

TITLE V (45CSR30)
RENEWAL APPLICATION

AFFINITY PREPARATION PLANT
PLANT ID. 03-54-081-00015

PREPARED FOR:

POCAHONTAS COAL COMPANY LLC
BECKLEY, WEST VIRGINIA

PREPARED BY:

ENVIRONMENTAL REGULATORY SERVICE GROUP, INC.
2303 ROXALANA ROAD
DUNBAR, WEST VIRGINIA 25064

PROJECT NO. ERSG 06-125-07

NOVEMBER 2006

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WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0499

TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

Form with 10 numbered sections: 1. Name of Applicant (Pocahontas Coal Company LLC), 2. Facility Name or Location (Affinity Preparation Plant), 3. DAQ Plant ID No. (03-54-081-00015), 4. Federal Employer ID No. (FEIN) (26-0128639), 5. Permit Application Type (Permit Renewal), 6. Type of Business Entity (Limited Partnership), 7. Is the Applicant the: (Both), 8. Number of onsite employees (0), 9. Governmental Code (Privately owned and operated; 0), 10. Business Confidentiality Claims (No).

11. Mailing Address		
Street or P.O. Box: 109 Appalachian Drive		
City: Beckley	State: WV	Zip: 25801
Telephone Number: (304) 255-9030	Fax Number: (304) 255-9032	

12. Facility Location		
Street: Laurel Run	City: Midway	County: Raleigh
UTM Easting: 479.90 km	UTM Northing: 4,173.7 km	Zone: <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
Directions: From Midway take County Route 1 towards Affinity. Plant is approximately 1 mile from Midway.		
Portable Source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is facility located within a nonattainment area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, for what air pollutants?	
Is facility located within 50 miles of another state? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, name the affected state(s). Virginia Kentucky	
Is facility located within 100 km of a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, name the area(s).	
If no, do emissions impact a Class I Area ¹ ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
¹ Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

13. Contact Information		
Responsible Official: Ronald L. Patterson		Title: Manager of Engineering
Street or P.O. Box: 109 Appalachian Drive		
City: Beckley	State: WV	Zip: 25801
Telephone Number: (304) 255-9030	Fax Number: (304) 255-9032	

E-mail address: RPATTERSON@UNITEDCO.NET		
Environmental Contact: Ronald L. Patterson		Title: Manager of Engineering
Street or P.O. Box: 109 Appalachian Drive		
City: Beckley	State: WV	Zip: 25801
Telephone Number: (304) 255-9030	Fax Number: (304) 255-9032	
E-mail address: RPATTERSON@UNITEDCO.NET		
Application Preparer: Jim Cooper		Title: Senior Engineer
Company: Environmental Regulatory Service Group, Inc.		
Street or P.O. Box: 2303 Roxalana Road		
City: Dunbar	State: WV	Zip: 25064
Telephone Number: (304)746-4780	Fax Number: (304)746-4783	
E-mail address: jim@ersginc.com		

14. Facility Description			
List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.			
Process	Products	NAICS	SIC
Coal Mining, Preparation, and Handling	Clean Coal	212112	1222

Provide a general description of operations.

The Affinity Preparation Plant has the ability to break/size, wash, thermally dry, store, and load out/in coal. The maximum capacity of the preparation plant is 550 tons per hour of raw coal feed. The facility has been idle since 1985, but has been well maintained.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
<input checked="" type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input checked="" type="checkbox"/> PSD (45CSR14)
<input checked="" type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input checked="" type="checkbox"/> Section 111 NSPS	<input type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> Section 112(j) MACT hammer
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> 112(r) RMP

<input type="checkbox"/> Section 129 Standards/Reqs.	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> NO _x Budget Trading Program Non-EGUs (45CSR1)	<input type="checkbox"/> NO _x Budget Trading Program EGUs (45CSR26)

<p>19. Non Applicability Determinations</p> <p>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</p> <p>Section 112 - no MACT standard has been promulgated for thermal dryers. Section 129 Standards and Requirements - facility does not combust solid waste. Section 183 (tank vessel requirement) - no tanks/vessels utilized at this facility. NAAQS increments or visibility (temp. sources) - no temporary sources. Emission Trading and Banking (45CSR28) - not involved in this program. NO_x Budget Trading Program Non-EGU's (45CSR1) - does not meet the definition of NO_x Budget Unit FIP - none in place Nonattainment NSR (45CSR19) - Not located in a non-attainment area or will not contribute to a violation of section 107 of the CAA. Section 183 (e) - facility is not a regulated entity as defined by Section 183 (e)(C). Statospheric Ozone (Title VI) - does not emit any of the listed pollutants. Emissions Cap 45CSR30-2.6.1 - none in place 45CSR27 – does not meet definition of chemical processing unit. Acid Rain (Title IV) - not an EGU. NO_x Budget Trading Program non-EGU's (45CSR1) - not involved in this program. NO_x Budget Trading Program EGU's (45CSR26) - not an EGU.</p>
<input checked="" type="checkbox"/> Permit Shield

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number.

Certified emission statement – Permit Condition Number II.E.
Asbestos inspection/removal – Permit Condition Number III.B.1.a.iii.
No open burning – Permit Condition Number III.B.1.a.i. and III.B.1.a.ii.
Annual compliance certification – Permit Condition Number II.I.3.
Any newly applicable requirement – Permit Condition Number III.B.1.a.iv.
Testing to be conducted as required – Permit condition number III.B.1.a.v.
No objectionable odors – Permit Condition Number III.B.1.b.
Submit standby plan for reduction in pollutants – Permit Condition Number III.B.2.a.i.
20% opacity limit for fugitive dust control systems – Permit Condition Number III.B.2.a.ii.
Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.
Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.
Submit annual emission inventory – Permit Condition Number III.B.2.a.v.
Submit Semi-Annual Monitoring Report – Permit Condition Number II.J.5.a.

Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Certified emission statement (Permit Condition Number II.E.) – Submit annually with fee
Asbestos inspection/removal (Permit Condition Number III.B.1.a.iii.) – Inspection and reporting
No open burning (Permit Condition Number III.B.1.a.i. and III.B.1.a.ii.) - Inspection
Annual compliance certification (Permit Condition Number II.I.3.) – Monitoring and recordkeeping
Newly applicable requirement (Permit Condition Number III.B.1.a.iv.) – Notify and submit compliance schedule.
Testing (Permit condition number III.B.1.a.v.) – Conduct as required
No objectionable odors (Permit Condition Number III.B.1.b.) – Recordkeeping
Submit standby plan for reduction in pollutants (Permit Condition Number III.B.2.a.i.) – Submit upon request
20% opacity limit (Permit Condition Number III.B.2.a.ii.) – Visual inspection and recordkeeping
Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Annual emission inventory (Permit Condition Number III.B.2.a.v.) – Submit report annually
Semi-Annual Monitoring Report – (Permit Condition Number II.J.5.a.) Submit as required

Are you in compliance with all facility-wide applicable requirements? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

	/ /	
	/ /	
	/ /	
22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
	/ /	

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Controlled Emissions
Carbon Monoxide (CO)	131.4
Nitrogen Oxides (NO _x)	44.24
Lead (Pb)	0.28
Particulate Matter (PM ₁₀) ¹	22.61
Total Particulate Matter (TSP)	76.16
Sulfur Dioxide (SO ₂)	490.56
Volatile Organic Compounds (VOC)	30.11
Hazardous Air Pollutants ²	Potential Controlled Emissions
Acetaldehyde	0.0125
Acetophenone	0.0003
Acrolein	0.0064
Benzene	0.0285
Benzyl Chloride	0.0153
Bromoform	0.0009
Carbon Disulfide	0.0028
2-Chloroacetophenone	0.0002

Chlorobenzene	0.0005
Chloroform	0.0013
Cumene	0.0012
2,4-Dinitrotoluene	6.13E-06
Dimethyl Sulfate	0.0011
Ethyl Benzene	0.0021
Formaldehyde	0.0053
Hexane	0.0015
Methyl Ethyl Ketone	0.0085
Methyl Hydrazine	0.0037
Methyl Methacrylate	0.0004
Methylene Chloride	0.0064
Phenol	0.0004
Propionaldehyde	0.0083
Tetrachloroethylene	0.0009
Toluene	0.0053
1,1,1-Trichloroethane	0.0004
Styrene	0.0005
Xylenes	0.0008
Vinyle Acetate	0.0002
Hydrochloric Acid	0.3121
Hydrofluoric Acid	0.0378
Antimony (Sb ₂ O ₅)	0.06
Arsenic (As ₂ O ₅)	7.23
Beryllium (BeO)	0.14
Cadmium (CdO)	0.004
Chromium (CrO ₃)	0.59

Cobalt (CoO)	0.31
Manganese (MnO2)	0.46
Mercury (HgO)	0.006
Nickel (NiO)	0.64
Selenium (SeO2)	0.14
Regulated Pollutants other than Criteria and HAP	Potential Emissions
¹ PM ₁₀ is a component of TSP. ² For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.	

