
| 1. Renewal Permit Application Submitted: | August 30, 2006 |
| 2. Permit Application Deemed Complete: | September 13, 2006 |
| 3. Permit Application Sent to EPA: | September 22, 2006 |
| 4. Draft Permit (SW01-12-R1) Issued: | September 22, 2006 |
| 5. Proposed Permit (SW01-12-R1) Issued: | October 31, 2006 |
| 6. Final Permit (SW01-12-R1) Issued: | January 10, 2007 |

Air Operating Permit SW01-12-R1-A

- | | |
|---|-------------------|
| 1. "Reopening for Cause" Letter to Permittee: | July 20, 2007 |
| 2. Draft Permit Issued: | February 22, 2008 |
| 3. Proposed Permit Issued: | April 8, 2008 |
| 4. Final Permit Issued: | June 4, 2008 |

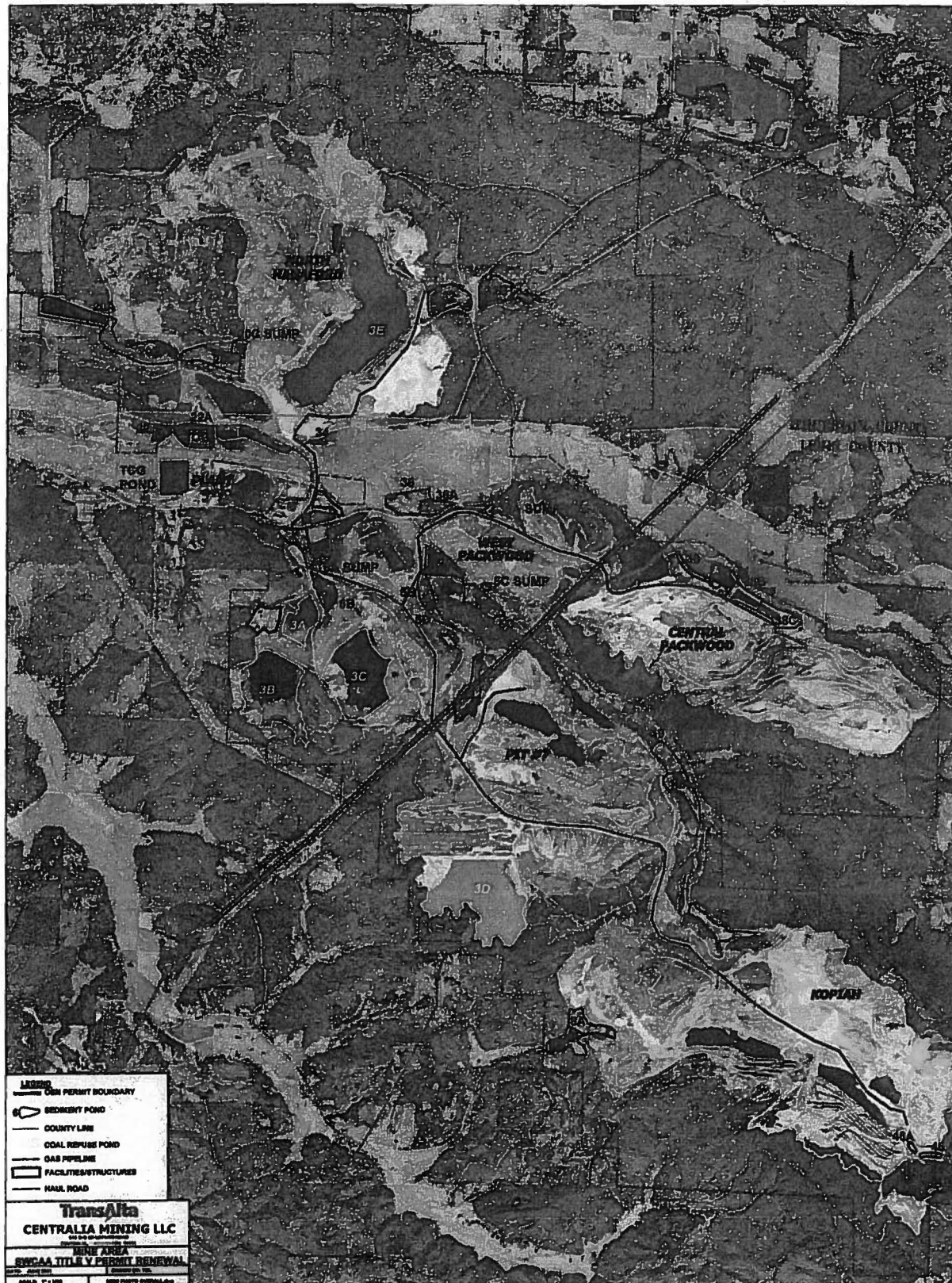
Air Operating Permit SW-01-12-R2

- | | |
|--|-------------------|
| 1. Renewal Permit Application Submitted: | July 8, 2011 |
| 2. Permit Application Deemed Complete: | August 19, 2011 |
| 3. Permit Application Sent to EPA: | August 19, 2011 |
| 4. Draft Permit (SW01-12-R2) Issued: | October 6, 2011 |
| 5. Proposed Permit (SW01-12-R2) Issued: | November 22, 2011 |
| 6. Final Permit (SW01-12-R2) Issued: | January 10, 2012 |

Air Operating Permit SW-01-12-R3

- | | |
|--|-------------------|
| 1. Renewal Permit Application Submitted: | December 10, 2015 |
| 2. Permit Application Deemed Complete: | January 7, 2016 |
| 3. Permit Application Sent to EPA: | January 25, 2017 |
| 4. Draft Permit (SW01-12-R3) Issued: | January 25, 2017 |
| 5. Proposed Permit (SW01-12-R3) Issued: | March 7, 2017 |
| 6. Final Permit (SW01-12-R3) Issued: | April 27, 2017 |

XIII. FACILITY LAYOUT



Appendix A
Applicable Requirement Review

