West Virginia Department of Environmental Protection
Division of Air Quality

Joe Manchin III
Governor

Stephanie R. Timmermeyer
Cabinet Secretary

Permit to Operate

Pursuant to

Title V

of the Clean Air Act

Issued to:

Second Sterling Corporation
Keystone Number 1 Coal Preparation Plant
R30-04700008-2006

John A. Benedict
Director

Issued: October 17, 2006 • Effective: November 1, 2006
Expiration: October 17, 2011 • Renewal Application Due: April 17, 2011

Permit Number: **R30-04700008-2006**
Permittee: **Second Sterling Corporation**
Facility Name: **Keystone Number 1 Coal Preparation Plant**
Mailing Address: **P. O. Box 1085, Beckley, WV 25802-1085**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Keystone, McDowell County, West Virginia
Mailing Address:	P. O. Box 1085, Beckley, WV 25802-1085
Telephone Number:	(304) 862-4529
Type of Business Entity:	Corporation
Facility Description:	Coal Preparation with Thermal Dryer
SIC Codes:	1221 Primary; None Secondary; None Tertiary
UTM Coordinates:	500.00 km Easting • 4140.94 km Northing • Zone 17

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0. Emission Units

Source ID	Emission Point ID	Equipment Description	Design Capacity		Year Installed or Modified	Control Device (1)
			TPH	TPY x 10^6		
HAULROAD						
HR-A	60E	From mainline railroad tracks up Clark Branch to Y intersection.. 1,400 ft of unpaved roads.	N/A	N/A	1950	WT
HR-B	60E	From Y intersection to plant truck dump. 1,700 ft of unpaved roads.	N/A	N/A	1950	WT
HR-C	60E	From County Rt.6 at Keystone No. 1 mine yard along old tram road to plant truck dump. 4,900 ft of unpaved roads.	N/A	N/A	1950	WT
HR-D	60E	Haulroad Activity	N/A	N/A		WT
HR-E	61E	Haulroad Activity	N/A	N/A	2004	WT and DSA
HR-F	61E	Haulroad Activity	N/A	N/A	2004	WT and DSA
FE	60E	Front Endloader Activity	N/A	N/A		WT
STORAGE						
ST1	40E	Raw Coal Open Stockpile (5,000 sq. ft/ 5,000 Ton)	470	0.1	1952	MC
ST2	41E	Raw Coal Storage Bins (2000 ton)	450	3.942	1952	PE
ST3	42E	Raw Coal Storage Bin 5 (500 Ton)	450	3.942	1952	PE
ST4	43E	Raw Coal Storage Bin 6 (500 Ton)	450	3.942	1952	PE
ST5	44E	Clean Coal Storage Loadout Bin with Telescopic Chute (100 ton)	290	2.001	1977	PE
ST6	45E	Clean Storage Silo (1700 Ton)	290	2.001	1990	FE
ST7	46E	Clean Storage Silo (1700 Ton)	290	2.001	1990	FE
ST8	47E	Clean Storage Open Stockpile (52,605 sq. ft/ 100,000 Ton)	290	1.000	1984	DSA
ST11	50E	Truck Dump Hopper No. 1 (80 Ton)	450	3.942	1952	PE
ST12	51E	Truck Dump Hopper No. 2 (30 ton)	450	3.942	1952	PE
ST13	52E	House Coal Bin (2,000 Ton)	40	0.333		PE
SOURCE						
SZ01	35E	Bradford Breaker	450	3.942	1952	FE
SZ02	36E	Gundlach Screen	200	1.752	1952	PE
SZ04	38E	Two Pre-Wet Wash Plant Screen	350	3.066	1952	PE
TD05	#001 #002	Thermal Dryer Manufacture: ENI Engineering Co. Model: Coal Flo # 7.5 Type: Fluidized Bed Dryer Coal Stoker Fired (2.5 TPH) Design BTU Rating: 65 x 10^6 Btu/hr	Dry: 290.0 Wet: 318.7 2.50	Dry: 2.54 Wet: 2.199 0.022	1977	FKFD and RCC

Source ID	Emission Point ID	Equipment Description	Design Capacity		Year Installed or Modified	Control Device (1)
			TPH	TPY x 10^6		
CONVEYOR BELTS						
C01	1E	36" Belt Conveyor from Truck Dump No.2 feeder to Screen SZ02	200	1.752	1952	PE
C02	2E	36" Belt Conveyor from Screen SZ02 to Belt Conveyor C03-Stacker Conveyor	200	1.752	1952	PE
C03	3E	36" Belt Conveyor-Stacker Conveyor from T18 to Raw Coal Stockpile, ST1	470	0.100	1952	PE
C04	4E	36" Belt Conveyor from Truck Dump No.1 feeder to Bradford Breaker	450	3.942	1952	FE
C05	5E	48" Belt Conveyor-Tripper Belt from Bradford Breaker to C03-Stacker Conveyor, C06-Tripper Belt, and C07 - Tripper Belt	450	3.942	1952	PE
C06	6E	48" Belt Conveyor-Tripper Belt-from C05-Tripper Belt-to raw coal belt to Blending Bins ST2	450	3.942	1952	PE
C07	7E	48" Belt Conveyor -Tripper Belt- from -Tripper Belt-C05 to raw coal belt to Bins ST3&ST4	450	3.942	1952	PE
C08	8E	36" Belt Conveyor from Raw Coal Stockpile ST1 to C09	350	0.1	1952	PE
C09	9E	42" Belt Conveyor from Blending Bins ST2 to C10	350	3.066	1952	PE
C10	10E	48" Belt Conveyor from C09-ST2 and collects from Bins 5&6 and carries to Pre-Wet Screens (SZ04)	350	3.066	1952	MC
C11	11E	30" Belt Conveyor from Thermal Dryer to Loadout Bin (ST5) 100T Bin	290	2.001	1952	PE
C12	12E	36" Belt Conveyor-Clean Coal Silo Transfer Belt-from Storage Bin 5 to Storage Bins 6&7-Clean Coal Silos	290	2.001	1990	PE
C13	13E	36" Belt Conveyor Transfer Belt to Clean Coal Silo - ST6 & ST7	290	2.001	1990	PE
C14	14E	36" Belt Conveyor-Reclaim Belt-from Clean Coal Storage Silo ST6 to C15-Loadout Belt	290	2.001	1990	PE
C15	15E	36" Belt Conveyor -Reclaim Belt-from Clean Coal Storage Silo ST7 to C15-Loadout Belt	290	2.001	1990	PE
C16	16E	36" Belt Conveyor -Loadout Belt- to Drop Chute	290	2.001	1990	PE
C21	21E	CC Conveyor Belt	318.7	2.199		PE
C22	22E	CC Conveyor Belt	40	0.3504		PE
C23	23E	CC Conveyor Belt	40	0.3504		PE
C24	24E	CC Conveyor Belt	40	0.3504		PE
C25	25E	CC Conveyor Belt	40	0.017		PE

Source ID	Emission Point ID	Equipment Description	Design Capacity		Year Installed or Modified	Control Device (1)
			TPH	TPY x 10^6		
Refuse						
SZ03	37E	McLanahan Crusher Manufacture: Roller/Hamer	200	1.752	1952	PE
ST9	48E	Stand-By Refuse Bin (300 Ton)	200	1.752	1952	PE
ST10	49E	Refuse Bin (500 Ton)	200	1.752	1952	PE
ST14	53E	Refuse Bin (50 Ton)	400	1.752		PE
C17	17E	Refuse 36" Belt Conveyor	200	1.752	1952	MC
C18	18E	Refuse 36" Belt Conveyor	75	0.657	1952	MC
C19	19E	Refuse 48" Belt Conveyor	200	1.752	1952	PE
C20	20E	Refuse 36" Belt Conveyor–	200	1.752	1952	PE
		Arial Tram	400	1.752		None
C26	26E	Refuse Conveyor Belt	200	1.752		MC
C27	27E	Refuse Conveyor Belt	400	1.752		None
C28	28E	Refuse Conveyor Belt	400	1.752		None
C29	29E	Refuse Conveyor Belt	400	1.752		None
C30	30E	Refuse Conveyor Belt	400	1.752		None
C31	31E	Refuse Conveyor Belt	400	1.752		None
Lime Facility						
ST20	59E	Lime Feed Bin (0.35 Ton)	0.025	0.000175	2004	FE
FSC1	62E	Lime Screw Conveyor	0.025	0.000175	2004	FE
"Synfuel" Facility						
ST15	54E	Eckman Loadout Open Stockpile (348,480 ft^2/30,000 Ton)	1000	1.0	2004	WS
ST16	55E	Endloader Hopper	1000	1.0	2004	PE
ST17	56E	Endloader Hopper	1000	1.0	2004	PE
ST18	57E	Endloader Hopper	1000	1.0	2004	PE
ST19	58E	Endloader Hopper	1000	1.0	2004	FE
C32	33E	Conveyor Belt	1000	1.0	2004	None
C33	33E	Conveyor Belt	1000	1.0	2004	None
C34	34E	Conveyor Belt	1000	1.0	2004	None