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input checked="" type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO ₂ lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input checked="" type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input checked="" type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO _x , SO ₂ , VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input checked="" type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input checked="" type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
<input type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input type="checkbox"/>	51. Steam cleaning operations.
<input type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input checked="" type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input checked="" type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table
Fill out the Title V Equipment Table and provide it as ATTACHMENT D .
26. Emission Units
For each emission unit listed in the Title V Equipment Table , fill out and provide an Emission Unit Form as ATTACHMENT E .
For each emission unit not in compliance with an applicable requirement, fill out a Schedule of Compliance Form as ATTACHMENT F .
27. Control Devices
For each control device listed in the Title V Equipment Table , fill out and provide an Air Pollution Control Device Form as ATTACHMENT G .

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

Note: This Certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: Ronald L. Patterson	Title: Manager of Engineering
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Responsible official's signature:

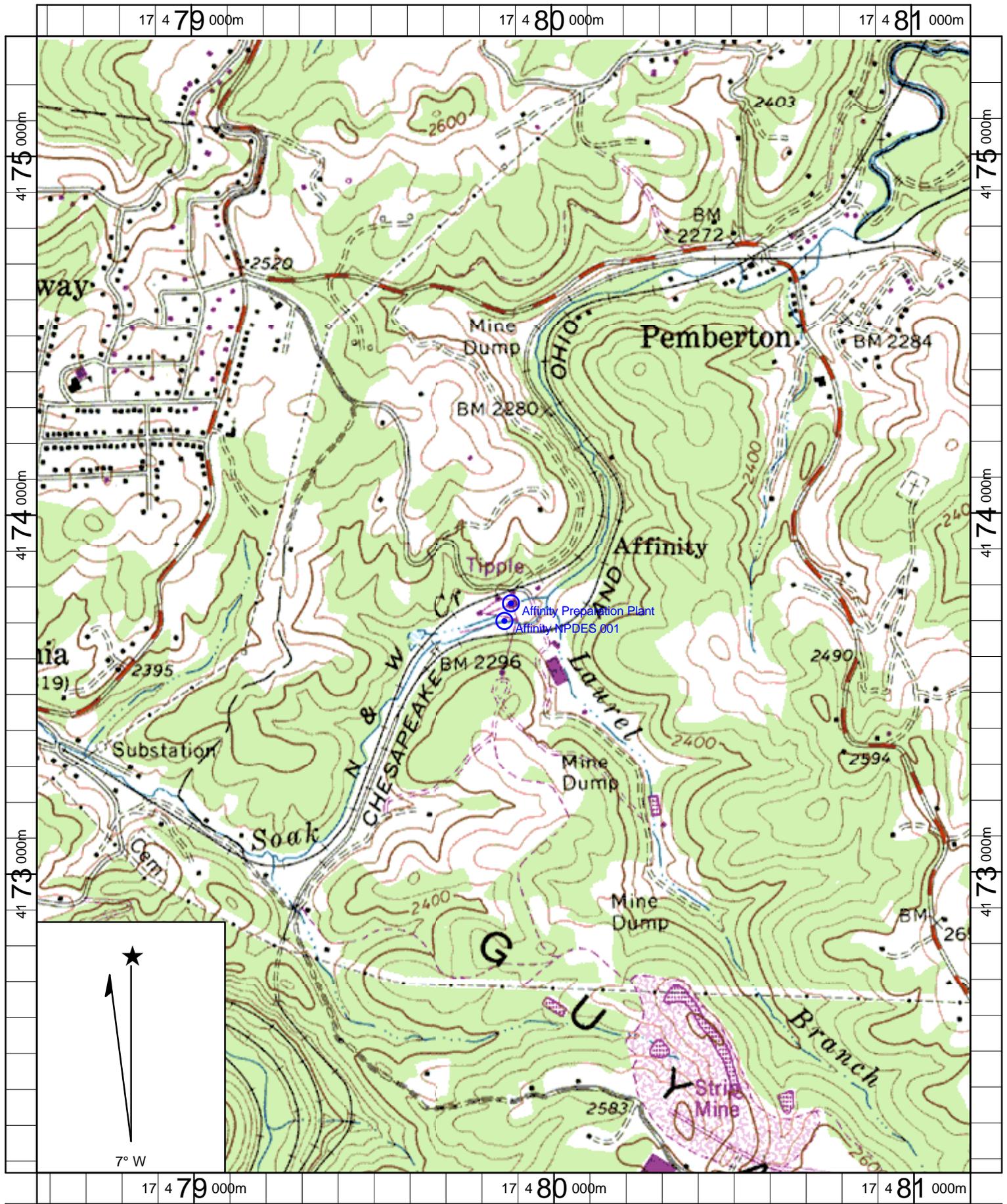
Signature: _____ Signature Date: _____
 (Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Title V Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)

ATTACHMENT A

AREA MAP(S)



Name: CRAB ORCHARD
 Date: 10/11/2006
 Scale: 1 inch equals 1142 feet

Location: 17 479863 E 4173748 N
 Caption: Affinity Preparation Plant
 Area Map

ATTACHMENT B

PLOT PLAN(S)

ATTACHMENT C

PROCESS FLOW DIAGRAM(S)

ATTACHMENT D

TITLE V EQUIPMENT TABLE

ATTACHMENT D - Title V Equipment Table
(includes all emission units at the facility except those designated as
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Point ID ¹	Control Device ¹	Emission Unit ID ¹	Emission Unit Description	Design Capacity	Year Installed/Modified
T5 and T6	MC	SO1	Railcar/Truck Shakeout	550 ton/hr	1972
T1, T2, and T12	FE	RB1	Rotary Breaker	550 ton/hr	1972
001, T17, T18, and T20	MCS/WSS	TD	Thermal Dryer	320 ton/hr	1972
T1	FE	BC-1	Slope Belt	550 ton/hr	1972
T2, and T3	FE	BC-2	Raw Coal Conveyor	550 ton/hr	1972
T3 and T7	PE	BC-3	Raw Coal Conveyor	550 ton/hr	1972
T6 and T7	PE	BC-4	Raw Coal Conveyor from Shakeout	550 ton/hr	1972
T8 and T9	FE	BC-5	Raw Coal Conveyor	550 ton/hr	1972
T9 and T10	PE	BC-6	Raw Coal Conveyor to Prep Plant	550 ton/hr	1972
T11, T12, and T13	PE	BC-7	Refuse Belt	230 ton/hr	1972
T16	PE	BC-8	Dryer Coal Belt	320 ton/hr	1972
T18 and T19	FE	BC-9	Belt Conveyor to Thermal Dryer Fuel Bin	4 ton/hr	1972
T17, T20 and T21	PE	BC-10	Thermal Dryer to Clean Coal Bin	316 ton/hr	1972
T21 and T22	PE	BC-11	Belt BC-10 to 10,000 ton Clean Coal Silo	316 ton/hr	1972
T23 and T24	PE	BC-12	10,000 ton Clean Coal Silo to Loadout Bin	316 ton/hr	1972
T15	PE	BC-13	Prep Plant to Wet Coal Transfer House	320 ton/hr	1972
T15	PE	BC-14	Wet Coal Transfer House to Prep Plant	320 ton/hr	1972
T11	PE	BC-15	Wet Wash Refuse to Belt BC-7	230 ton/hr	1972
T7 and T8	FE	S1	Raw Coal Silo	2,500 tons	1972
T3 and T10	FE	S2	Raw Coal Silo	2,000 tons	1972
T21, T24, and T25	PE	CCB1	Clean Coal Loadout Bin	30 tons	1972
T22 and T23	FE	CCB2	Clean Coal Silo	10,000 tons	1972
T26	MC	CCOS1	Clean Coal Emergency Storage	40,000 sq ft	1972
T13 and T14	PE	REF 1	Refuse Bin	300 tons	1972
VT/UPH	RWMW	--	Refuse Bin to Refuse Area	0.4 mile/trip	1972
VT/UPH1	RWMW	--	Raw Coal from Off-Site Mines	1.1 mile/trip	1972
END 2	RWMW	--	Endloader Traffic	1 mile/trip	1972
VT/UPH2	RWMW	--	Clean Coal Haulroad	0.189 mile/trip	1972

