MonPower®
A FirstEnergy Company

800 Cabin Hill Drive
Greensburg, PA 15601

FEDERAL EXPRESS

November 21, 2019

Laura M. Crowder, Director
WV Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Re: Monongahela Power Company
Harrison Power Station
Title V Operating Permit R30-03300015-2015
Renewal Application

Dear Ms. Crowder:

Enclosed please find two (2) separate CD-ROMs each containing electronic copies of the Title V permit application forms and supporting calculation spreadsheets, and one (1) hardcopy of the General Form including the original signed certification page, for the renewal of the Monongahela Power Company Harrison Power Station's Title V Operating Permit No. R30-03300015-2015. The current Title V operating permit for the Harrison Power Station will expire on May 2, 2020.

If you have any questions or require additional information, please contact me at (724) 838-6136 or by email at jlefik@firstenergycorp.com.

Sincerely,

James A. Lefik

James A. Lefik
Engineer IV
Air Permitting, Testing & CEMs

Enclosures

L-1730.20

TITLE V PERMIT APPLICATION CHECKLIST
FOR ADMINISTRATIVE COMPLETENESS

A complete application is demonstrated when all of the information required below is properly prepared, completed and attached. The items listed below are required information which must be submitted with a Title V permit application. Any submittal will be considered incomplete if the required information is not included.*	
☒	Two signed copies of the application (at least one must contain the original "*Certification*" page signed and dated in blue ink)
☒	Correct number of copies of the application on separate CDs or diskettes, (i.e. at least one disc per copy)
☒	*Table of Contents (needs to be included but not for administrative completeness)
☒	Facility information
☒	Description of process and products, including NAICS and SIC codes, and including alternative operating scenarios
☒	Area map showing plant location
☒	Plot plan showing buildings and process areas
☒	Process flow diagram(s), showing all emission units, control equipment, emission points, and their relationships
☒	Identification of all applicable requirements with a description of the compliance status, the methods used for demonstrating compliance, and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the source is not in compliance
☒	Listing of all active permits and consent orders (if applicable)
☒	Facility-wide emissions summary
☒	Identification of Insignificant Activities
☒	ATTACHMENT D - Title V Equipment Table completed for all emission units at the facility except those designated as insignificant activities
☒	ATTACHMENT E - Emission Unit Form completed for each emission unit listed in the Title V Equipment Table (ATTACHMENT D) and a Schedule of Compliance Form (ATTACHMENT F) for all requirements for which the emission unit is not in compliance
☒	ATTACHMENT G - Air Pollution Control Device Form completed for each control device listed in the Title V Equipment Table (ATTACHMENT D)
☐	ATTACHMENT H – Compliance Assurance Monitoring (CAM) Plan Form completed for each control device for which the "Is the device subject to CAM?" question is answered "Yes" on the Air Pollution Control Device Form (ATTACHMENT G)
☒	General Application Forms signed by a Responsible Official
☐	Confidential Information submitted in accordance with 45CSR31

TITLE V OPERATING PERMIT
RENEWAL APPLICATION

MONONGAHELA POWER COMPANY
HARRISON POWER STATION

TITLE V OPERATING PERMIT #R30-03300015-2015

Date of Application Submittal:
November 21, 2019

Table of Contents

(Information enclosed as hardcopies and electronic copies as noted)

Title V Permit Application – General Forms (hardcopy + electronic)

Facility Area Map (electronic) ..... Attachment A

Facility Plot Plan (electronic)..... Attachment B

Process Flow Diagrams (electronic) ..... Attachment C

- Material Flow Diagram
- Material Flow Diagram Table
- Coal Handling System
- Lime Handling #1
- Emergency Lime Handling
- Lime Slurry Handling
- Absorber Sludge Handling
- Lime Handling #2
- Fly Ash Handling

Emission Units Tables (electronic)..... Attachment D

Emission Unit Forms (electronic) ..... Attachment E

- Combustion Sources
- Materials Handling
- Miscellaneous Sources
- Insignificant Storage Tanks

Air Pollution Control Device Forms (electronic) ..... Attachment G

Emissions Calculations Excel Files (electronic) .....Appendix A

- Harrison Combustion Sources
- Fugitive Particulate Matter Emission Sources
- Hourly Fugitive Emission Calculations – Materials Handling
- Miscellaneous Sources

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street SE
Charleston, WV 25304
Phone: (304) 926-0475
www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. **Name of Applicant (As registered with the WV Secretary of State's Office):** **Monongahela Power Company**	2. **Facility Name or Location:** **Harrison Power Station**
3. **DAQ Plant ID No.:** **0 3 3 — 0 0 0 1 5**	4. **Federal Employer ID No. (FEIN):** **2 3 -- 3 0 2 0 4 8 1**

5. **Permit Application Type:**

☐ Initial Permit — When did operations commence? **1972**
☒ Permit Renewal — What is the expiration date of the existing permit? **06/02/2020**
☐ Update to Initial/Renewal Permit Application

6. **Type of Business Entity:** ☒ Corporation ☐ Governmental Agency ☐ LLC ☐ Partnership ☐ Limited Partnership	7. **Is the Applicant the:** ☐ Owner ☐ Operator ☒ Both If the Applicant is not both the owner and operator, please provide the name and address of the other party.
8. **Number of onsite employees:** **211**	

9. **Governmental Code:**

☒ Privately owned and operated; 0
☐ Federally owned and operated; 1
☐ State government owned and operated; 2
☐ County government owned and operated; 3
☐ Municipality government owned and operated; 4
☐ District government owned and operated; 5

10. **Business Confidentiality Claims**

Does this application include confidential information (per 45CSR31)? ☐ Yes ☒ No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's *"PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY"* guidance.