(1) Transfer points (TP) have the same type of fugitive dust control system as the associated conveyors unless otherwise noted. Control Device abbreviations: FE = Full Enclosure, FE/FE = Full Enclosure in Building, PE = Partial Enclosure, NE = No Enclosure, IMC = Inherent Moisture Content (6%) of the coal from the mine, MC = Moisture Content, WT = Water Truck, DSA = Dust Suppression Additives, FKFD = Flex-Kleen Flooded Disk wet scrubber (Manufacture: Research-Cottrell, Model: Flex-Kleen Flooded Cone, Type: Venturi #60), and RCC = Two (2)-82" equivalent diameter Research-Cottrell Cyclones (Manufacture: Research-Cottrell, Model: Flex-Kleen Dryer Mechanical Cyclone Dust Collectors and Flex-Kleen #14 Tangentially Fed Cyclonic type mist eliminator.

2.0. General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NO_x**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor		
CES	Certified Emission Statement	**PM**	Particulate Matter
C.F.R. *or* CFR	Code of Federal Regulations	**PM_{10}**	Particulate Matter less than 10μm in diameter
CO	Carbon Monoxide		
C.S.R. *or* CSR	Codes of State Rules	**pph**	Pounds per Hour
DAQ	Division of Air Quality	**ppm**	Parts per Million
DEP	Department of Environmental Protection	**PSD**	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	**psi**	Pounds per Square Inch
HAP	Hazardous Air Pollutant	**SIC**	Standard Industrial Classification
HON	Hazardous Organic NESHAP		
HP	Horsepower	**SIP**	State Implementation Plan
lbs/hr *or* lb/hr	Pounds per Hour	**SO_2**	Sulfur Dioxide
LDAR	Leak Detection and Repair	**TAP**	Toxic Air Pollutant
M	Thousand	**TPY**	Tons per Year
MACT	Maximum Achievable Control Technology	**TRS**	Total Reduced Sulfur
		TSP	Total Suspended Particulate
MM	Million	**USEPA**	United States Environmental Protection Agency
MMBtu/hr *or* mmbtu/hr	Million British Thermal Units per Hour	**UTM**	Universal Transverse Mercator
MMCF/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour	**VEE**	Visual Emissions Evaluation
NA	Not Applicable	**VOC**	Volatile Organic Compounds
NAAQS	National Ambient Air Quality Standards		
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. **[45CSR§30-5.1.b.]**

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration. **[45CSR§30-4.1.a.3.]**

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3. **[45CSR§30-6.3.b.]**

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time. **[45CSR§30-6.3.c.]**

2.4. Permit Actions

2.4.1. 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. **[45CSR§30-5.1.f.3.]**

2.5. Reopening for Cause

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

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (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 has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution Control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. 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. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. 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 cause(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. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as “State-enforceable only” shall become “Federally-enforceable” requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary 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 Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. 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; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege. **[45CSR§30-5.1.f.4]**

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA. **[45CSR§30-5.1.a.2.]**

3.0. Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
[45CSR§6-3.1.]

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause, suffer, allow or permit any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
[45CSR§6-3.2.]

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
[40 C.F.R. 61 and 45CSR15]

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
[45CSR§4-3.1 State-Enforceable only.]

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
[45CSR§11-5.2]

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
[W.Va. Code § 22-5-4 (a) (14)]

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan**. Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any fugitive dust control system which is twenty percent (20%) opacity or greater.
[45CSR§5-3.4., 45CSR13, R13-0308D, B.1. and B.2.]

3.1.10. No person shall cause, suffer, allow or permit a coal preparation plant or handling operation to operate that is not equipped with a fugitive dust control system. This system shall be operated and maintained in such a manner as to minimize the emission of particulate matter into the open air.
[45CSR§5-6.1., 45CSR13, R13-0308D, B.1. and B.2.]

3.1.11. The owner or operator of a coal preparation plant or handling operation shall maintain dust control of the premises and owned, leased or controlled access roads by paving, or other suitable measures. Good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening and general maintenance to minimize dust generation and atmospheric entrainment.
[45CSR§5-6.2., 45CSR13, R13-0308D, B.1. and B.2.]

3.1.12. The permitted facility shall be constructed and operated in accordance with information filed in Permit Application R13-0308, R13-0308A, R13-0308B, R13-0308C, R13-0308D, and any amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-0308D, C.3.]

3.1.13. The permitted facility shall be constructed and operated in accordance with information filed in WVACC Permit Application No. 1142. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.
[45CSR13, R13-1142, General Requirements (2)]

3.2. Monitoring Requirements

3.2.1. The permittee shall conduct monitoring/recordkeeping/reporting as follows [Not required for open stockpile (ST-1, ST-8, ST-9, ST-10), Refuse Disposal Area and haulroads (HRA, HRB, and HRC)]: (NOTE: See Section 4.0. for the Thermal Dryer Unit Requirements).

a. Visible emissions evaluation shall be conducted for each affected source at least once every consecutive 12-month period in accordance with 40 C.F.R. 60 Appendix A, Method 9. This annual evaluation shall consist of a minimum of 24 consecutive observations for each emission unit.

b. Each emissions unit with a visible emissions limit contained in this permit shall be observed visually at least each calendar week during periods of normal facility operation for a sufficient time interval determined by conducting 40 C.F.R. 60 Appendix A Method 22-like visible emission checks. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60, Appendix A, Method 9 certification course.

If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 C.F.R. 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under condition Section 3.2.1.a. if the visible emissions condition is corrected in a timely manner; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

c. If the visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 C.F.R. 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of condition 3.2.1.b. in lieu of those established in this condition.

d. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.

[45CSR§30-5.1.c.]

3.2.2. The permittee shall inspect all fugitive dust control systems monthly to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all scheduled and non-scheduled maintenance. Records shall be maintained on site stating any maintenance or corrective actions taken as a result of the monthly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.
[45CSR§30-5.1.c.]

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

[WV Code § 22-5-4 (a) (15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.4.4. The permittee shall maintain daily records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. These records shall be maintained on site for a period of no less than five (5) years.
[45CSR§30-5.1.c.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3 pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Enforcement and Permits Review (3AP12)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

45CSR§10-5. (08/31/2000)	The thermal dryer is not defined as a refinery process gas stream or any other process gas stream that contains hydrogen sulfides to be combusted

4.0. Source-Specific Requirements [Thermal Dryer (TD05), Emission ID (#001 and #002)]

4.1. Limitations and Standards

4.1.1. The sulfur content of the coal being used to fire the thermal dryer shall not exceed 0.85% on an as received basis.
[45CSR13, R13-0308D, A.1.]

4.1.2. The ash content of the coal being used to fire the thermal dryer shall not exceed 10% on an as received basis.
[45CSR13, R13-0308D, A.2.]

4.1.3. Emissions from the thermal dryer shall not exceed the following amounts:

Pollutant	lbs/hr	tons/year
Carbon Monoxide	12.6	43.5
Oxides of Nitrogen	40.6	140.1
Particulate Matter	7.23	24.9
Sulfur Dioxide	12.8	44.1
Volatile Organic Compounds	30	103.5

[45CSR13, R13-0308D, A.3.]

4.1.4. Throughput into the thermal dryer shall not exceed 2,199,030 tons per year nor 318.7 tons per hour. Compliance with the annual throughput limit shall be determined using a rolling yearly total.
[45CSR13, R13-0308D, A.4.]