Air Discharge Permit 07-2758 (Diesel Engines)

Requirement	Title V Permit Location	Comments
1 (NO _x limit for Unit 5452 Engine)	—	This unit has been permanently removed from service. See 9/22/2011 e-mail with Tim LeDuc.
2 (CO limit for Unit 5452 Engine)	—	This unit has been permanently removed from service. See 9/22/2011 e-mail with Tim LeDuc.
3 (NO _x limits for Pump Engines 5453 and 5454)	Req-10	
4 (CO limits for Pump Engines 5453 and 5454)	Req-11	
5 (NO _x limit for SE Packwood Spoils Sump Engine)	Req-12	This engine also referred to as "CP-100"
6 (CO limit for SE Packwood Spoils Sump Engine)	Req-13	This engine also referred to as "CP-100"
7 (NO _x limit for Sump 84 Pump Engine)	Req-14	
8 (CO limit for Sump 84 Pump Engine)	Req-15	
9 (Visible emissions limit for several engines)	Req-16	
10 (Operating limit for Unit 5452)	—	This unit has been permanently removed from service. See 9/22/2011 e-mail from Tim LeDuc.
11 (Time totalizer installation)	Req-17	
12 (Fuel quality)	Req-18, 19 and M4	
13 (Informational condition requiring compliance with permit)	None	This condition is informational in nature and not a separately enforceable requirement or one for which a compliance certification is appropriate.
14 (Upset recordkeeping and reporting)	K1 and R1	
15(a) (Recording of hours run)	M3	
15(b) (Upset recordkeeping)	K1	
16 (Recordkeeping details)	Section VIII	

Requirement	Title V Permit Location	Comments
17 (Record retention)	Section VIII	
18(a) (Reporting of hours run)	R4	
18(b) (Emissions inventory)	R5	
19 (Upset reporting)	R1	

Air Discharge Permit 14-3093 (Issued for approval of Fine Coal Recovery Facility)