11. Mailing Address		
Street or P.O. Box: 800 Cabin Hill Drive		
City: Greensburg	**State: Pennsylvania**	**Zip: 15601-1650**
Telephone Number: (724) 837-3000	**Fax Number: (234) 678-2384**	

12. Facility Location		
Street: Route 20	**City: Haywood**	**County: Harrison**
UTM Easting: 557.392 km	**UTM Northing: 4,359.489** km	**Zone:** ☒ 17 or ☐ 18
Directions: From the junction of State Route 20 and US Route 19 near Haywood, take Route 20 approximately one mile west to the facility.		
Portable Source? ☐ Yes ☒ No		
Is facility located within a nonattainment area? ☐ Yes ☒ No		**If yes, for what air pollutants?**
Is facility located within 50 miles of another state? ☒ Yes ☐ No		**If yes, name the affected state(s).** **Pennsylvania**
Is facility located within 100 km of a Class I Area[1]? ☒ Yes ☐ No **If no, do emissions impact a Class I Area[1]?** ☐ Yes ☐ No		**If yes, name the area(s).** Dolly Sods Wilderness Area - 91km Otter Creek Wilderness Area- 69km

[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: Gary L. Dinzeo		**Title: Director, Harrison Plant**
Street or P.O. Box: P.O. Box 600		
City: Haywood	**State: WV**	**Zip: 26366-0600**
Telephone Number: (304) 584-2233	**Fax Number: (304) 584-2408**	
E-mail address: gdinzeo@firstenergycorp.com		
Environmental Contact: James A. Lefik		**Title: Engineer IV**
Street or P.O. Box: 800 Cabin Hill Drive		
City: Greensburg	**State: Pennsylvania**	**Zip: 15601-1650**
Telephone Number: (724) 838-6136	**Fax Number: (234) 678-2384**	
E-mail address: jlefik@firstenergycorp.com		
Application Preparer: James A. Lefik		**Title: Engineer IV**
Company: FirstEnergy Corp.		
Street or P.O. Box: 800 Cabin Hill Drive		
City: Greensburg	**State: Pennsylvania**	**Zip: 15601-1650**
Telephone Number: (724) 838-6136	**Fax Number: (234) 678-2384**	
E-mail address: jlefik@firstenergycorp.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
Electric Generation Service	**Electric power generation and transmission**	**221112**	**4911**

Provide a general description of operations.

The Harrison Power Station is a fossil fuel-fired electric generation facility with three 6,325 MMBtu/hr coal-fired boilers with nominal gross MW ratings of 713 MW, 710 MW, and 711 MW, respectively. The facility operates under the Standard Industrial Code (SIC) 4911, and North American Industry Classification System (NAICS) Code 221112. The facility also consists of two 202.2 MMBtu/hr auxiliary boilers, two 800-kW diesel-fired emergency generators, a 350-kW diesel-fired emergency generator, a 100-kW propane-fired emergency generator, a 605-bhp propane-fired emergency generator, and two diesel-fired emergency fire pump engines. Supporting operations include lime handling, coal handling, ash handling, sludge system and various storage tanks with insignificant air emissions. The facility has the potential to operate twenty-four hours a day, seven days a week, and fifty-two weeks per year.

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.	
☒ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☒ PSD (45CSR14)
☒ NESHAP (45CSR34)	☐ Nonattainment NSR (45CSR19)
☒ Section 111 NSPS	☒ Section 112(d) MACT standards
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☒ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☐ 45CSR27 State enforceable only rule
☒ 45CSR4 State enforceable only rule	☒ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☒ **C**ompliance **A**ssurance **M**onitoring (40CFR64)
☒ CAIR NO_x Annual Trading Program (45CSR39)	☒ CAIR NO_x Ozone Season Trading Program (45CSR40)
☒ CAIR SO_2 Trading Program (45CSR41)	

19. Non-Applicability Determinations
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.
The non-applicable requirements are listed on the next page.
☒ Permit Shield

19. Non-Applicability Determinations *(Continued)* - *Attach additional pages as necessary.*

19. Non-Applicability Determinations

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.

45CSR27: *To prevent and control the emissions of Toxic Air Pollutants.* Although this facility has emissions of Toxic Air Pollutants in excess of the thresholds listed in 45CSR27 Table A, it does not meet the definition of a Chemical Processing Unit. There is not an assembly of reactors, tanks, distillation columns, heat exchangers, vaporizers, compressors, dryers, decanters, and/or other equipment used to treat, store, manufacture, or use toxic air pollutants.