4.1.5. Emissions from the thermal dryer shall be controlled by a cyclone and a venturi scrubber. The rate of hydrated lime injected into the SO_2 control system shall be sufficient so as to maintain the scrubber influent at a pH of at least 5.0.
[45CSR13, R13-0308D, A.6.]

4.1.6. On and after the date on which the performance test required to be conducted by 40 C.F.R. § 60.8 is completed, an owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any thermal dryer gases which:

(1) Contain particulate matter in excess of 0.070 g/dscm (0.031 gr/dscf).

(2) Exhibit 20 percent opacity or greater.

Compliance with this streamlined limit assures compliance with the corresponding provisions of 45CSR§5-3.1 (Section 4.1.7.) and Section 4.1.3.

[45CSR16, 40 C.F.R. § 252 (a), 45CSR13, R13-0308D, B.1. and B.5.]

4.1.7. No person shall cause, suffer, allow or permit emission of particulate matter into the open air from any stack which is twenty percent (20%) opacity or greater.
[45CSR§5-3.1., 45CSR13, R13-0308D, B.1.]

4.1.8. No person shall circumvent 45CSR5 by adding additional gas to any dryer exhaust or group of dryer exhausts for the purpose of reducing the grain loading.
[45CSR§5-4.2. 45CSR13, R13-0308D, B.1.]

4.1.9. No person shall cause, suffer, allow or permit the exhaust gases from a thermal dryer to be vented into the open air at an altitude of less than eighty (80) feet above the foundation grade of the structure containing the dryer or less than ten (10) feet above the top of said structure or any adjacent structure, whichever is greater. In determining the desirable height of a plant stack, due consideration shall be given to the local topography, meteorology, the location of nearby dwellings and public roads, the stack emission rate and good engineering practice as set forth in 45CSR20.
[45CSR§5-4.3., 45CSR13, R13-0308D, B.1.]

4.1.10. No person shall cause, suffer, allow or permit the emission into the open air from any source operation an in-stack sulfur dioxide concentration exceeding 2,000 parts per million by volume from existing source operations, except as provided in 45CSR§§10-4.1.a through 4.1.e.
[45CSR§10-4.1., 45CSR13, R13-0308D, B.1. and B.3.]

4.1.11. All thermally dried coal shall be loaded directly to railroad car or sent to fully enclosed storage bins for later loading into railroad car.
[45CSR13, R13-1142, A.1.]

4.1.12. No open stockpiling of thermally dried coal shall take place.
[45CSR13, R13-1142, A.2.]

4.2. Monitoring Requirements

4.2.1. The permittee shall conduct monitoring/recordkeeping/reporting for the thermal dryer as follows

a. A visible emissions evaluation shall be conducted for the thermal dryer unit(s) at least once every consecutive 12-month period in accordance with 40 C.F.R. 60 Appendix A, Method 9. This annual evaluation shall consist of a minimum of 24 consecutive observations for the thermal dryer unit(s).

b. The thermal dryer unit(s) included in this permit shall be observed visually on a monthly basis during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions by conducting monthly Method 22-like visible emission checks. At a minimum, the observer must be trained and knowledgeable regarding the effects of background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water (condensing water vapor) on the visibility of emissions. This training may be obtained from written materials found in the References 1 and 2 from 40 C.F.R. Part 60, Appendix A, Method 22 or from the lecture portion of the 40 C.F.R. Part 60, Appendix A, Method 9 certification course.

If visible emissions from the thermal dryer unit(s) is observed during these monthly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the thermal dryer unit(s), visible emissions evaluations in accordance with 40 C.F.R. 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than fourteen (14) days from the time of the observation. A Method 9 evaluation shall not be required under condition Section 4.2.1.b if the visible emissions condition is corrected in a timely manner; the thermal dryer unit(s) is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

c. If any visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a thermal dryer unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive seven (7) day period in accordance with 40 C.F.R. 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the thermal dryer unit for 3 consecutive evaluation periods, the thermal dryer may comply with the visible emissions testing requirements of Section 4.2.1.b in lieu of those established in this condition.

d. A record of each visible emissions observation shall be maintained, including any data required by 40 C.F.R. 60 Appendix A, Method 22 or Method 9, whichever is appropriate. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall be maintained on site for a period of no less than five (5) years stating any maintenance or corrective actions taken as a result of the daily inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.

e. If any visible emissions evaluation performed in accordance with 40C.F.R.60 Appendix A, Method 9 indicates a visible emissions observation of twenty percent (20%) or greater, the minimum total time of the observations for that emission unit shall be sixty (60) minutes. This Section e. shall not apply if any visible emissions observation is sixty percent (60%) or greater.

f. The thermal dryer unit(s) included in this permit shall be observed visually during periods of building a fire of operating quality and minimization efforts taken to ensure particulate matter emissions of sixty percent (60 %) opacity for a period of up to 8 minutes in any operating day is not exceeded during such activities.

[45CSR§30-5.1.c.]

4.2.2. At the request of the Director the owner and/or operator of a source shall install such stack gas monitoring devices as the Director deems necessary to determine compliance with the provisions of 45CSR10. The data from such devices shall be readily available at the source location or such other reasonable location that the Director may specify. At the request of the Director, or his or her duly authorized representative, such data shall be made available for inspection or copying. Failure to promptly provide such data shall constitute a violation of 45CSR10.
[45CSR§10-8.2.a.]

4.2.3. Prior to the installation of calibrated stack gas monitoring devices, sulfur dioxide emission rates shall be calculated on an equivalent fuel sulfur content basis.
[45CSR§10-8.2.b.]

4.2.4. The permittee shall follow the monitoring plan pursuant to 45CSR§10-8.2.c. See Appendix A.
[45CSR§10-8.2.c.2.]

4.2.5. The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(1) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ±1.7 °C (±3 °F).

(2) For affected facilities that use venturi scrubber emission control equipment:

(i) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

(ii) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator may be consulted for approval of alternative locations.

[45CSR16, 40 C.F.R. § 60.253 (a), 45CSR13, R13-0308D, B.1. and B.5.]

4.2.6. All monitoring devices under 40 C.F.R. § 60.253 (a) [Section 4.2.5.] are to be recalibrated annually in accordance with procedures under 40 C.F.R. § 60.13(b).
[45CSR16, 40 C.F.R. § 60.253 (b), 45CSR13, R13-0308D, B.1. and B.5.]

4.3. Testing Requirements

4.3.1. Any stack venting thermal dryer exhaust gases and/or air table exhaust gases or exhaust gases or air from any air pollution control device shall include straight runs of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures. Flow straightening devices shall be required where cyclonic gas flow would exist in the absence of such devices.
[45CSR§5-12.6.]

4.3.2. The permittee shall conduct tests to determine compliance with the particulate matter (PM) emission limitations in Section 4.1.6 (1) within 365 days of the effective date of this permit. If the Thermal Dryer is inactive on the effective date of this permit, the permittee shall conduct tests to determine compliance with the particulate matter (PM) emission limitations in Section 4.1.6 (1) within 180 days after resuming activity. As outlined in 40 C.F.R. § 60.254 (b) (1), the permittee shall use Method 5 or an alternative method approved by the Director for such testing. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.

If an alternative testing method were approved which effectively replaces Method 5, a permit revision would be required in accordance with 45CSR§30-6.4 or 45CSR§30-6.5 as applicable. Parameter indicator ranges shall be established for the exit temperature of the thermal dryer, water pressure to the control equipment, and the pressure loss of the inlet airflow to the scrubber. The permittee shall establish these indicator ranges and operate within these ranges to provide a reasonable assurance that the thermal dryer unit is in compliance with opacity and particulate loading limits. The permittee shall take immediate corrective action when a parameter falls outside the indicator range established for that parameter and shall record the cause and corrective measures taken.

The permittee shall conduct a stack test, establish parameter indicator ranges, and furnish the Director a written report of the results of such testing and established indicator ranges. The permittee shall also record the following parameters during such testing:

a. Opacity readings on the exhaust stack following the procedures of Method 9;
b. Amount of coal burned and the amount of coal dried;
c. Coal drying temperature and residence time in the dryer;
d. Temperature of the gas stream at the exit of the thermal dryer;

e. Flow rate through the dryer and converted to dry standard cubic feet;
f. Water pressure to the control equipment; and
g. Pressure loss of the inlet airflow to the scrubber. The pressure drop will be measured between the inlet airflow to the scrubber and outlet airflow of the scrubber, which is atmospheric loss through the venturi constriction of the control equipment.