Requirement	Title V Permit Location	Comments
1 (PM emission limits)	Req-26	
2 (Visible emission limits)	Req-27	
3 (Visible emission limits)	Req-28	
4 (Control of stacking)	Req-29	
5 (Stockpile watering)	Req-30	
6 (Spray/fog nozzle maintenance)	Req-31	
7 (Wet suppression)	Req-32	
8 (Control plan for Subpart Y stockpile)	Req-33	
9 (Informational condition requiring compliance with permit)	—	This condition is informational in nature and not a separately enforceable requirement or one for which a compliance certification is appropriate.
10 (Monthly inspection)	M1, K1	
11 (General recordkeeping)	K2	
12 (Subpart Y Records)	K2	
13 (Recordkeeping details)	K1	
14 (Record retention)	Section VIII	
15 (Subpart Y visual monitoring)	M5	
16 (Initial notification of installation)	—	One-time requirement completed December 8, 2014.
17 (Excess emissions reporting)	R1	
18 (Deviation reporting)	R1	
19 (Subpart Y Method 9 reporting)	R6	Initial test submitted by letter dated July 8, 2015. Under anticipated compliance option, no further reports to EPA required.
20(a-c) (Annual reporting)	R4	

Requirement	Title V Permit Location	Comments
20(d) (Emissions inventory)	R5	

40 CFR 60 Subpart Y – Standards of Performance for Coal Preparation and Processing Plants

Requirement	Title V Permit Location	Comments
60.250	—	"Applicability"
60.251	—	"Definitions"
60.252	—	"Standards for thermal dryers." No thermal dryers at this facility.
60.253	—	"Standards for pneumatic coal-cleaning equipment." No pneumatic coal-cleaning equipment at this facility.
60.254(a)	—	"Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles." This section applies only to equipment constructed, reconstructed or modified before 4/28/2008. The affected equipment was constructed in 2014.
60.254(b)	Req-28	"Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles." 10% opacity limit from (b)(1) is found in Req-28. The PM concentration limit from (b)(2) applies only to mechanical vents which this facility does not utilize.
60.254(c)	Req-33	"Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles." Requirement to develop and operate in accordance with a fugitive dust control plan for affected clean coal stockpiles. At this time there are no affected stockpiles. Coal is transferred directly to TransAlta Centralia Generation without stockpiling.
60.255(a)	—	"Performance tests and other compliance requirements." Requirements for facilities constructed on or before 4/28/2008. This section applies only to equipment constructed, reconstructed or modified before 4/28/2008. The affected equipment was constructed in 2014.
60.255(b)	M5	"Performance tests and other compliance requirements." This section describes the opacity observation requirements. An alternative compliance demonstration method for on-going monitoring is contained in 60.255(f).
60.255(c)	—	"Performance tests and other compliance requirements." This section describes the fact that compliance for affected equipment enclosed within a building can be evaluated at the building envelope. Informative in nature rather than a direct requirement. At this facility all equipment within the building is also itself fully enclosed.
60.255(d)	—	"Performance tests and other compliance requirements." This section contains a compliance alternative for facilities using certain PM control devices. No applicable control devices at this facility.