¹For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

ATTACHMENT E
EMISSION UNIT FORM(S)

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: TD	Emission unit name: Thermal Dryer	List any control devices associated with this emission unit. Multi-Clone, Wet Scrubber, and Mist Eliminator
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Coal fired fluidized bed thermal dryer
320 tons per hour
112 MMBtu/hr

Manufacturer: Link Belt	Model number: Fluid-Flo Dryer	Serial number: NA
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Construction date: 1972	Installation date: 1972	Modification date(s): NA
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
112 MMBtu/hr

Maximum Hourly Throughput: 320 tons dried per hour	Maximum Annual Throughput: 606,720 tons dried annually	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input checked="" type="checkbox"/> Direct Fired
--	---

Maximum design heat input and/or maximum horsepower rating: 112 MMBtu/hr	Type and Btu/hr rating of burners: Stoker 112 MMBtu/hr
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Coal – 5 ton/hr and 43,800 ton/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Bituminous Coal	2.00%	6%	HHV 14,000 Btu/lb
			LHV 12,000 Btu/lb

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)	30.0	131.40
Nitrogen Oxides (NO _x)	46.08	44.24
Lead (Pb)	0.07	0.28
Particulate Matter (PM ₁₀)	--	--
Total Particulate Matter (TSP)	37.44	35.94
Sulfur Dioxide (SO ₂)	112.0	490.56
Volatile Organic Compounds (VOC)	31.36	30.11
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Acetaldehyde	0.0029	0.0125
Acetophenone	0.0001	0.0003
Acrolein	0.0015	0.0064
Benzene	0.0065	0.0285
Benzyl Chloride	0.0035	0.0153
Bromoform	0.0002	0.0009
Carbon Disulfide	0.0007	0.0028
2-Chloroacetophenone	0.00004	0.0002
Chlorobenzene	0.0001	0.0005
Chloroform	0.0003	0.0013
Cumene	0.0003	0.0012
2,4-Dinitrotoluene	1.40E-06	6.13E-06
Dimethyl Sulfate	0.0002	0.0011
Ethyl Benzene	0.0005	0.0021
Formaldehyde	0.0012	0.0053
Hexane	0.0003	0.0015
Methyl Ethyl Ketone	0.002	0.0085
Methyl Hydrazine	0.0009	0.0037
Methyl Methacrylate	0.0001	0.0004
Methylene Chloride	0.0015	0.0064
Phenol	0.0001	0.0004

Propionaldehyde	0.0019	0.0083
Tetrachloroethylene	0.0002	0.0009
Toluene	0.0012	0.0053
1,1,1-Trichloroethane	0.0001	0.0004
Styrene	0.0001	0.0005
Xylenes	0.0002	0.0008
Vinyle Acetate	3.80E-05	0.0002
Hydrochloric Acid	0.0712	0.3121
Hydroflouric Acid	0.0086	0.0378
Antimony (Sb2O5)	0.013	0.06
Arsenic (AS2O5)	1.65	7.23
Barium (BaO)	0.80	3.50
Beryllim (BeO)	0.03	0.14
Cadminum (CdO)	0.0009	0.004
Chromium (CrO3)	0.14	0.59
Cobalt (CoO)	0.07	0.31
Copper (CuO)	0.205	0.90
Lead (PbO2)	0.07	0.28
Manganese (MnO2)	0.11	0.46
Mercury (HgO)	0.0014	0.006
Nickel (NiO)	0.15	0.64
Selenium (SeO2)	0.03	0.14
Silver (AgO)	0.0005	0.0022
Zinc (ZnO)	0.12	0.50
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Particulate, nitrogen oxides, volatile organic compound, and carbon dioxide potential emissions are based on the emissions factors found in AP-42 - Table 11.10-1 & 11.10-2 (11/'95) and the amount of coal dried in the thermal dryer.

The carbon monoxide potential emissions are based on the emission factors found in AP-42 Table 1.1-3 (9/'98) and the amount of coal combusted.

The VOC HAP potential emissions are based on the emission factors taken from Table 4-5 of EPA's Guidance for Coal Mining Facilities (EPA 745-B-00-003).

The metal HAP potential emissions are based on the emission factors found in the USGS Coal Quality Database and calculated per EPA 745-B-00-003 that assume that 100 % of the base metal is fully oxidized to determine the quantity of the metal compounds manufactured / emitted.

SO2 potential emissions based on fuel sulfur content, maximum heat input, and minimum fuel heat content.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

- 20% opacity limit for stack emissions – Permit Condition Number III.B.2.a.vi.
- No more than 60% opacity for a period or periods aggregating 5 minutes or more during any 60 minute period – Permit Condition Number III.B.2.a.vii
- No more than 60% opacity for 8 minutes or more during start-up – Permit Condition Number III.B.2.a.viii.
- Particulate loading limit of 0.0825 grains per cubic foot – Permit Condition Number III.B.2.a.ix.
- Adding additional gas to dryer exhaust to circumvent above particulate loading rule – Permit Condition Number III.B.2.a.x.
- Stack emissions must be vented at least 80 feet above foundation grade and at least 10 feet above roof of any structures – Permit Condition Number III.B.2.a.xi.
- Continuous measurements of stack exit temperature – Permit Condition Number III.B.2.a.xii.
- Continuously monitor pressure drop in the scrubber – Permit Condition Number III.B.2.a.xiii.
- Continuously monitor the water pressure for the scrubber – Permit Condition Number III.B.2.a.xiv.
- Sulfur dioxide limit of 2,000 ppm – Permit Condition Number III.2.a.xv.
- Installation of stack gas monitoring device – Permit Condition Number III.B.2.a.xvi.
- Calculate sulfur dioxide based on fuel analysis before installation of monitoring device – Permit Condition Number III.B.2.a.xvii.
- Sulfur dioxide monitoring plan – Permit Condition Number III.B.2.b.iii.
- Sulfur dioxide testing – Permit Condition Number III.B.2.a.xviii.
- Emissions testing – Permit Condition Number III.B.2.a.xix.
- Install flow straightening device – Permit Condition Number III.B.1.a.vi.
- Opacity observations – Permit Condition Number III.C.7.
- Establish operating parameters – Permit Condition Number III.C.5.
- Conduct stack testing as required – Permit Condition Number III.C.5.
- Fuel sampling as required – Permit Condition Number III.C.6.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

20% opacity limit for stack emissions (Permit Condition Number III.B.2.a.vi.) – Visual inspection and recordkeeping

No more than 60% opacity for a period or periods aggregating 5 minutes or more during any 60 minute period (Permit Condition Number III.B.2.a.vii) - Visual inspection and recordkeeping

No more than 60% opacity for 8 minutes or more during start-up (Permit Condition Number III.B.2.a.viii.) - Visual inspection and recordkeeping

Particulate loading limit of 0.0825 grains per cubic foot (Permit Condition Number III.B.2.a.ix.) – Recordkeeping and stack testing

Adding additional gas to dryer exhaust to circumvent above particulate loading rule (Permit Condition Number III.B.2.a.x.) - Inspection

Stack emissions must be vented at least 80 feet above foundation grade and at least 10 feet above roof of any structures (Permit Condition Number III.B.2.a.xi.) - Inspection

Continuous measurements of stack exit temperature (Permit Condition Number III.B.2.a.xii.) – Install monitor and recordkeeping

Continuously monitor pressure drop in the scrubber (Permit Condition Number III.B.2.a.xiii.) - Install monitor and recordkeeping

Continuously monitor the water pressure for the scrubber (Permit Condition Number III.B.2.a.xiv.) - Install monitoring and recordkeeping

Sulfur dioxide limit of 2,000 ppm (Permit Condition Number III.2.a.xv.) - Recordkeeping

Installation of stack gas monitoring device (Permit Condition Number III.B.2.a.xvi.) – As requested by director

Calculate sulfur dioxide based on fuel analysis before installation of monitoring device (Permit Condition Number III.B.2.a.xvii.) – Only needed upon installation of stack gas monitoring device

Sulfur dioxide monitoring plan (Permit Condition Number III.B.2.b.iii.) – Submit plan prior to start-up

Sulfur dioxide testing (Permit Condition Number III.B.2.a.xviii.) – As designated by the Director

Emissions testing (Permit Condition Number III.B.2.a.xix.) – As required by the director