Subsequent testing to determine compliance with the particulate loading limitations of Sections 4.1.6 (1) shall be conducted in accordance with the schedule set forth in the following table:

Test	Test Results	Testing Frequency
Initial	≤50% of particulate loading limit	Once/5 years
Initial	between 50% and 90 % of particulate loading limit	Once/3 years
Initial	≥90% of particulate loading limit	Annual
Annual	If annual testing is required, after two successive tests indicate mass emission rates between 50% and 90 % of particulate loading limit	Once/3 years
Annual	If annual testing is required, after three successive tests indicate mass emission rates ≤50% of particulate loading limit	Once/5 years
Once/3 years	If testing is required once/3 years, after two successive tests indicate mass emission rates 50% of particulate loading limit	Once/5 years
Once/3 years	If testing is required once/3 years and any test indicates a mass emission rate ≥90% of particulate loading limit	Annual
Once/5 years	If testing is required once /5 years and any test indicates mass emission rates between 50% and 90 % of particulate loading limit	Once/3 years
Once/5 years	If testing is required once/5 years and any test indicates a mass emission rate ≥90% of particulate loading limit	Annual

[45CSR§30-5.1.c.]

4.3.3. At such reasonable times as the Director may designate, the owner or operator of any fuel burning unit(s), manufacturing process source(s) or combustion source(s) may be required to conduct or have conducted tests to determine the compliance of such source(s) with the emission limitations of 45CSR§§10-3, 4 or 5. Such tests shall be conducted in accordance with the appropriate test method set forth in 40 CFR Part 60, Appendix A, Method 6, Method 15 or other equivalent EPA testing method approved by the Director. The Director, or his or her duly authorized representative, may at his or her option witness or conduct such tests. Should the Director exercise his or her option to conduct such tests, the operator will provide all necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.
[45CSR§10-8.1.a.]

4.3.4. The Director, or his duly authorized representative, may conduct such other tests as he or she may deem necessary to evaluate air pollution emissions other than those noted in 45CSR§10-3. **[45CSR§10-8.1.b.]**

4.3.5. The owner or operator shall determine compliance with the opacity standards in Section 4.1.6 (2) [40 C.F.R. § 60.252] as follows:

(1) Method 9 and the procedures in 40 C.F.R. § 60.11 shall be used to determine opacity.

[45CSR16, 40 C.F.R. § 60.254 (b) (2), 45CSR13, R13-0308D, B.1. and B.5.]

4.3.6. Tests that may be required by the Director to determine compliance with the emission limitations set forth in Section 4.1.3 shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at 100% of the peak load unless otherwise specified by the Director.

a. Tests to determine compliance with SO_2 emission limits shall be conducted in accordance with Method 6, 6A, 6B, or 6C, as set forth in 40 CFR 60, Appendix A.

[45CSR13, R13-0308D, B.7.]

4.3.7. With regard to any testing required by the Director, the permittee shall submit to the Director of Air Quality a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place. **[45CSR13, R13-0308D, B.8.]**

.

4.3.8. For the purpose of determining compliance with the maximum limit set forth in Section 4.1.4 the applicant shall maintain certified daily and monthly records of the amount of coal throughput to the thermal dryer. Compliance with the hourly throughput limit shall be demonstrated by dividing the daily total throughput by the number of hours operated in the same day to obtain an hourly average. Compliance with all yearly throughput limits shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of raw coal throughput at any given time for the previous twelve (12) months. By the fifteenth day of each calendar month, the permittee shall calculate the rolling yearly total. Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR§30-5.1.c., 45CSR13, R13-0308D, B.9.]

4.3.9. Tests that may be required by the Director to determine compliance with the CO, NO_x, and VOC emission limitations set forth in Sections 4.1.3 shall be conducted in accordance with the methods as set forth below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at maximum achievable load unless otherwise specified by the Director.

a. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10 or 10B as set forth in 40 C.F.R. 60, Appendix A.

b. Tests to determine compliance with NO_x emission limits shall be conducted in accordance with Method 7, 7A, 7B, 7C, 7D, or 7E as set forth in 40 C.F.R. 60, Appendix A.

c. Tests to determine compliance with VOC emission limits shall be conducted in accordance with Method 25, or 25A as set forth in 40 C.F.R. 60, Appendix A.

[45CSR§30-5.1.c.]

4.4. Recordkeeping Requirements

4.4.1. The permittee shall demonstrate compliance with Section 4.1.10 [45CSR§10-4.1.] by complying with the stipulations as stated below:

a. The owner or operator of a thermal dryer shall meet the following minimum coal sampling requirements:

1. The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the dryer may be obtained.

2. Coal shall be sampled at least three (3) times per day and at least once per eight (8) hour period.

3. Minimum sample size shall be five hundred (500) grams.

4. Samples shall be composited and analyzed at the end of each calendar month

b. Coal samples shall be prepared for analysis in accordance with procedures specified in ASTM D2013-86. "Standard Method of Preparing Coal Samples for Analysis."

c. The heat content of coal samples shall be determined in accordance with procedures specified in ASTM D2015-85, "Standard Test Method for Gross Calorific Value of Solid fuel by the Adiabatic Bomb Calorimeter," or ASTM D5865, "Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter."

d. The sulfur content of coal samples shall be determined in accordance with procedures specified in ASTM D3177-84, "Standard Test Methods for Total Sulfur in the Analysis Sample of Coal and Coke", or ASTM D4239-85, "Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods."

e. The owner or operator of a thermal dryer shall calculate the SO_2 emissions for each month based on the design heat input of 105 mmBtu/hr and the results of the analyses for sulfur and heat content for the month according to the following equations:

Equation 1:

$$\underline{SO_2\ (LB/hr)} = 2 \times (MFR/\ HV) \times S$$

Where: MFR = Design heat input of 105,000,000 Btu/hr
HV = Heating value of fuel in Btu/LB
S = Percent sulfur content of fuel divided by 100
2 = 2 LB SO_2 per 1LB S

Equation 2:

$\underline{SO_2\ (ppmv)} = SO_2\ (LB/hr) \times (385/64) \times (1/89{,}000) \times (1/60) \times 10^6$

Where: SO_2 (ppmv) = Sulfur dioxide concentration by volume
SO_2 (LB/hr) = Sulfur dioxide weight rate
385 = Molar volume in scf/LB-mole
64 = Molecular weight of Sulfur dioxide in LB/LB-mole
89,000 = Exhaust fan volumetric exhaust flow rate in scfm
60 = Minutes per hour

The measurement of fuel flow on this particular thermal dryer is not easily accomplished. Therefore by using the equations in this section, the maximum design heat input, and minimum volumetric gas flow rate, if compliance with 45CSR§10-4.1 is shown with these "worse case" conditions then compliance at lower heat inputs and/or higher stack gas flow rates will be ensured.

f. These records shall be maintained on site for a period of no less than five (5) years.

[45CSR§30-5.1.c.]

4.4.2. Recordkeeping for the monitoring devices in Section 4.2.5 shall be recorded at least once every 12 hours during periods of normal operation. These records shall be maintained on site for a period of no less than five (5) years.
[45CSR§30-5.1.c.]