Requirement	Title V Permit Location	Comments
60.255(e)	—	"Performance tests and other compliance requirements." Administrator testing option applicable to identical control devices. Not an applicable requirement and no applicable control devices at this facility.
60.255(f)	M5	"Performance tests and other compliance requirements." Alternatives to 60.255(b)(2) compliance demonstration method for on-going monitoring. The facility has chosen not to conduct the digital opacity compliance system option in (f)(2), therefore this option was not included in the NSR permit or the Title V permit.
60.255(g)	—	"Performance tests and other compliance requirements." Option to demonstrate compliance with a continuous opacity monitoring system (COMS). This facility has no stacks therefore this option is not applicable.
60.255(h)	—	"Performance tests and other compliance requirements." Coal truck dump operation requirements. All coal is pumped to this facility as a water slurry and conveyed off-site. No trucks are utilized.
60.256	—	"Continuous monitoring requirements." These requirements apply to thermal dryers built prior to April 28, 2008 and mechanical vents for facilities constructed on or after April 28, 2008. This facility was built in 2014 and does not contain thermal dryers or mechanical vents.
60.257	M5	"Test methods and procedures."
60.258(a)	K2	"Reporting and Recordkeeping." Section (a) details logbook requirements.
60.258(b)	R3	"Reporting and Recordkeeping." Section (b) requires semi-annual excess emission reporting requirements. In this case the only applicable requirement is to report any 6-minute average opacities that exceed the emission standard.
Applicable General Requirements		
60.1	—	General applicability of the General Provisions
60.2	—	Definitions
60.3	—	Units and abbreviations
60.4	—	Address
60.5	—	Determination of construction or modification
60.6	—	Review of plans
60.7	K1, K2	Notification and Recordkeeping. Initial notification completed December 8, 2014, no continuous monitoring or other periodic reports required. 40 CFR 60.7(f) requires maintenance of records of performance monitoring and other measurements.
60.8	M5	Performance tests
§60.9	—	Availability of information. No requirement on the permittee.
60.10	—	State Authority
60.11	P1	Compliance with standards and maintenance requirements. No active requirements, however the credible evidence provision was included in P1.
60.12	Req-6	Circumvention
60.13	—	Continuous monitoring requirements. No continuous monitoring applicable to equipment at this facility.
60.14	—	Modification. Modification is subject to New Source Review.

Requirement	Title V Permit Location	Comments
60.15	—	Reconstruction. Reconstruction is subject to New Source Review.
60.16	—	Priority list
60.17	—	Incorporations by reference
60.18	—	General control device requirements. Not applicable to Subpart Y.
60.19	—	General notification and reporting requirements. Informational.

CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Requirement	Title V Permit Location	Comments
60.4200	—	"Am I subject to this subpart?" Informational. Only the Southeast Packwood Spoils Sump Engine (CP-100) is subject to this regulation.
60.4201	—	"What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?"
60.4202	—	"What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?"
60.4203	—	"How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?"
60.4204	—	"What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?" Section (a) states that the engine must meet the requirements in Table 1. This engine is Tier 2 EPA certified which meets the Table 1 limitation. No active requirement.
60.4205	—	"What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?" No emergency engines at this facility.
60.4206	—	"How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?" Informational. No exemption or modification of any other requirement in this section.
60.4207	Req-19	"What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?"
60.4208	—	"What is the deadline for importing or installing stationary CI ICE produced in previous model years?"
60.4209	—	"What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?" No requirements for a non-emergency engine without a diesel particulate filter.
60.4210	—	"What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?"

Requirement	Title V Permit Location	Comments
60.4211	Req-20, App. B	"What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?" The engine in question is EPA certified to the appropriate Tier 2 standard, so the only remaining compliance requirement is to operate the engine properly. Specific maintenance requirements are detailed in Appendix B.
60.4212	—	"What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?" No testing requirements for this engine.
60.4213	—	"What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?" The engine is much smaller than 30 liters per cylinder and is not subject to any testing requirements.
60.4214	—	"What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?" There are no notification requirements applicable to this engine.
60.4215	—	"What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?"
60.4216	—	"What requirements must I meet for engines used in Alaska?"
60.4217	—	"What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?" This facility does not have approval to utilize special fuels.
60.4218	—	"What parts of the General Provisions apply to me?" Refers to Table 8.
60.4219	—	"What definitions apply to this subpart?" Informational.
Table 1	—	"Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder" Informational listing of the emission standards. Compliance was demonstrated by purchasing a EPA Tier certified engine that exceeds the standards in Table 1.
Table 2	—	"Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder." No engine in this category at the facility.
Table 3	—	"Certification Requirements for Stationary Fire Pump Engines." No engine in this category at the facility.
Table 4	—	"Emission Standards for Stationary Fire Pump Engines." No engine in this category at the facility.
Table 5	—	"Labeling and Recordkeeping Requirements for New Stationary Emergency Engines." Not a requirement for the owner/operator.
Table 6	—	"Optional 3-Mode Test Cycle for Stationary Fire Pump Engines." Not a requirement for the owner/operator.
Table 7	—	"Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder." No engine in this category at the facility.