Install flow straightening device (Permit Condition Number III.B.1.a.vi.) – Install when cyclonic flow is present

Opacity Observations (Permit Condition Number III.C.7.) – Testing and reporting

Establish operating parameters (Permit Condition Number III.C.5.) – Testing and reporting

Conduct stack test (Permit Condition Number III.C.5.) – Testing as required

Fuel sampling (Permit Condition Number III.C.6.) – Sample as required

Daily coal throughput records/hours of operation (Permit Condition Number III.C.4.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: RB1	Emission unit name: Rotary Breaker	List any control devices associated with this emission unit. Full Enclosure
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
550 ton/hr rotary breaker

Manufacturer: McNally-Pittsburgh	Model number: NA	Serial number: NA
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Construction date: 1972	Installation date: 1972	Modification date(s): NA
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
550 ton/hr

Maximum Hourly Throughput: 550 ton/hr	Maximum Annual Throughput: 950,400 ton/yr	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)	1.04	0.9
Total Particulate Matter (TSP)	2.20	1.9
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Particulate matter emissions are calculated based on the emission factors found in the General Permit (G10-C) Calculation Spreadsheet.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

- Testing to be conducted as required – Permit condition number III.B.1.a.v.
- 20% opacity limit for fugitive dust control systems – Permit Condition Number III.B.2.a.ii.
- Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.
- Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.
- Record daily coal throughput and hours of operation – Permit Condition Number III.C.4.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

- Testing (Permit condition number III.B.1.a.v.) – Conduct as required
- 20% opacity limit (Permit Condition Number III.B.2.a.ii.) – Visual inspection and recordkeeping
- Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
- Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
- Record daily coal throughput and hours of operation (Permit Condition Number III.C.4.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CCOS1	Emission unit name: Clean Coal Emergency Storage	List any control devices associated with this emission unit. Primary is Moisture Content (MC) Water Spray (WS) as needed
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Clean Coal Stockpile – 40,000 square feet

Manufacturer: NA	Model number:	Serial number:
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Construction date: 1972	Installation date: 1972	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
40,000 square feet

Maximum Hourly Throughput: 316 tons/hr	Maximum Annual Throughput: 606,720 tons	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
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Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)	0.18	0.80
Total Particulate Matter (TSP)	0.38	1.68
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Stockpile emissions calculated using the emission factors located in the General Permit (G10-C) Spreadsheet.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.
Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.
Record daily usage of dust suppressant – Permit Condition Number III.C.3.
Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Daily usage of dust suppressant (Permit Condition Number III.C.3.) - Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: END 2	Emission unit name: Endloader Traffic	List any control devices associated with this emission unit. Water Spray
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Unpaved haulroad – 1.0 mile per trip

Manufacturer: NA	Model number:	Serial number:
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Construction date: 1972	Installation date: 1972	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1 trips/hr and 8,760 trips/yr

Maximum Hourly Throughput: 1 mile	Maximum Annual Throughput: 8,760 miles	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)	0.81	3.54
Total Particulate Matter (TSP)	2.64	11.56
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculated using emission factors from AP-42 Fifth Edition – 13.2.2 Unpaved Roads, last updated: 12/2003

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.
Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.
Record daily usage of dust suppressant – Permit Condition Number III.C.3.
Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Daily usage of dust suppressant (Permit Condition Number III.C.3.) - Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: VT/UPH	Emission unit name: Refuse Haulroad	List any control devices associated with this emission unit. Water Spray
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Unpaved haulroad – 0.4 mile per trip

Manufacturer: NA	Model number:	Serial number:
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Construction date: 1972	Installation date: 1972	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
4 trips/hr and 7,360 trips/yr

Maximum Hourly Throughput: 241 tons	Maximum Annual Throughput: 536,640 tons	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)	0.97	0.90
Total Particulate Matter (TSP)	3.18	2.93
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculated using emission factors from AP-42 Fifth Edition – 13.2.2 Unpaved Roads, last updated: 12/2003

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.
Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.
Record daily usage of dust suppressant – Permit Condition Number III.C.3.
Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Daily usage of dust suppressant (Permit Condition Number III.C.3.) - Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: VT/UPH1	Emission unit name: Raw Coal Haulroad	List any control devices associated with this emission unit. Water Spray
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Unpaved haulroad – 1.1 mile per trip

Manufacturer: NA	Model number:	Serial number:
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Construction date: 1972	Installation date: 1972	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
14 trips/hr and 2,640 trips/yr

Maximum Hourly Throughput: 550 tons	Maximum Annual Throughput: 105,600 tons	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)	8.54	0.81
Total Particulate Matter (TSP)	27.90	2.63
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculated using emission factors from AP-42 Fifth Edition – 13.2.2 Unpaved Roads, last updated: 12/2003

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.
Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.
Record daily usage of dust suppressant – Permit Condition Number III.C.3.
Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Daily usage of dust suppressant (Permit Condition Number III.C.3.) - Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: VT/UPH2	Emission unit name: Clean Coal Haulroad	List any control devices associated with this emission unit. Water Spray
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Unpaved haulroad – 0.189 miles per trip

Manufacturer: NA	Model number:	Serial number:
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Construction date: 1972	Installation date: 1972	Modification date(s):
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
8.0 trips/hr and 15,168 trips/yr

Maximum Hourly Throughput: 316 tons	Maximum Annual Throughput: 606,720 tons	Maximum Operating Schedule: 8,760 hours/year
---	---	--

Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)	0.84	0.79
Total Particulate Matter (TSP)	2.74	2.60
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculated using emission factors from AP-42 Fifth Edition – 13.2.2 Unpaved Roads, last updated: 12/2003

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.
Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.
Record daily usage of dust suppressant – Permit Condition Number III.C.3.
Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Daily usage of dust suppressant (Permit Condition Number III.C.3.) - Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: S1	Emission unit name: Raw Coal Silo	List any control devices associated with this emission unit. FE
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2,500 ton Raw Coal Silo

Manufacturer: NA	Model number: NA	Serial number: NA
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Construction date: 1972	Installation date: 1972	Modification date(s): NA
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
2,500 ton capacity

Maximum Hourly Throughput: 550 tons	Maximum Annual Throughput: 1,056,000 tons	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Controlled Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculating transfer point emission factor using AP-42 Equation 13.2.4 (1/95).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

20% opacity limit for fugitive dust control systems – Permit Condition Number III.B.2.a.ii.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.

Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.

Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

Record daily coal throughput and hours of operation – Permit Condition Number III.C.4.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

20% opacity limit (Permit Condition Number III.B.2.a.ii.) – Visual inspection and recordkeeping
Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping
Record daily coal throughput and hours of operation (Permit Condition Number III.C.4.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: S2	Emission unit name: Raw Coal Silo	List any control devices associated with this emission unit. FE
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2,000 ton Raw Coal Silo

Manufacturer: NA	Model number: NA	Serial number: NA
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Construction date: 1972	Installation date: 1972	Modification date(s): NA
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
2,000 ton capacity

Maximum Hourly Throughput: 550 tons	Maximum Annual Throughput: 950,400 tons	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Controlled Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculating transfer point emission factor using AP-42 Equation 13.2.4 (1/95).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

20% opacity limit for fugitive dust control systems – Permit Condition Number III.B.2.a.ii.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.

Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.

Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

Record daily coal throughput and hours of operation – Permit Condition Number III.C.4.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

20% opacity limit (Permit Condition Number III.B.2.a.ii.) – Visual inspection and recordkeeping
Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping
Record daily coal throughput and hours of operation (Permit Condition Number III.C.4.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CCB1	Emission unit name: Clean Coal Loadout Bin	List any control devices associated with this emission unit. PE
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
30 ton Clean Coal Loadout Bin

Manufacturer: NA	Model number: NA	Serial number: NA
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Construction date: 1972	Installation date: 1972	Modification date(s): NA
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
30 ton capacity

Maximum Hourly Throughput: 316 tons	Maximum Annual Throughput: 606,720 tons	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Controlled Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculating transfer point emission factor using AP-42 Equation 13.2.4 (1/95).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

20% opacity limit for fugitive dust control systems – Permit Condition Number III.B.2.a.ii.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.

Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.

Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

Record daily coal throughput and hours of operation – Permit Condition Number III.C.4.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

20% opacity limit (Permit Condition Number III.B.2.a.ii.) – Visual inspection and recordkeeping
Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping
Record daily coal throughput and hours of operation (Permit Condition Number III.C.4.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: CCB2	Emission unit name: Clean Coal Silo	List any control devices associated with this emission unit. FE
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
10,000 ton Clean Coal Silo

Manufacturer: NA	Model number: NA	Serial number: NA
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Construction date: 1972	Installation date: 1972	Modification date(s): NA
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
10,000 ton capacity

Maximum Hourly Throughput: 316 tons	Maximum Annual Throughput: 606,720 tons	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
--	---

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Controlled Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculating transfer point emission factor using AP-42 Equation 13.2.4 (1/95).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

20% opacity limit for fugitive dust control systems – Permit Condition Number III.B.2.a.ii.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.

Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.

Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

Record daily coal throughput and hours of operation – Permit Condition Number III.C.4.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

20% opacity limit (Permit Condition Number III.B.2.a.ii.) – Visual inspection and recordkeeping
Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping
Record daily coal throughput and hours of operation (Permit Condition Number III.C.4.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: REF1	Emission unit name: Refuse Bin	List any control devices associated with this emission unit. PE
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
300 ton Refuse Bin

Manufacturer: NA	Model number: NA	Serial number: NA
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Construction date: 1972	Installation date: 1972	Modification date(s): NA
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Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
300 ton capacity

Maximum Hourly Throughput: 241 tons	Maximum Annual Throughput: 536,640 tons	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
--	--

Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:
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List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Controlled Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculating transfer point emission factor using AP-42 Equation 13.2.4 (1/95).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

20% opacity limit for fugitive dust control systems – Permit Condition Number III.B.2.a.ii.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.

Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.

Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

Record daily coal throughput and hours of operation – Permit Condition Number III.C.4.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

20% opacity limit (Permit Condition Number III.B.2.a.ii.) – Visual inspection and recordkeeping
Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping
Record daily coal throughput and hours of operation (Permit Condition Number III.C.4.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number: See attached table	Emission unit name: See attached table (BC-1 through BC-15)	List any control devices associated with this emission unit. Enclosures and/or moisture content
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Provide a description of the emission unit (type, method of operation, design parameters, etc.):
 All conveyors and associated transfer points.

Manufacturer: NA	Model number: NA	Serial number: NA
Construction date: 1972	Installation date: 1972	Modification date(s): NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):

Maximum Hourly Throughput: See attached table	Maximum Annual Throughput: See attached table	Maximum Operating Schedule: 8,760 hours/year
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Fuel Usage Data (fill out all applicable fields)

Does this emission unit combust fuel? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, is it? <input type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
Maximum design heat input and/or maximum horsepower rating:	Type and Btu/hr rating of burners:

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<i>Emissions Data</i>		
Criteria Pollutants	Potential Controlled Emissions (Worst Case)	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO _x)		
Lead (Pb)		
Particulate Matter (PM ₁₀)	1.55	1.22
Total Particulate Matter (TSP)	3.28	2.58
Sulfur Dioxide (SO ₂)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Controlled Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Controlled Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

Calculating transfer point emission factor using AP-42 Equation 13.2.4 (1/95).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

20% opacity limit for fugitive dust control systems – Permit Condition Number III.B.2.a.ii.

Maintain fugitive dust control systems – Permit Condition Number III.B.2.a.iii.

Minimize dust generation and atmospheric entrainment through dust control methods and good operating practices – Permit Condition Number III.B.2.a.iv.

Weekly inspections of all fugitive dust control systems – Permit Condition Number III.C.2.

Record daily coal throughput and hours of operation – Permit Condition Number III.C.4.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

20% opacity limit (Permit Condition Number III.B.2.a.ii.) – Visual inspection and recordkeeping
Maintain fugitive dust control systems (Permit Condition Number III.B.2.a.iii.) - Recordkeeping
Minimize dust generation and atmospheric entrainment (Permit Condition Number III.B.2.a.iv.) – Recordkeeping
Weekly inspections of all fugitive dust control systems (Permit Condition Number III.C.2.) - Recordkeeping
Record daily coal throughput and hours of operation (Permit Condition Number III.C.4.) - Recordkeeping

Are you in compliance with all applicable requirements for this emission unit? Yes No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

CONVEYING AFFECTED SOURCE SHEET – AFFINITY PREPARATION PLANT

Source Identification Number ¹	Date of Manufacture ²	Type of Material Handled ³	Size of Material Handled ⁴	Maximum Material Transfer Rate ⁵		Average Moisture Content (%) ⁶	Control Device ⁷
				tons/hour	tons/year		
BC-1	1972	Raw Coal	6" x 0	550	950,400	5	FE
BC-2	1972	Raw Coal	2" x 0"	550	950,400	5	FE
BC-3	1972	Raw Coal	2" x 0"	550	950,400	5	PE
BC-4	1972	Raw Coal	2" x 0	550	105,600	5	PE
BC-5	1972	Raw Coal	2" x 0	550	1,056,000	5	FE
BC-6	1972	Raw Coal	2" x 0	550	1,056,000	5	PE
BC-7	1972	Refuse	6" x 0	241	536,640	5	PE
BC-8	1972	Clean Coal	2" x 0	320	614,400	5	PE
BC-9	1972	Clean Coal	2" x 0	5	43,800	5	FE
BC-10	1972	Clean Coal	2" x 0"	316	606,720	5	PE
BC-11	1972	Clean Coal	2" x 0	316	606,720	5	PE
BC-12	1972	Clean Coal	2" x 0	316	606,720	5	PE
BC-13	1972	Clean Coal	2" x 0	320	614,400	5	PE
BC-14	1972	Clean Coal	2" x 0	320	614,400	5	PE
BC-15	1972	Refuse	2" x 0"	230	441,600	5	PE

1. Enter the appropriate Source Identification Number for each conveyor using the following codes. For example, multiple belt conveyors should be designated BC-1, BC-2, BC-3 etc. Transfer points are considered emission points, not sources, and should not be included in the *Conveying Affected Source Sheet*. Transfer Point Identification Numbers shall be assigned in the *Emission Calculation Sheet*.

a. C Belt Conveyor	BE Bucket Elevator
b. DL Drag-link Conveyor	PS Pneumatic System
c. SC Screw Conveyor	VC Vibrating Conveyor
d. OT Other	
2. Enter the date that each conveying device was manufactured.
3. Enter the type of material being handled - Raw Coal (RC) Sized Coal (SC) Clean Coal (CC) Refuse (R) Other (O) ____
4. Enter the nominal size of the material being conveyed (e.g. clean coal - : " x 0). If more than one material is handled by the listed conveyor, list each material and enter the appropriate data for each material.
5. Enter the maximum material transfer rate for each conveyor in tons per hour and tons per year.
6. Enter the average percent moisture content of the conveyed material.
7. Enter the control device for the conveyor. PE - Partial Enclosure (example 3/4 hoop) FE - Full Enclosure N – None

ATTACHMENT G

AIR POLLUTION CONTROL DEVICE FORM(S)

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: WSS	List all emission units associated with this control device. Thermal Dryer	
Manufacturer: Reasearch Cottrell, Inc.	Model number: NA	Installation date: 1972
Type of Air Pollution Control Device:		
<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input checked="" type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe)
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	
List the pollutants for which this device is intended to control and the capture and control efficiencies.		
Pollutant	Capture Efficiency	Control Efficiency
Particulate	100%	99.25%
Sulfur Dioxide	NA	70%
Nitrogen Oxides	NA	NA
Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.). Average pressure drop – 28 inches of H ₂ O Minimum pressure drop as well as scrubber water supply pressure will be established during initial stack test.		
Is this device subject to the CAM requirements of 40 C.F.R. 64? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Describe the parameters monitored and/or methods used to indicate performance of this control device. Pressure Drop Gas Temperature Scrubber Supply Water Pressure		

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: MCS	List all emission units associated with this control device. Thermal Dryer
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Manufacturer: Reasearch Cottrell, Inc.	Model number: Series 6 x 5	Installation date: 1972
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Type of Air Pollution Control Device:

<input type="checkbox"/> Baghouse/Fabric Filter	<input type="checkbox"/> Venturi Scrubber	<input checked="" type="checkbox"/> Multiclone
<input type="checkbox"/> Carbon Bed Adsorber	<input type="checkbox"/> Packed Tower Scrubber	<input type="checkbox"/> Single Cyclone
<input type="checkbox"/> Carbon Drum(s)	<input type="checkbox"/> Other Wet Scrubber	<input type="checkbox"/> Cyclone Bank
<input type="checkbox"/> Catalytic Incinerator	<input type="checkbox"/> Condenser	<input type="checkbox"/> Settling Chamber
<input type="checkbox"/> Thermal Incinerator	<input type="checkbox"/> Flare	<input type="checkbox"/> Other (describe) _____
<input type="checkbox"/> Wet Plate Electrostatic Precipitator	<input type="checkbox"/> Dry Plate Electrostatic Precipitator	

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
Particulate	100%	40%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

Average pressure drop – 4.5 inches of H₂O

Is this device subject to the CAM requirements of 40 C.F.R. 64? Yes No

Describe the parameters monitored and/or methods used to indicate performance of this control device.