4.5. Reporting Requirements

4.5.1. See Section 3.4.

4.6. Compliance Plan

4.6.1. None

5.0 Source-Specific Requirements [Refuse Storage (ST9, ST10, ST14), Emission ID (37E, 48E, 49E, 53E)]

5.1. Limitations and Standards

5.1.1. In order to prevent and control air pollution from coal refuse disposal areas, the operation of coal refuse disposal areas shall be conducted in accordance with the standards established by 45CSR§5-7.
[45CSR§5-7.1., Refuse Storage Piles]

5.1.2. Coal refuse is not to be deposited on any coal refuse disposal area unless the coal refuse is deposited in such a manner as to minimize the possibility of ignition of the coal refuse.
[45CSR§5-7.2., Refuse Storage Piles]

5.1.3. Coal refuse disposal areas shall not be so located with respect to mine openings, tipples or other mine buildings, unprotected coal outcrops or steam lines, that these external factors will contribute to the ignition of the coal refuse on such coal refuse disposal areas.
[45CSR§5-7.3., Refuse Storage Piles]

5.1.4. Vegetation and combustible materials shall not be left on the ground at the site where a coal refuse pile is to be established, unless it is rendered inert before coal refuse is deposited on such site.
[45CSR§5-7.4., Refuse Storage Piles]

5.1.5. Coal refuse shall not be dumped or deposited on a coal refuse pile known to be burning, except for the purpose of controlling the fire or where the additional coal refuse will not tend to ignite or where such dumping will not result in statutory air pollution.
[45CSR§5-7.5., Refuse Storage Piles]

5.1.6. Materials with low ignition points used in the production or preparation of coal, including, but not limited to, wood, brattice cloth, waste paper, rags, oil and grease, shall not be deposited on any coal refuse disposal area or in such proximity as will reasonably contribute to the ignition of a coal refuse disposal area.
[45CSR§5-7.6., Refuse Storage Piles]

5.1.7. Garbage, trash, household refuse and like materials shall not be deposited on or near any coal refuse disposal area.
[45CSR§5-7.7., Refuse Storage Piles]

5.1.8. The deliberate ignition of a coal refuse disposal area or the ignition of any materials on such an area by any person or persons is prohibited.
[45CSR§5-7.8., Refuse Storage Piles]

5.1.9. With respect to all burning coal refuse disposal areas, the person responsible for the coal refuse disposal areas or the land on which the coal refuse disposal areas are located shall use due diligence to control air pollution from the coal refuse disposal areas. Consistent with the declaration of policy and purpose set forth in W. Va. Code §22-5-1, the Director shall determine what constitutes due diligence with respect to each such burning coal refuse disposal area. When a study of any burning coal refuse disposal area by the Director establishes that air pollution exists or may be created, the person responsible for the coal refuse disposal area or the land on which the coal refuse disposal area is located shall submit to the Director a report setting forth satisfactory methods and procedures to eliminate, prevent or reduce the air pollution. The report shall be submitted within such time as the Director shall specify. The report for the elimination, prevention or reduction of air pollution shall contain sufficient information, including, completion dates, to establish that the corrective measures can be executed with due diligence. If approved by the Director, the

corrective measures and completion dates shall be embodied in a consent order issued pursuant to W. Va. Code §§ 22-5-1 et seq. If the report is not submitted as requested or if the Director determines that the methods and procedures set forth in the report are not adequate to reasonably control the air pollution he or she shall issue an order requiring the elimination, prevention or reduction of the air pollution. **[45CSR§5-8.3., Refuse Storage Piles]**

5.2. Monitoring Requirements

5.2.1. See Section 3.2.

5.3. Testing Requirements

5.3.1. See Section 3.3.

5.4. Recordkeeping Requirements

5.4.1. See Section 3.4.

5.5. Reporting Requirements

5.5.1. See Section 3.5.

5.6. Compliance Plan

5.6.1. None

6.0 Source-Specific Requirements [Coal Processing (SZ01, SZ02, SZ03 and SZ04), Conveying Equipment (C01 through C34, and FSC1), Coal Storage (ST1 through ST8, ST11 through ST13 and ST15 through ST20), Emission ID (1E through 38E, 40E through 47E, 50E through 52E, 54E through 59E, and 62E)]

6.1. Limitations and Standards

6.1.1. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated 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 the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[45CSR13, R13-0308D, B.1. and B.5., 45CSR16, 40 C.F.R § 60.11 (d), Transfer Points: T30, T32, T33, T34, T35, T36, T37, T38, T39, T40, T42; Conveyors: C12, C13, C14, C15, C16; Silos: ST6, ST7]

6.1.2. The throughput of coal into the wet wash system shall not exceed 350 tons per hour nor 3,066,000 tons per year. Compliance with the annual throughput limit shall be determined using a rolling yearly total.
[45CSR13, R13-0308D, A.5.]

6.1.3. The permittee shall maintain a water truck on site (the term "on site" includes all areas subject to vehicular traffic at the plant site including the county road from the former "Eckman Loadout" site to Route US 52) and in good operating condition, and shall utilize same to apply a mixture of water and an environmentally acceptable dust control additive, hereinafter referred to as solution, as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from open stockpiles and haulroads and other work areas where mobile equipment is used.

The spray bar shall be equipped with commercially available spray nozzles, of sufficient size and number, so as to provide adequate coverage to the surface being treated. A freeze protection plan to insure the wet suppression system remains operational 8,760 hours a year shall be incorporated.

The pump delivering the solution, shall be of sufficient size and capacity so as to be capable of delivering to the spray nozzle(s) an adequate quantity of solution, and at a sufficient pressure.

[45CSR13, R13-0308D, A.7.]

6.1.4. The permittee shall install, operate and maintain a fugitive dust control system to prevent the generation of fugitive dust and to eliminate tracking of material from the site through the town of Keystone. This system shall include but not be limited to a new section of windscreen shall be installed at the former Loadout site, from Bridge Street to the nearby overpass bridge on Route US52. Said windscreen should be properly maintained including but not limited to the timely replacement or repair of any missing or damaged sections. Consistent with its status as a county road, the road leading from the bridge to the plant will not be considered to be part of the haulroad.
[45CSR13, R13-0308D, A.8.]

6.1.5. On and after the date on which the performance test required to be conducted by 40 C.F.R. § 60.8 is completed, an owner or operator subject to the provisions of 40 C.F.R. Part 60 Subpart Y shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.
[45CSR16, 40 C.F.R § 60.252 (c), 45CSR13, R13-0308D, B.1. and B.5.]

6.1.6. In accordance with the information filed in Permit Application R13-0308B and its amendments, the following maximum throughputs shall not be exceeded, and the following control equipment shall be installed, maintained, and operated so as to minimize emissions of pollutants:

Table 1: Equipment and Transfer Rates

Equipment ID No.	Description	Maximum Capacity		Control Equipment	Associated Transfer Points		
		TPH	TPY x 10 6		Location: B -Before A -After	ID. No.	Control Equipment
ST11	Truck Dump No.1	450	3.942	PE	B A	T1 T2	N PE
C04	Belt Conveyor	450	3.942	FE	B A	T2 T4	PE PE
SZ01	Rotary Breaker	450	3.942	FE	B A A	T4 T5 T46	PE PE PE
C05	Belt Conveyor	450	3.942	PE	B A A A	T5 T7 T8 T6	PE PE PE PE
ST12	Truck Dump No. 2	200	1.752	PE	B A	T14 T15	N PE
C01	Belt Conveyor	200	1.752	PE	B A	T15 T16	PE PE
SZ02	Screen	200	1.752	PE	B A A	T16 T17 T53	PE PE PE
C02	Belt Conveyor	200	1.752	PE	B A	T53 T54	PE PE
C03	Belt Conveyor	470	0.1	PE	B B A	T8 T54 T12	PE PE N
ST1	Raw Coal Stockpile	470	0.1	N	B A	T12 T19	N N
C08	Belt Conveyor	350	0.1	PE	B A	T19 T18	N PE
C06	Belt Conveyor	450	3.942	PE	B A	T6 T13	PE N
ST2	Storage Bin	450	3.942	PE	B A	T13 T25	N PE
C09	Belt Conveyor	350	3.066	PE	B A	T25 T23	PE PE
C07	Belt Conveyor	450	3.942	PE	B A A	T7 T11 T10	PE PE PE