Requirement	Title V Permit Location	Comments
Table 8	—	"Applicability of General Provisions to Subpart IIII." Table 8 was not listed directly in the permit, rather the individual General Provisions were independently identified.
Applicable General Requirements Identified by Table 8 (Applicable to the Southeast Packwood Spoils Sump Engine (CP-100))		
60.1	—	General applicability of the General Provisions
60.2	—	Definitions
60.3	—	Units and abbreviations
60.4	—	Address. Informational.
60.5	—	Determination of construction or modification
60.6	—	Review of plans
60.7	—	Notification and Recordkeeping. There are no notification requirements applicable to this engine.
60.8	—	Performance tests. No performance tests are required.
60.9	—	Availability of information. Informational
60.10	—	State Authority. Informational.
60.11	P1	Compliance with standards and maintenance requirements. No active requirements, however the credible evidence provision was included in P1.
60.12	Req-6	Circumvention
60.13	—	Monitoring requirements. Only applies to stationary CI ICE with a displacement of ≥ 30 liters per cylinder.
60.14	—	Modification. Modification is subject to New Source Review.
60.15	—	Reconstruction. Reconstruction is subject to New Source Review.
60.16	—	Priority list
60.17	—	Incorporations by reference
60.18	—	General control device requirements. No control devices.
60.19	—	General notification and reporting requirements. There are no notification requirements applicable to this engine.

CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Requirement	Title V Permit Location	Comments
63.6580	—	"What is the purpose of subpart ZZZZ?"
63.6585	—	"Am I subject to this subpart"
63.6590	—	"What parts of my plant does this subpart cover?"
63.6595	—	"When do I have to comply with this subpart?"
63.6600	—	"What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?" No engines in this category at the facility.

Requirement	Title V Permit Location	Comments
63.6601	—	"What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?" No engines in this category at the facility.
63.6602	Req-24	"What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?" References the applicable emission limits in Table 2c. The only applicable emission limit category in Table 2c is "Non-emergency, non-black start CI stationary RICE $100 \leq \text{HP} \leq 300 \text{ HP}$ " with a CO emission limit of 230 ppmvd @ 15% O ₂ .
63.6603	—	"What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?" This facility is a major source.
63.6604	—	"What fuel requirements must I meet if I own or operate a stationary CI RICE?" None of the engines at this facility fall into one of the specific categories listed in this section.
63.6605	Req-24 and Req-25	"What are my general requirements for complying with this subpart?" This section is a general duty clause.
63.6610	—	"By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?" No engines in this category at the facility.
63.6611	—	"By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?" No engines in this category at the facility.
63.6612	M4	"By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?" All initial testing / compliance demonstrations were completed in 2013.
63.6615	—	"When must I conduct subsequent performance tests?" Requires subsequent testing as per Table 3. This facility does not have any engines in any category listed in Table 3.
63.6620	M4	"What performance tests and other procedures must I use?"