Pressure Drop
 Gas Temperature

ATTACHMENT H

COMPLIANCE ASSURANCE MONITORING PLAN/SO₂ MONITORING PLAN

ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at <http://www.epa.gov/ttn/emc/cam.html>

CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*): YES NO

- a. The PSEU is located at a major source that is required to obtain a Title V permit;
- b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is **NOT** exempt;

LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
 - Stratospheric Ozone Protection Requirements.
 - Acid Rain Program Requirements.
 - Emission Limitations or Standards for which a WVDEP Division of Air Quality permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
 - An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).
- c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;
 - d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND
 - e. The PSEU is **NOT** an exempt backup utility power emissions unit that is municipally-owned.

BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit:

- RENEWAL APPLICATION.** **ALL** PSEUs for which a CAM plan has **NOT** yet been approved need to be addressed in this CAM plan submittal.
- INITIAL APPLICATION** (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.
- SIGNIFICANT MODIFICATION TO LARGE PSEUs.** **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, **Only** address the appropriate monitoring requirements affected by the significant modification.

3) ^aBACKGROUND DATA AND INFORMATION

Complete the following table for **all** PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU in order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.

PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	^b EMISSION LIMITATION or STANDARD	^c MONITORING REQUIREMENT
TD	THERMAL DRYER	SO2	VENTURI SCRUBBER	45CSR10-4.1 - MAXIMUM ALLOWABLE SULFUR LOADING, 2,000 PPM (GRANDFATHERED SOURCE NO ADDITIONAL SO2 EMISSION LIMIT).	DAILY FUEL SAMPLING, COMPOSITE, AND ANALYZE MONTHLY FOR SULFUR CONTENT.
				MINIMUM PRESSURE DROP TO BE DETERMINED UPON INITIAL STACK TEST THAT WILL BE PERFORMED AFTER START-UP.	CONTINUOUSLY MONITOR PRESSURE DROP.
				MINIMUM SCRUBBER SUPPLY WATER PRESSURE TO BE DETERMINED UPON INITIAL STACK TEST THAT WILL BE PERFORMED AFTER START-UP.	CONTINUOUSLY MONITOR WATER PRESSURE.
				HEAT INPUT LIMIT OF 112 MMBTU/HR.	CONTINUOUSLY MONITOR FUEL USAGE, DAILY FUEL SAMPLING AND ANALYSIS OF HEAT CONTENT.
<u>EXAMPLE</u> Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

^a If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

^b Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

° Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

CAM MONITORING APPROACH CRITERIA

Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. If more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.

4a) PSEU Designation: TD1	4b) Pollutant: SULFUR DIOXIDE	4c) ^a Indicator No. 1: SULFUR DIOXIDE LOADING LIMIT	4d) ^a Indicator No. 2: MAXIMUM HEAT INPUT
5a) GENERAL CRITERIA Describe the <u>MONITORING APPROACH</u> used to measure the indicators:		COAL IS SAMPLED DAILY, COMPOSITED, AND ANALYZED MONTHLY FOR SULFUR AND HEAT CONTENT.	FUEL USAGE IS CONTINUOUSLY MONITORED AND FUEL SAMPLES ARE ANALYZED FOR HEAT CONTENT.
^b Establish the appropriate <u>INDICATOR RANGE</u> or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:		2,000 PPM LIMIT	112 MMBTU/HR
5b) PERFORMANCE CRITERIA Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy:		500 GRAMS OF COAL WILL BE SAMPLED FROM A POINT WHERE A REPRESENTATIVE SAMPLE CAN BE OBTAINED AND ANALYZED FOR SULFUR CONTENT ACCORDING TO ASTM D3177-84.	FUEL USAGE IS CONTINUOUSLY MEASURED AND COAL SAMPLES ARE ANALYZED FOR HEAT CONTENT.
^c For new or modified monitoring equipment, provide <u>VERIFICATION PROCEDURES</u> , including manufacturer's recommendations, <u>TO CONFIRM THE OPERATIONAL STATUS</u> of the monitoring:		NA	NA
Provide <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):		SAMPLE PREPARATION DONE ACCORDING TO ASTM METHOD D2013-86.	FUEL ANALYSIS IS DONE ACCORDING TO ASTM METHOD D5865.
^d Provide the <u>MONITORING FREQUENCY</u> :		COAL WILL BE SAMPLED ONCE PER DAY DURING NORMAL OPERATION.	CONTINUOUSLY MONITORED AND TOTAL COAL USED IS RECORDED AT THE END OF EACH DAY.
Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used:		COAL SAMPLES ARE COLLECTED AT A POINT WHERE A REPRESENTATIVE SAMPLE CAN BE OBTAINED. THEY ARE PREPARED ACCORDING TO ASTM METHOD D2013-86	FUEL USAGE IS COMPILED AT THE END OF EACH DAY.
Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred:		COAL SAMPLES ARE COMPOSITED MONTHLY	DAILY

^a Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

- ^b Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.
- ^c The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.
- ^d Emission units with post-control PTE \geq 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

CAM MONITORING APPROACH CRITERIA

Complete this section for **EACH** PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for **EACH** indicator selected for **EACH** PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. If more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.

4a) PSEU Designation: TD	4b) Pollutant: SULFUR DIOXIDE	4c) ^a Indicator No. 3: PRESSURE DROP	4d) ^a Indicator No. 4: WATER PRESSURE
5a) GENERAL CRITERIA Describe the <u>MONITORING APPROACH</u> used to measure the indicators:		PRESSURE DROP WILL BE CONTINUOUSLY MONITORED.	WATER PRESSURE WILL BE CONTINUOUSLY MONITORED.
^b Establish the appropriate <u>INDICATOR RANGE</u> or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:		INDICATOR RANGES WILL BE ESTABLISHED DURING INITIAL STACK TEST AFTER START-UP. FACILITY HAS BEEN IDLE SINCE 1985.	INDICATOR RANGES WILL BE ESTABLISHED DURING INITIAL STACK TEST AFTER START-UP. FACILITY HAS BEEN IDLE SINCE 1985.
5b) PERFORMANCE CRITERIA Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy:		PRESSURE DROP MEASUREMENTS WILL BE TAKEN AT THE INLET OF THE SCRUBBER AND AT A LOCATION BETWEEN THE SCRUBBER AND THE MIST ELIMINATOR.	WATER SUPPLY PRESSURE WILL BE RECORDED BEFORE THE SCRUBBER.
^c For new or modified monitoring equipment, provide <u>VERIFICATION PROCEDURES</u> , including manufacturer's recommendations, <u>TO CONFIRM THE OPERATIONAL STATUS</u> of the monitoring:		NA	NA
Provide <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):		CALIBRATION PERFORMED ON THE PRESSURE DROP RECORDER/MONITOR WILL BE PERFORMED AT LEAST ONCE ANNUALLY. ACCURACY IS " 1" H2O.	CALIBRATION PERFORMED ON THE WATER PRESSURE GAUGE IS PERFORMED AS NEEDED BUT AT LEAST ONCE ANNUALLY. ACCURACY IS " 5 PERCENT.
^d Provide the <u>MONITORING FREQUENCY</u> :		PRESSURE DROP MONITORED CONTINUOUSLY.	WATER PRESSURE MONITORED CONTINUOUSLY.
Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used:		CONTINUOUSLY RECORDED BY STRIP CHART AND MANUALLY RECORDED ONCE EVERY 12 HOURS.	CONTINUOUSLY RECORDED BY STRIP CHART AND MANUALLY RECORDED ONCE EVERY 12 HOURS.
Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred:		3-HOUR ROLLING AVERAGE	3-HOUR ROLLING AVERAGE

^a Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

^b Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

^c The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

^d Emission units with post-control PTE \geq 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

RATIONALE AND JUSTIFICATION

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:
TD

6b) Regulated Air Pollutant:
SULFUR DIOXIDE

7) **INDICATORS AND THE MONITORING APPROACH:** Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer’s recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

Coal sampling and analysis of sulfur content along with determining the amount of coal burned is a sufficient way to determine SO2 emissions for this unit. By knowing the concentration of sulfur in the coal and the fuel usage a simple calculation can be performed to determine compliance. Pressure drop and scrubber water supply pressure monitoring effectively indicates the scrubber is operating properly.