Equipment ID No.	Description	Maximum Capacity		Control Equipment	Associated Transfer Points		
		TPH	TPY x 10 6		Location: B -Before A -After	ID. No.	Control Equipment
ST3	Storage Bin	450	3.942	PE	B A	T10 T26	PE PE
ST4	Storage Bin	450	3.942	PE	B A	T11 T27	PE PE
C10	Belt Conveyor	350	3.066	N	B B B B A	T18 T23 T26 T27 T24	PE PE PE PE PE
SZ04	Prewet Screen	350	3.066	PE	B A	T24 T55	PE FE
C18	Refuse Conveyor	75	0.657	N	B A	T17 T52	PE PE
C17	Refuse Conveyor	200	1.752	N	B B A	T46 T52 T47	PE PE PE
SZ03	Refuse Crusher	200	1.752	PE	B A	T47 T48	PE PE
C19	Refuse Conveyor	200	1.752	PE	B A	T48 T49	PE PE
C26	Refuse Conveyor	200	1.752	N	B A	wet wash T62	 PE
C20	Refuse Conveyor	200	1.752	PE	B B A	T49 T62 T50	PE PE PE
ST10	Refuse Bin	200	1.752	PE	B A	T50 T51	PE PE
ST9	Standby Refuse Bin	200	1.752	PE	B A	T50 T51	PE PE
	Arial Tram	400	1.752	N	B A	T51 T63	PE PE
ST14	Refuse Bin	400	1.752	PE	B A	T63 T64	PE N
C27	Refuse Conveyor	400	1.752	N	B A	T64 T65	N N
C28	Refuse Conveyor	400	1.752	N	B A	T65 T66	N N
C29	Refuse Conveyor	400	1.752	N	B A	T66 T67	N N
C30	Refuse Conveyor	400	1.752	N	B A	T67 T68	N N
C31	Refuse Conveyor	400	1.752	N	B A	T68 T69	N N

Equipment ID No.	Description	Maximum Capacity		Control Equipment	Associated Transfer Points		
		TPH	TPY x 10 6		Location: B -Before A -After	ID. No.	Control Equipment
C22	CC Conveyor	40	0.3504	PE	B A	Wet Wash T57	 FE
C23	CC Conveyor	40	0.3504	PE	B A	T57 T58	FE PE
C21	CC Conveyor	318.7	2.199	PE	B A	Wet Wash T56	 FE
C24	CC Conveyor	40	0.3504	PE	B A	T58 T59	PE PE
ST13	Storage Bin	40	0.333	PE	B A	T59 T60	PE N
C25	CC Conveyor	40	0.017	PE	B A	T59 T61	PE FE
TD05	Thermal Dryer	318.7	2.199	Scrubber	B B A	T56 T61 T28	FE FE FE
C11	CC Conveyor	290	2.001	PE	B A	T28 T29	FE PE
ST5	Loadout bin	290	2.001	PE	B A A	T29 T30 T31	PE PE PE
C12	CC Conveyor	290	2.001	PE	B A	T30 T32	PE PE
C13	CC Conveyor	290	2.001	PE	B A A	T32 T33 T34	PE PE PE
ST6	Storage Bin	290	2.001	FE	B A	T33 T35	PE PE
ST7	Storage Bin	290	2.001	FE	B A	T34 T40	PE PE
C14	CC Conveyor	290	2.001	PE	B A	T35 T37	PE PE
C15	CC Conveyor	290	2.001	PE	B A	T40 T42	PE PE
C16	CC Conveyor	290	2.001	PE	B B A	T37 T42 T38	PE PE PE
ST8	CC Stockpile	290	1	N	B A	T43 T44	N N
ST20	Lime Feed Bin	0.025	0.000175	FE	B A	T83 T84	N FE
FSC1	Lime Screw Conveyor	0.025	0.000175	FE	B A	T84 T85	FE PE

Equipment ID No.	Description	Maximum Capacity		Control Equipment	Associated Transfer Points		
		TPH	TPY x 10 6		Location: B -Before A -After	ID. No.	Control Equipment
ST15	Synfuel Stockpile	1000	1	WS	B	T70	N
					A	T71	PE
					A	T75	PE
					A	T73	PE
					A	T78	PE
					A	T82	N
ST16	Synfuel Storage Bin	1000	1	PE	B	T71	PE
					A	T72	FE
ST17	Synfuel Storage Bin	1000	1	PE	B	T73	PE
					A	T74	FE
ST18	Synfuel Storage Bin	1000	1	PE	B	T75	PE
					A	T76	FE
C33	Synfuel Conveyor	1000	1	N	B	T76	FE
					A	T77	FE
ST19	Synfuel Storage Bin	1000	1	PE	B	T78	PE
					A	T79	FE
C34	Synfuel Conveyor	1000	1	N	B	T79	FE
					A	T80	FE
C32	Synfuel Conveyor	1000	1	N	B	T72	FE
					B	T77	FE
					B	T74	FE
					B	T80	FE
					A	T81	N

[45CSR13, R13-0308D, A.9.]

6.2. Monitoring Requirements

6.2.1. See Section 3.2.

6.3. Testing Requirements

6.3.1. Compliance testing shall be determined by conducting observations in accordance with Reference Method 9 Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR § 60.11. The minimum total time of the observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).
[45CSR13, R13-0308D, B.1. and B.5., 45CSR16, 40 CFR §§ 60.11 (b) & (e) (1), Transfer Points: T30, T32, T33, T34, T35, T36, T37, T38, T39, T40, T42; Conveyors: C12, C13, C14, C15, C16; Silos: ST6, ST7]

6.3.2. For the purpose of determining compliance with the maximum limit set forth in Section 6.1.2 the applicant shall maintain certified daily and monthly records of the amount of coal throughput to the wet wash plant. Compliance with the hourly throughput limit shall be demonstrated by dividing the daily total throughput by the number of hours operated in the same day to obtain an hourly average. Compliance with all yearly throughput limits shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of raw coal throughput at any given time for the previous twelve (12) months. By the fifteenth day of each calendar month, the permittee shall calculate the rolling yearly total. Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or his/her duly authorized representative upon request.
[45CSR§30-5.1.c., 45CSR13, R13-0308D, B.9.]

6.4. Recordkeeping Requirements

6.4.1. See Section 3.4.

6.5. Reporting Requirements

6.5.1. See Section 3.5.

6.6. Compliance Plan

6.6.1. None

7.0. Compliance Assurance Monitoring • Cyclone System

7.1. Emission Unit

7.1.1. Thermal Dryer

7.2. Control Device

7.2.1. Cyclone System is guaranteed to remove 90% of the minus 28 mesh fines entrained in the air stream before entry into the wet scrubber. The cyclone consists of two (2) eighty-two (82) inch diameter involute dry type Research-Contrell, Flex-Kleen Dryer Mechanical Cyclone Dust Collectors. The fine coal is discharged from the cyclones through 16" diameter rotary air locks.

7.3. Control Device Efficiency Limits

7.3.1. Particulate Matter: Capture efficiency of 90% and a control efficiency of 95%

7.4. Monitoring Approach

7.4.1. Opacity monitoring (see Section 4.2.).

7.4.2. The permittee shall follow the cyclone's manufacturer requirements to maintain a pressure drop range from 4.0 to 7.0 inches H_2O.

7.4.3. The inlet temperature shall be greater than or equal to 110 ^{o}F.

7.4.4. The permittee shall conduct calibration of equipment as required.

7.5. Response to Excursion

7.5.1. Lower temperature values do not pose an emission issue with dryer. During normal operations, the presence of opacity shall be investigated and corrected as soon as practicable. All excursions shall be documented and maintained for a period of not less than five (5) years and shall be made available to the Director or his authorized representative.

7.5.2. Please note: The exceedances of the indicator ranges do not specifically indicate an emissions exceedance.

7.6. Recordkeeping and Reporting

7.6.1. Thermal dryer exit temperature ranges from 110 °F to 250 °F with record keeping.

7.6.2. A record of the number, duration and cause(s) of all excursions or exceedances, and the corrective actions will be maintained.

7.6.3. A record of the number, duration, and cause for the downtime of the monitor itself shall be kept. This excludes downtime for calibration checks. This document should also include the measures taken to correct the excursion

7.6.4. The permittee shall maintain maintenance records on the cyclones.

7.6.5. Records for Section 7.6 are maintained with manual reading and recording at least once every 8 hours or once per shift.

[40 C.F.R. 64 *and* 45CSR§30-5.1.c.1.B.]