Requirement	Title V Permit Location	Comments
63.6625	Req-21, Req-22, Req-23	"What are my monitoring, installation, collection, operation, and maintenance requirements?" Only sections (e) and (h), and optionally (i) apply to any engines at this facility. Section (e)(1) applies and is found in Req-22 for engines < 100 hp. The startup limitations in section (h) are found in Req-23. The optional oil analysis program of section (i) is found in Req-21.
63.6630	Req-24, R7	"How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?" Only (a) and (c) apply to engines at this facility. Section (a) is found in Req-24. Section (c), which is the "Notification of Compliance Status" requirement, is contained in R7.
63.6635	—	"How do I monitor and collect data to demonstrate continuous compliance?" Continuous compliance monitoring is not required for any of the engines at this facility.
63.6640(a)	Req-21, Req-22	"How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?" Section (a) requires compliance with applicable requirements in Tables 1a, 1b, 2a, 2b, 2c, and 2d in accordance with Table 6. Table 6 contains additional work practice requirements applicable to existing diesel engines with a site rating of less than 100 hp.
63.6640(b)	R3, R7	"How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?" Deviation reporting and re-testing requirements.
63.6640(c)	—	"How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?" Requirements for specific 4SLB and 4SRB. This facility does not have any engines in this category.
63.6640(d)	—	"How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?" Exemptions for "engine burn-in". No engines at this facility are this new.
63.6640(e)	R1	"How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?" Section (e) requires reporting of deviations from Part 63 "General Provisions" for non-exempted engines.
63.6640(f)	—	"How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?" Section (e) applies to emergency engines. There are no emergency engines at this facility.
63.6645	R7	"What notifications must I submit and when?" The notice requirements were included in R7, although it is unlikely that new notifications will be required during the permit term.

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63.6650	R3	"What reports must I submit and when?" The required contents of the semi-annual report are detailed in 63.6650(c & d). 63.6650(f) is the duty to report deviations in the semi-annual Title V report or the semi-annual Subpart ZZZZ report.
63.6655	M3, K3	"What records must I keep?"
63.6660	VIII	"In what form and how long must I keep my records?" This section and 63.10(b) are included in the introductory paragraphs of Section VIII.
63.6665	—	"What parts of the General Provisions apply to me?" References Table 8. This section itself is informational and not included in the permit. This section exempts specific engine categories with the need to comply with the General Provisions of 40 CFR 63, however only the Southeast Packwood Spoils Sump Engine (CP-100 Sump Pump) at this facility is exempted.
63.6670	—	"Who implements and enforces this subpart?" This section is informational. SWCAA has adopted Subpart ZZZZ but has not yet been delegated enforcement by EPA as of January 25, 2017.
63.6675	—	"What definitions apply to this subpart?" This section is a reference for other sections and does not contain any directly applicable requirements.
Table 1a	—	"Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions" No engines in this category at this facility.
Table 1b	—	"Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions" No engines in this category at this facility.
Table 2a	—	"Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions" No engines in this category at this facility.
Table 2b	—	"Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP" No engines in this category at this facility.
Table 2c	Req-21, Req-24	"Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions"
Table 2d	—	"Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions" This facility is a major source of HAP.

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Table 3	—	"Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests" There are no engines in the categories listed in Table 3 at this facility.
Table 4	M4	"Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests"
Table 5	Req-24, M4	"Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements"
Table 6	Req-22	"Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements"
Table 7	R3	"Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports"
Table 8	—	"Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ." Table 8 was not listed directly in the permit, rather the individual General Provisions were independently identified.
Applicable General Requirements Identified by Table 8 (Applicable to all engines other than the Southeast Packwood Spoils Sump Engine (CP-100) as identified in 40 CFR 63.6665)		
63.1	—	General applicability of the General Provisions
63.2	—	Definitions
63.3	—	Units and abbreviations
63.4	Req-6	Prohibited activities and circumvention
63.5	—	Construction and reconstruction notification. Construction or reconstruction would require NSR.
63.6(a)	—	Applicability. Informational
63.6(b)(1)-(4)	—	Compliance dates for new and reconstructed sources. Informational
63.6(b)(5)	—	Notification for new or reconstructed sources. Construction or reconstruction would require NSR.
63.6(b)(7)	—	Compliance dates for new and reconstructed area sources that become major sources. Informational. This facility is already a major source.
63.6(c)(1)-(2)	—	Compliance dates for existing sources. Compliance dates have passed.
63.6(c)(5)	—	Compliance dates for existing area sources that become major sources. Informational. This facility is already a major source.
63.6(f)(2)	—	Methods for determining compliance. Informational.
63.6(f)(3)	—	Finding of compliance. Informational
63.6(g)(1)-(3)	—	Use of alternate standard. Informational.
63.6(i)	—	Compliance extension procedures and criteria
63.6(j)	—	Presidential compliance exemption
63.7(a)(1)-(2)	—	Performance test dates. All initial testing has been completed.
63.7(a)(3)	—	CAA section 114 authority
63.7(b)(1)	R7	Notification of performance test
63.7(b)(2)	R7	Notification of rescheduling
63.7(c)	R7	Quality assurance/test plan
63.7(d)	M4	Testing facilities
63.7(e)(2)	—	Conduct of performance tests and reduction of data. Informational
63.7(e)(3)	—	Test run duration. Run duration already specified in rule.