8) **INDICATOR RANGES:** Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how EACH indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- COMPLIANCE OR PERFORMANCE TEST (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer’s recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.
- TEST PLAN AND SCHEDULE (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.
- ENGINEERING ASSESSMENTS (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers’ design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

RATIONALE AND JUSTIFICATION:

Fuel throughput and heat content records will be used to indicate compliance with established parameter of 112 MMBtu/hr. This indicator range is the design heat input rating.

Scrubber water supply pressure and pressure drop will be monitored continuously verifying the proper operation of the scrubber. These operating parameters will be established during the initial stack test which will be performed after start-up. This facility has been idle since 1985.

According to Title V Permit Section III.C.6.e. the maximum design heat input, the minimum volumetric gas flow rate (manufacture rating), and the sulfur content of the fuel burned can be used to calculate "worst case" sulfur dioxide emissions. By doing this, compliance with sulfur dioxide limits at higher flow rates or lower heat inputs is ensured.

APPENDIX
CALCULATIONS

SUMMARY OF POTENTIAL TO EMIT

	<u>TPH</u>	<u>TPY</u>
Raw Coal	550	950,400
Clean Coal	320	614,400
Refuse	230	441,600
Dried Clean Coal	316	606,720

Point ID	Source	Pollutant	Uncontrolled Emissions		Controlled Emissions	
			(LB/HR)	(TPY)	(LB/HR)	(TPY)
001	Transfer Points	Particulate	8.68	7.30	3.40	2.67
002	Crushing	Particulate	11.00	9.50	2.20	1.90
004	Open Stockpiles	Particulate	0.38	1.68	0.38	1.68
005	Haulroads	Particulate	121.53	65.72	36.46	19.71
006	Thermal Dryer	Particulate	8,320	7,987	37.44	35.94
006	Thermal Dryer	HAP's-Metals (PM)	3.25	14.25	3.25	14.25
Facility Total PM :			8,465	8,086	83.13	76.16

Point ID	Source	Pollutant	Uncontrolled Emissions		Controlled Emissions		PM-10 portion ¹
			(LB/HR)	(TPY)	(LB/HR)	(TPY)	
001	Transfer Points	PM-10	4.11	3.45	1.61	1.26	47%
002	Crushing	PM-10	5.20	4.49	1.04	0.90	47%
004	Open Stockpiles	PM-10	0.18	0.80	0.18	0.80	47%
005	Haulroads	PM-10	37.20	20.12	11.16	6.04	26%
006	Thermal Dryer	PM-10	3,152	3,026	14.18	13.62	38%
Facility Total PM₁₀ :			3,199	3,055	28.17	22.61	

38% is interpolated between AP42 factors of 26 for TSP and 3.8 for PM2.5

THERMAL DRYER EMISSION - OTHER THAN PARTICULATE

Point ID	Source	Pollutant	Uncontrolled Emissions		Control Efficiency (%)	Controlled Emissions	
			(LB/HR)	(TPY)		(LB/HR)	(TPY)
006	Thermal Dryer	Carbon Monoxide	30.00	131.40	0.00	30.00	131.40
006	Thermal Dryer	Sulfur Dioxide	373.33	1,635.20	70.00	112.00	490.56
006	Thermal Dryer	Nitrogen Oxides	46.08	49.15	10.00	46.08	44.24
006	Thermal Dryer	VOC	31.36	30.11	-	31.36	30.11
006	Thermal Dryer	HAP's-Organics	10.68	46.76	99.25*	0.11	0.47

NOTES:

1 - PER AP-42 PARTICLE SIZE MULTIPLIERS AND WVDEP-DAQ G10-C GUIDANCE.

* The only pollutants with an associated control efficiency are HCl and HF.

TRANSFER POINTS:

Defining empirical expression variables, where:

Clean
Raw coal Coal Refuse
 e = ? ? ? lb/ton
 k = 0.74 0.74 0.74 dimensionless
 U = 7 7 7 mph
 M = 5 5 5 %

Calculating transfer point emission factor using AP42 Equation 13.2.4

$$e = k(0.0032)((U/5)^{1.3}/(M/2)^{1.4})$$

e = **0.001** **0.0010** **0.0010** lb/ton

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Maximum Throughput		Control		Emission Factor (LB/TON)	TSP						PM10					
				(TPH)	(TPY)	Device	Eff. (%)		Uncontrolled Emissions		Controlled Emissions		Worst Case Scenario*		Uncontrolled Emissions		Controlled Emissions		Worst Case Scenario*	
									(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)
T1		Slope Belt to Breaker	1972	550	950,400	FE	80	0.0010	0.559	0.483	0.112	0.097	0.112	0.097	0.26	0.23	0.05	0.05	0.05	0.05
T2		Breaker to BC-2	1972	550	950,400	FE	80	0.0010	0.559	0.483	0.112	0.097	0.112	0.097	0.26	0.23	0.05	0.05	0.05	0.05
T3		BC-2 to Silo (S2) or BC3	1972	550	950,400	PE	50	0.0010	0.559	0.483	0.280	0.242	0.280	0.242	0.26	0.23	0.13	0.11	0.13	0.11
T5		Railcar/Truck Shakeout	1972	550	105,600	MC	0	0.0010	0.559	0.054	0.559	0.054	0.559	0.054	0.26	0.03	0.26	0.03	0.26	0.03
T6		Shakeout to BC-4	1972	550	105,600	FE	80	0.0010	0.559	0.054	0.112	0.011	0.112	0.011	0.26	0.03	0.05	0.01	0.05	0.01
T7		BC-4 to Silo (S1)	1972	550	1,056,000	PE	50	0.0010	0.559	0.537	0.280	0.268	0.280	0.268	0.26	0.25	0.13	0.13	0.13	0.13
T8		Silo (S1) to BC-5	1972	550	1,056,000	FE	80	0.0010	0.559	0.537	0.112	0.107	0.112	0.107	0.26	0.25	0.05	0.05	0.05	0.05
T9		BC-5 to BC-6	1972	550	1,056,000	FE	80	0.0010	0.559	0.537	0.112	0.11	0.112	0.107	0.26	0.25	0.05	0.05	0.05	0.05
T10		Silo (S2) to BC-6	1972	550	950,400	FE	80	0.0010	0.559	0.483	0.112	0.097	0.000	0.000	0.26	0.23	0.05	0.05	0.00	0.00
T11		BC-15 to BC-7	1972	230	441,600	PE	50	0.0010	0.234	0.225	0.117	0.112	0.117	0.112	0.11	0.11	0.06	0.05	0.06	0.05
T12		Breaker to BC-7	1972	11	95,040	FE	80	0.0010	0.011	0.048	0.002	0.010	0.002	0.010	0.01	0.02	0.0011	0.0046	0.0011	0.0046
T13		BC-7 to Refuse Bin	1972	241	536,640	PE	50	0.0010	0.245	0.273	0.123	0.136	0.123	0.136	0.12	0.13	0.06	0.06	0.06	0.06
T14		Refuse Bin to Truck	1972	241	536,640	PE	50	0.0010	0.245	0.273	0.123	0.136	0.123	0.136	0.12	0.13	0.06	0.06	0.06	0.06
T15		BC-13 to BC-14	1972	320	614,400	FE	80	0.0010	0.325	0.312	0.065	0.062	0.065	0.062	0.15	0.15	0.03	0.03	0.03	0.03
T16		BC-8 to Wet Coal Bin	1972	320	614,400	PE	50	0.0010	0.325	0.312	0.163	0.156	0.163	0.156	0.15	0.15	0.08	0.07	0.08	0.07
T17		Thermal Dryer to BC-10	1972	315	604,800	FE	80	0.0010	0.320	0.308	0.064	0.062	0.064	0.062	0.15	0.15	0.03	0.03	0.03	0.03
T18		Thermal Dryer to BC-9	1972	5	43,800	FE	80	0.0010	0.005	0.022	0.001	0.004	0.001	0.004	0.002	0.011	0.0005	0.0021	0.00	0.00
T19		BC-9 to Fuel Bin	1972	5	43,800	FE	80	0.0010	0.005	0.022	0.001	0.004	0.001	0.004	0.002	0.011	0.0005	0.0021	0.00	0.00
T20		Multiclone to BC-10	1972	1	1,920	FE	80	0.0010	0.001	0.001	0.0002	0.0002	0.000	0.000	0.0005	0.0005	0.0001	0.0001	0.00	0.00
T21		BC-10 to CCB1 or BC-11	1972	316	606,720	PE	50	0.0010	0.321	0.309	0.161	0.154	0.161	0.154	0.15	0.15	0.08	0.07	0.08	0.07
T22		BC-11 to CCB2	1972	316	606,720	PE	50	0.0010	0.321	0.309	0.161	0.154	0.161	0.154	0.15	0.15	0.08	0.07	0.08	0.07
T23		CCB2 to BC-12	1972	316	606,720	FE	80	0.0010	0.321	0.309	0.064	0.062	0.064	0.062	0.15	0.15	0.03	0.03	0.03	0.03
T24		BC-12 to CCB1	1972	316	606,720	PE	50	0.0010	0.321	0.309	0.161	0.154	0.161	0.154	0.15	0.15	0.08	0.07	0.08	0.07
T25		CCB1 to Railcar	1972	316	606,720	TC	75	0.0010	0.321	0.309	0.080	0.077	0.080	0.077	0.15	0.15	0.04	0.04	0.04	0.04
T26		CCOS1 Loadout	1972	316	606,720	MC	0	0.0010	0.321	0.309	0.321	0.309	0.321	0.309	0.15	0.15	0.15	0.15	0.15	0.15