7.7. CAM Plan Summary of Requirements for Cyclone Device

	Indicator No. 1	Indicator No. 2
I. Indicator	Differential Pressure Drop Across Cyclone System	Inspection and Maintenance of Cyclone System
Measurement Approach	The cyclone's manufacturer requirements to maintain a pressure from 4.0 to 7.0 inches H_2O.	Visible Emissions are monitored by 40 CFR60, Method 9 certified individuals
II. Indicator Range	An excursion is defined when the minimum drop pressure is less than 4.0 or greater 7.0 inches H_2O.	An excursion is defined as a 6 minute block average of 15-second readings greater than 20% opacity
III. Performance Criteria		
A. Data Representativeness	The indicator ranges falls within the manufacturer's recommendations. The temperature range is from 110 to 250 °F. Lower temperature values do not pose an emission issue with dryer. During normal operations, the presence of opacity shall be investigated and corrected as soon as practicable. All excursions shall be documented and maintained for a period of not less than five (5) years and shall be made available to the Director or his authorized representative.	A record of the number, duration and cause(s) of all excursions or exceedances, and the corrective actions will be maintained. A record of the number, duration, and cause for the downtime of the monitor itself shall be kept. This excludes downtime for calibration checks. This document should also include the measures taken to correct the excursion.
B. Verification of Operational Status	Stack test conducted July 2005.	Stack test conducted July 26-29, 2005.
C. QA/QC Practices and Criteria	The calibration of equipment shall be conducted as required.	Personnel perform inspections and maintenance.
D. Monitoring Frequency	Monthly VE readings.	Monthly VE readings.
Collection Procedures	Manual log entries.	Manual log entries.
Averaging Period	None	Six minute block average, based on 15-second readings unless a 60 minute is required.

8.0. Compliance Assurance Monitoring • Wet Scrubber Collection Device

8.1. Emission Unit

8.1.1. Thermal Dryer

8.2. Control Device

8.2.1. The Flex Kleen Flooded Disk Wet Scrubber collection device uses a Flex-Kleen #14 Tangentially Fed Cyclonic type mist eliminator that captures and removes particulate matter from the gas stream. The scrubber design is a high-energy scrubber manufactured by Research Cottrell, Flex Kleen Flooded Cone, Venturi #60.

8.3. Control Device Efficiency Limits

8.3.1. Particulate Matter: Capture efficiency of 100%.

8.3.2. Sulfur Dioxide: Capture efficiency of 100% and the control of the maximum allowable loading per 45CSR§10-4.1.

8.4. Monitoring Approach

8.4.1. Opacity monitoring (see Section 4.2.).

8.4.2. The Scrubbing Liquor pressure to the control equipment shall be between 25 to 40 PSIA.

8.4.3. The pressure drop across the scrubber shall be greater than 30 inches H_2O. It is normally between 34 to 35 inches H_2O.

8.4.4. The gas temperature and pressure shall not be less than 110 ^{o}F and 16 PSIA.

8.4.5. Lime feed rate shall be set to maintain sufficient speed for the scrubber effluent pH set point of 5.0 to consistently meet the effluent minimum limitation of pH 4.

8.4.6. The minimum scrubber effluent pH shall be 4.0.

8.4.7. The permittee shall conduct calibration of equipment as required.

8.5. Response to Excursion

8.5.1. Lower temperature values do not pose an emission issue with dryer. During normal operations, the presence of opacity shall be investigated and corrected as soon as practicable. All excursions shall be documented and maintained for a period of not less than five (5) years and shall be made available to the Director or his authorized representative.

8.5.2. Please note: The exceedances of the indicator ranges do not specifically indicate an emissions exceedance.

8.6. Recordkeeping and Reporting

8.6.1. Record keeping of water pressure to the control equipment to the scrubber.

8.6.2. Record keeping of pressure drop across the scrubber.

8.6.3. Record keeping of the scrubber water flow rate.

8.6.4. Records for Section 8.6.1 through 8.6.3 are maintained by manual reading and recording at least once every 8 hours or once per shift.

8.6.5. Continuously recording the pH of the scrubber effluent.

[40 C.F.R. 64 *and* 45CSR§30-5.1.c.1.B.]

8.7. CAM Plan Summary of Requirements for Wet Scrubber Collection Device

	Indicator No. 1	Indicator No. 2
I. Indicator	Wet scrubber effluent	Monitoring and Recording the scrubber effluent
Measurement Approach	The wet scrubber effluent is monitored with a pH probe.	Lime feed rate shall be set to maintain sufficient speed for the scrubber effluent pH set point of 5.0 to consistently meet the effluent minimum limitation of pH 4.
II. Indicator Range	An excursion is defined when the scrubber effluent pH is less than 4.0.	Continuously monitoring and recording of the scrubber effluent
III. Performance Criteria		
A. Data Representativeness	Continuously recording the pH of the scrubber effluent.	Continuously recording the pH of the scrubber effluent.
B. Verification of Operational Status	Stack test conducted July 2005. Stack Tester's recommendations.	Stack test conducted July 26-29, 2005.
C. QA/QC Practices and Criteria	The calibration of equipment shall be conducted as required.	Personnel perform inspections and maintenance.
D. Monitoring Frequency	Once per shift (10-12 hours)	Once every shift (10-12 hours) [(1)]
Collection Procedures	Manual log entries. [(1)]	Manual log entries. [(1)]
Averaging Period	None	Once every shift (10-12 hours) [(1)]

[(1)] A digital recording system should be in-place within two weeks (approximately November 1, 2006).

APPENDIX A

45CSR10 Monitoring Plan

- **Thermal Dryer (65 MMBtu/hr – Fire Box)**

COPY

Division of Air Quality
7012 MacCorkle Avenue, SE
Charleston, WV 25304-2943
Telephone Number: (304) 926-3647
Fax Number: (304) 926-3739

West Virginia Department of Environmental Protection

Bob Wise
Governor

Michael O. Callaghan
Secretary

August 28, 2001

Second Sterling Corporation
c/o John D. Higginbotham, Jr., Chief Engineer
P.O. Box 1085
Beckley, WV 25802-1085

Subject: Notice of Monitoring Plan Approval
Second Sterling Corporation Plant ID#: 047-00008

Dear Mr. Higginbotham:

The Division of Air Quality (DAQ) is pleased to inform you that the monitoring plan submitted pursuant to Regulations 10 & 10A for Second Sterling Corporation located in Keystone, WV has been approved effective August 28, 2001. This monitoring plan approval is based on the plans and specifications submitted in correspondence dated June 29 and July 25, 2001. The Director may cancel or suspend this approval if the plans and specifications upon which the approval was based are not adhered to. If revisions to the monitoring plan are needed, then Second Sterling Corporation must submit any revisions in writing and they must be approved by the Director, before any revisions can be implemented.

The request for exemption from weight emission testing dated July 25, 2001 has been approved.

Should you have any questions or require additional information, contact Mr. Fred Teel of my staff at (304) 926-3647.

APPROVED : _____ Date: 8/30/01
John A. Benedict, Deputy Director
Division of Air Quality

"To use all available resources to protect and restore West Virginia's environment in concert with the needs of present and future generations."

DEP West Virginia Department of Environmental Protection

SECOND STERLING CORPORATION
P.O. Box 1085
Beckley, WV 25802-1085
304/252-8528

July 25, 2001

Edward L. Kropp, Chief
West Virginia Division of Environmental Protection
OFFICE OF AIR QUALITY
7012 MacCorkle Avenue, SE
Charleston, WV 25304

RE: Plant ID# 047-00008
45CSR10A-5.2.c "Alternate to Compliance Testing"

Dear Mr. Kropp:

We request an alternate to compliance testing by demonstrating mathematically that the emissions rate of sulfur dioxide as determined by previous stack testing is significantly lower than 2000 ppm.

Two stack tests have been performed on this dryer. The first stack test was conducted by TRA-DET INC, LABORATORIES in November 1978, which represented the start up of the thermal dryer. The purpose of those tests was to determine emission rates of SO_2 and particulate matter. The second stack test was conducted by TRA-DET INC, COAL TECHNICAL SERVICES in February of 1998. The purpose of these tests was to determine the emission rates of NO_x.

Information used in the mathematical calculations for SO_2 emissions rates were taken from both mentioned stack test reports. The information used from the first stack test is tables 10 and 11 (Appendix A) Sulfur Oxide Emissions. There numbers represent the actual emissions of SO_2 found in the stack during the 1978 test and represent the SO_2 efficiency removal rate.

The information used from the second stack tests is Dryer Performance, page 8 and Performance Summary Keystone Thermal Dryer, page 11 (Appendix B). The information used from Appendix B was the percent sulfur of the coal burned, 0.81%. The fuel consumption during each of the two runs was 2.63 TPH and the stack flow rate was 75,499 DSCFM.