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63.7(e)(4)	—	Administrator may require other testing under section 114 of the CAA. Informational
63.7(f)	—	Alternative test method provisions. Informational. No reasonable reason to utilize an alternative test method.
63.7(g)	—	Performance test data analysis, recordkeeping, and reporting. Source test report requirements are detailed in R6, however Subpart ZZZZ testing requirements in the permit are primarily informational because all initial testing has been completed.
63.7(h)	—	Waiver of tests. Informational.
63.8(a)(1)	—	Applicability of monitoring requirements.
63.8(a)(2)	—	Performance specifications
63.8(b)(1)	—	Alternative Monitoring.
63.8(b)(2)-(3)	—	Multiple effluents and multiple monitoring systems
63.8(c)(1)	—	Continuous monitoring system (CMS) operation and maintenance. No CMS at this facility.
63.8(c)(1)(ii)	—	Continuous monitoring system parts
63.8(c)(2)-(3)	—	Monitoring system installation
63.8(c)(4)	—	Continuous monitoring system requirements
63.8(c)(6)-(8)	—	CMS requirements
63.8(d)	—	CMS quality control
63.8(e)	—	CMS performance evaluation. Except that §63.8(e) only applies as specified in §63.6645.
63.8(f)(1)-(5)	—	Alternative monitoring method
63.8(f)(6)	—	Alternative to relative accuracy test
63.8(g)	—	Data reduction for CMS
63.9(a)	—	Applicability and State delegation of notification requirements
63.9(b)(1)-(5)	R7	Initial notifications. Except that §63.9(b) only applies as specified in §63.6645.
63.9(c)	—	Request for compliance extension
63.9(d)	—	Notification of special compliance requirements for new sources
63.9(e)	R7	Notification of performance test
63.9(g)(1)	—	Notification of performance evaluation
63.9(g)(3)	—	Notification that criterion for alternative to RATA is exceeded. Except that §63.9(g) only applies as specified in §63.6645.
63.9(h)(1)-(6)	R7	Notification of compliance status
63.9(i)	—	Adjustment of submittal deadlines
63.9(j)	—	Change in previous information submitted. Due to the nature of the equipment at this facility and SWCAA's review, no such notice will be necessary.
63.10(a)	—	Administrative provisions for recordkeeping/reporting
63.10(b)(1)	VIII	Record retention

Requirement	Title V Permit Location	Comments
63.10(b)(2)(vi)-(xi)	K3	Records
63.10(b)(2)(xii)	—	Record when under waiver
63.10(b)(2)(xiii)	—	Records when using alternative to RATA
63.10(b)(2)(xiv)	—	Records of supporting documentation
63.10(b)(3)	—	Records of applicability determination
63.10(c)	—	Additional records for sources using CEMS
63.10(d)(1)	—	General reporting requirements. Reporting specified as per the applicable standard.
63.10(d)(2)	R7	Report of performance test results
63.10(d)(4)	—	Progress reports. No progress reports required.
63.10(e)(1) and (2)(i)	—	Additional CMS Reports
63.10(e)(3)	—	Excess emission and parameter exceedances reports (CEMS)
63.10(f)	—	Waiver for recordkeeping/reporting. Informational.
63.12	—	State authority and delegations
63.13	—	Addresses. Informational
63.14	—	Incorporation by reference
63.15	—	Availability of information