* Worst case scenario involves all of the coal going through Raw Coal Silo 1 and none of the coal going through Raw Coal Silo 2.

Uncontrolled		Controlled		Worst Case		Uncontrolled		Controlled		Worst Case	
8.68	7.30	3.40	2.67	3.28	2.58	4.11	3.45	1.61	1.26	1.55	1.22

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CRUSHING OPERATIONS:

Emission Unit ID	Emission Unit Description	Year Installed	TONS PROCESSED		Control		EMISSION FACTOR (LBS/TON PROCESSED)	TSP				PM10			
			(TPH)	(TPY)	Device	Eff. %		Uncontrolled Emissions		Controlled Emissions		Uncontrolled Emissions		Controlled Emissions	
								(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)
RB1	Rotary Breaker	1972	550	950,400	FE	80	0.02	11.00	9.50	2.20	1.90	5.20	4.49	1.04	0.90

Uncontrolled		Controlled		Uncontrolled		Controlled	
11.00	9.50	2.20	1.90	5.20	4.49	1.04	0.90

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OPEN STOCKPILES

Defining empirical expression variables, where:

Clean Coal
 e = ? lb/day/acre
 s = 7.5 %
 p = 157 days
 f = 20 %

Calculating open stockpile emission factor using G10-C guidance

$$e = 1.7 \times (s/1.5) \times ((365-p)/235) \times (f/15)$$

e = **10.03** lb/day/acre

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Storage Capacity (tons)	Base Area (SQ FT)	Control Device ID	Control Eff. (%)	EMISSION FACTOR (LB/DY/AC.)	TSP				PM10			
									Uncontrolled Emissions		Controlled Emissions		Uncontrolled Emissions		Controlled Emissions	
									(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)
CCOS1		Clean Coal Stockpile	1972	--	40,000	MC	0.00	10.03	0.38	1.68	0.38	1.68	0.18	0.80	0.18	0.80
Totals:									0.38	1.68	0.38	1.68	0.18	0.80	0.18	0.80

GF = Grandfathered under Regulation 13.

UNPAVED HAULROAD

Defining empirical expression variables, where:

	Clean/Raw Coal Haulroad	Refuse Haulroad	Endloader/Dozer	
e =	?	?	?	lb/VMT
PM k =	4.9	4.9	4.9	PM > 30um
PM10 k =	1.5	1.5	1.5	PM < 10um
s =	5	5	5	%
W =	65	80	150	tons
p =	157	157	157	days

	PM	PM-10
a =	0.7	0.9
b =	0.45	0.45
c =	-	-

Source: AP-42 Fifth Edition – 13.2.2 Unpaved Roads, last updated:12/2003

$$e = [k \times (s \div 12)^a \times (W \div 3)^b] \times ((365 - p) \div 365)$$

Note: Eliminate variable (S/15) if vehicle speed is greater than 15 mph.

PM e =	6.04	6.63	8.80	lb/VMT
PM10 e =	1.85	2.03	2.69	lb/VMT

ID No.	TRIPS PER PER HOUR	TRIPS PER YEAR	VMT PER Trip	EMISSION FACTOR (LB/VMT)	CONTROL DEVICE	CONTROL EFFICIENCY (%)	TSP				PM10			
							Uncontrolled Emissions		Controlled Emissions		Uncontrolled Emissions		Controlled Emissions	
							(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)	(LB/HR)	(TPY)
VT/UPH	4	7,360	0.4	6.63	WS	70	10.61	9.76	3.18	2.93	3.25	2.99	0.97	0.90
VT/UPH1	14	2,640	1.1	6.04	WS	70	92.99	8.77	27.90	2.63	28.47	2.68	8.54	0.81
END 2	1	8,760	1	8.80	WS	70	8.80	38.53	2.64	11.56	2.69	11.80	0.81	3.54
VT/UPH2	8	15,168	0.189	6.04	WS	70	9.13	8.66	2.74	2.60	2.79	2.65	0.84	0.79

UNCONTROLLED	CONTROLLED	UNCONTROLLED	CONTROLLED
121.53	65.72	36.46	19.71
37.20	20.12	11.16	6.04

	Raw Coal	Refuse	Clean
Tons per Truck (tons)=	40	60	40
Truck Weight (tons)=	45	50	45
Avg.Truck Travel Weight (tons)=	65	80	65
Tons per Hour =	550	230	316
Trucked Yearly Tonnage (tpy) =	105,600	441,600	606,720
Number of Trucks per Year =	2,640	7,360	15,168
Number of Trucks per Hour =	14	4	8

GF = Grandfathered under Regulation 13.

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THERMAL DRYER - COAL DRIED FROM WASH PROCESS + PRODUCTS OF COMBUSTION

SOURCE ID NO.	A.S.N.	THERMAL DRYER POLLUTANT	EMISSION FACTOR ² (LB/TON)	MAX. DRYER FEED RATE (LB/HR)	(TON/YR)	Uncontrolled Emissions (LB/HR)	(TPY)	Control Device	Eff. (%)	Controlled Emissions (LB/HR)	(TPY)
TD		Particulate	26.00	640,000	614,400	8,320	7,987	MC+WS	99.55	37.44	35.94
		Sulfur Dioxide ⁴	--	640,000	614,400	373.33	1,635.2	MC+WS	70	112.00	490.56
		Nitrogen Oxides	0.16	640,000	614,400	51.2	49.2	MC+WS	10	46.08	44.24
		VOC	0.098	640,000	614,400	31.36	30.11	MC+WS	0	31.36	30.11

THERMAL DRYER - PRODUCTS OF COMBUSTION

SOURCE ID NO.	A.S.N.	THERMAL DRYER POLLUTANT	EMISSION FACTOR ³ (LB/TON)	MAX. DRYER BURN RATE (LB/HR)	(TON/YR)	Uncontrolled Emissions (LB/HR)	(TPY)	Control Device	Eff. (%)	Controlled Emissions (LB/HR)	(TPY)
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COAL

TD		CO	6.00	10,000	43,800	30.00	131.40	MC+WS	0	30.00	131.40
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WORST CASE EMISSIONS

	UNCONTROLLED (LB/HR)	CONTROLLED (LB/HR)	UNCONTROLLED (TPY)	CONTROLLED (TPY)
Particulate	8,320	37.44	7,987	35.94
CO	30.00	30.00	131.40	131.40
SO ₂ ⁴	373.33	112.00	1,635.20	490.56
NO _x	51.20	46.08	49.15	44.24
VOC	31.36	31.36	30.11	30.11

Notes:

- The overall particulate collection efficiency is based on an efficiency of 40% for the cyclone system and an efficiency of 99.25% for the wet scrubber system (100*40% + 60*99.25% = 99.55%).
- Particulate, nitrogen oxides, volatile organic compound, and carbon dioxide emissions factors are based on the amount of coal dried in the thermal dryer. (AP-42 - Table 11.10-1 & 11.10-2 (11/95)).
- The carbon monoxide emission factor is based on the amount of coal burned in the thermal dryer (AP-42 Table 1.1-3 (7/98)).
- Sulfur dioxide emissions are calculated based on design heat input and the fuel analysis for sulfur and heat content.

GF = Grandfathered under Regulation 13.