CALCULATIONS

A. Determine the amount of SO_2 loading out of the stack assuming no SO_2 removal in the dryer. There are 3 potential ways to remove SO_2 in the dryer:

1. Absorbed in the ash in the furnace
2. Absorbed in the moisture remaining in the coal being dried
3. Absorbed in scrubbers

[redacted]

Edward L. Kropp, Chief
West Virginia Division of Environmental Protection
OFFICE OF AIR QUALITY
Page Four

This calculation will assume that there is no SO_2 removal and will represent the maximum SO_2 emissions in ppm.

SO_2 = Fuel consumed x % sulfur x 2 (conversion to SO_2)
= 2.63 tons/hr x 2000 lbs/ton x 0.0081 x 2
= 85.21 lbs/hr

$$\text{ppm } SO_2 = \frac{85.21 \text{ lbs/hr}}{\text{molecular weight of } SO_2 \text{ x stack flow volume x conversion to ppm}}$$

$$= \frac{85.21}{64 \times 75499 \times 1.56 \times 10^{-7}}$$

$$= \frac{85.21}{.7538}$$

= 113.04 ~ 113 ppm < 2000 ppm

Therefore with no SO_2 removal the amount of SO_2 emitted is 113 ppm, which is significantly less than the threshold limit of 2000 ppm.

B. Determine the amount of SO_2 loading out of the stack using the efficiency limits determined from the 1978 stack test. From Appendix A, the average SO_2 emissions were 0.78 lbs/hr. This was however based on a sulfur of .6 and a fuel consumption of 2.5 TPH.

With controls the 1978 test results avg. emissions was 0.78 lbs/hr.

$$\text{ppm} = \frac{0.78 \text{ lbs/hr}}{0.7538}$$

= 1.03 < 2000 ppm

Therefore with controls the emissions rate in ppm is a mute point.

Through the above calculations it has been demonstrated that the emissions of SO_2 from the thermal dryer is very, very small compared to the threshold limit of 2000 ppm.

Edward L. Kropp, Chief
West Virginia Division of Environmental Protection
OFFICE OF AIR QUALITY
Page Three

Therefore, we submit this to you for approval as an alternate to compliance testing for SO_2. We will monitor on a weekly basis the sulfur content of the coal and the amount used to fire the thermal dryer.

We request that you approve this alternate to compliance testing.

Should you have any questions, please call me at 304/252-8528.

Respectfully submitted,

John D. Higginbotham, Jr.
Chief Engineer

JDHJr/plr

APPENDIX A

TABLE 10. SULFUR OXIDE EMISSIONS

KEYSTONE THERMAL DRYER

EASTERN ASSOCIATED COAL CORPORATION

RUN	NaOH IMPINGERS		FILTER CATCH		TOTAL
	gms SO_2/DSCM	lbs SO_2/hr.	gms SO_2/DSCM	lbs SO_2/hr.	lbs SO_2/hr.
1	0.0036	0.978	0.0024	0.643	1.621
2	0.0025	0.671	0.0023	0.617	1.288
4	0.0041	1.072	0.0023	0.601	1.673
5	0.0037	0.992	0.0026	0.688	1.680

TABLE 11.

SULFUR EMISSIONS

KEYSTONE THERMAL DRYER

EASTERN ASSOCIATED COAL CORPORATION

RUN	SULFUR EMISSIONS						CHANGE IN ACIDITY OF SCRUBBER WATER	FURNACE TEMPERATURE		
	IMPINGER CATCH		FILTER CATCH		TOTAL			PANEL BOARD	DRYER	DIFFERENCE
	SO_2	S	SO_2	S	S					
	lbs/hr	lbs/hr	lbs/hr	lbs/hr	lbs/hr		mg/l. (as $CaCO_3$)	°F	°F	°F
1	0.978	0.490	0.643	0.322	0.812		+56.5	866	800	66
2	0.671	0.336	0.617	0.309	0.645		+31.5	844	796	48
4	1.072	0.536	0.601	0.301	0.837		+40.4	847	788	59
5	0.992	0.496	0.688	0.344	0.840		+43.3	964	900	64

APPENDIX B

8

DRYER PERFORMANCE

The performance of the dryer was determined conducting a heat and mass balance on the dryer system based on the measured coal moistures, the measured gas flows, and the assumed tonnage of the total clean coal product leaving the dryer (the actual readings from the belt scale on the dryer product are believed to be low, and the operators estimate of a 220 to 230 A/R TPH product rate was used for the calculation of the dryer throughput tonnage[3]. The moisture analysis of the coal samples collected during the two test runs were:

Sample	Run 1	Run 2
Dryer Feed	11.46%	11.34%
Deck Discharge	5.43%	4.88%
Cyclone Product	1.10%	0.76%
Total Product (calculated)	4.82%	4.30%

The analysis of the composite fuel sampled collected during the course of both Runs 1 and 2 was as follows:

	A/R	D/B
Moisture	5.21 %	
Ash	3.96 %	4.18 %
Sulfur	0.81 %	0.85 %
BTU	14,163 per lb.	14,941 per lb.
Volatile	19.47 %	20.54 %
Carbon	81.62 %	86.11 %
Hydrogen	4.39 %	4.63 %
Nitrogen	1.31%	1.38 %
Oxygen	2.70 %	2.85 %

[3] Calculated system performance substantiates the assumed tonnage and it is believed by the author to be a reasonably correct estimate of the actual product tonnage leaving the dryer.

Table 1:

11

PERFORMANCE SUMMARY
KEYSTONE THERMAL DRYER
February 1998

Location	Parameter	Run 1	Run 2	Average	Units
Furnace	Exit Temperature	1,334	1,286	1,310	°F
	Gross Heat Release	74.53	74.53	74.53	mmBTU/hr.
	Area Heat Relese	755,839	755,839	755,839	mmBTU/hr/ft^2
	Fuel Consumption	2.63	2.63	2.63	A/R TPH
	Combustion Air (required)	61,671	61,671	61,671	lbs./hr.
	Estimated Combustion Air	114,500	114,500	114,500	lbs./hr.
		85.7%	85.7%	85.7%	% excess
Inlet Air	Volume Flow[1]	74,741	75,877	75,309	ACFM
		74,930	76,068	75,499	DSCFM
	Mass Flow	338,370	343,512	340,941	lbs./hr.
	Temperature	40	40	40	°F
	Pressure	28.47	28.47	28.47	" HgABS
Deck Inlet	Temperature	915	902	909	°F
	Pressure	-0.3	-0.3	-0.3	" W.C.
	Volume Flow	207,989	209,123	208,556	ACFM
	Mass Flow	340,722	345,864	343,293	lbs./hr.
		79.2	80.4	79.8	lbs./ft^2/min.
Constriction Deck	Pressure Drop	5.3	5.6	5.5	" W.C.
	Rod Velocity	338	340	339	ft./sec.
Fluidized Bed	Pressure Drop	0.4	0.6	0.5	" W.C.
Cyclone Inlet	Volume Flow	128,141	130,558	129,350	ACFM
	Pressure	-8.6	-9.0	-8.8	" W.C.
	Temperature[2]	263	265	264	°F
Cyclones	Actual Pressure Drop	2.7	2.5	2.6	" W.C.
	Predicted Pressure Drop	2.8	2.8	2.8	" W.C.
Exhaust Fan	Inlet Flow	112,996	115,091	114,044	ACFM
	Temperature	173	175	174	°F
	Gas Density	0.0551	0.0549	0.0550	lbs./ft^3
	Pressure Drop	44	44	44	" W.C.
	Motor Amps	291	291	291	amps
	Motor Power	1,166	1,181	1,173	BHP
Scrubber	Saturation	25.3	24.1	24.7	% v/v
	Static Pressure	35.5	35.5	35.5	" W.C.
	Temperature	188	190	189	°F
	Condensation (water)	28	28	28	gal./min.
Stack	Temperature	113	113	113	°F
	Flow	94,168	95,582	94,875	ACFM
		74,930	76,068	75,499	DSCFM

Notes:

1. Includes air supplied as combustion air by underfire & overfire fans.
2. Based on reported temperature of drying chamber thermocouple.

File perf summary
Sheet Process

Update 02/27/1998
@ 12:10 PM