40 C.F.R. 60, Subpart K & Ka: All tanks are below 40,000 gallons in capacity.

40 C.F.R. 60, Subpart Kb: All new tanks constructed after July 23, 1984 are less than the capacity threshold of 19,813 gallons and/or have a vapor pressure less than 2.2 psi.

40 C.F.R. 60, Subpart D: Harrison Power Station boilers (B1, B2, & B3) were constructed prior to August 17, 1971.

40 C.F.R. 60, Subpart Da: Harrison Power Station boilers (B1, B2, & B3) were constructed before September 18, 1978.

40 C.F.R. 60, Subpart Db: Harrison Power Station Auxiliary boilers (A, B) were constructed prior to June 19, 1984.

40 C.F.R. 60, Subpart OOO: The definition of limestone states that it is a sedimentary rock consisting of at least 80% calcium or magnesium carbonates. Lime is defined as calcium oxide, which can be produced by subjecting calcium carbonate to high temperature baking in kilns to drive off carbon dioxide. Therefore, lime is not equivalent to limestone and the Harrison lime handling operation is not subject to Subpart OOO.

40 C.F.R. 63, Subpart Q: The existing Cooling Towers do not use any chromium-based water treatment chemicals and therefore, are exempt from the referenced regulation.

45CSR5: The Rule to Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations, and Coal Disposal Areas is not applicable to the facility since 45CSR2 applies.

45CSR17: The Rule to Prevent and Control Particulate Matter Air Pollution from Material Handling Preparation, Storage, and Other Sources of Fugitive Particulate Matter is not applicable to the facility because 45CSR2 is applicable.

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 underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

45CSR2: Control of Particulate matter emissions from indirect heat exchangers
45CSR6: Open burning prohibited
45CSR7: Control of Particulate from Manufacturing Source Operations
45CSR10: Control of sulfur dioxide emissions from in direct heat exchangers
45CSR11: Standby plans for emergency episodes.
45CSR13: Permit for construction, modification
45CSR16: Standard of Performance for New Stationary Sources Pursuant to 40 CFR Part 60
WVCode§22-5-4 (a)(14): Secretary can request any pertinent information.
45CSR30: Operating permit requirement
45CSR33: Acid Rain Provisions and Permits
45CSR34: Emission Standards for Hazardous Air Pollutants
40 C.F.R. Part 61: Asbestos inspection and removal
40 C.F.R. Part 64: Compliance Assurance Monitoring
40 C.F.R Part 63 Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
40 C.F.R Part 63 Subpart UUUUU: National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units
40 C.F.R. Part 60, Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 C.F.R. Part 60, Subpart JJJJ: Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
40 C.F.R Part 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 C.F.R. Part 72: Permits Regulation
40 C.F.R. Part 74: Sulfur dioxide Opt-ins
40 C.F.R. Part 75: Continuous Emissions Monitoring
40 C.F.R. Part 76: Nitrogen Oxides Reduction Program
40 C.F.R. Part 77: Excess Emissions
40 C.F.R. Part 60, Subpart Y: Coal Preparation Plants
40 C.F.R. Part 82, Subpart F: Ozone depleting substances
State Only: 45CSR4: No objectionable odors
45CSR39: NOx Annual Trading Program
45CSR40: NO_x Ozone Season Trading Program
45CSR41: SO_2 Trading Program

☒ 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.)

45CSR2: monitoring/testing/recordkeeping/reporting
45CSR6: recordkeeping
45CSR7: recordkeeping
45CSR10: monitoring/recordkeeping
45CSR11: recordkeeping
45CSR13: recordkeeping/reporting
45CSR16: recordkeeping
WVCode§22-5-4 (a)(14): recordkeeping/reporting
45CSR30: monitoring/testing/recordkeeping/reporting
45CSR33: monitoring/testing/recordkeeping/reporting
45CSR34: monitoring/testing/recordkeeping/reporting
40 C.F.R. Part 61: recordkeeping
40 C.F.R. Part 64: monitoring/recordkeeping/reporting
40 C.F.R Part 63 Subpart DDDDD: monitoring/testing/recordkeeping/reporting
40 C.F.R Part 63 Subpart UUUUU: monitoring/testing/recordkeeping/reporting
40 C.F.R. Part 60, Subpart IIII: monitoring/recordkeeping
40 C.F.R. Part 60, Subpart JJJJ: monitoring/recordkeeping
40 C.F.R. Part 63, Subpart ZZZZ: monitoring/recordkeeping
40 C.F.R. Part 72: recordkeeping/reporting
40 C.F.R. Part 74: recordkeeping/reporting
40 C.F.R. Part 75: monitoring/testing/recordkeeping/reporting
40 C.F.R. Part 76: monitoring/recordkeeping
40 C.F.R. Part 77: monitoring/recordkeeping/reporting
40 C.F.R. Part 60, Subpart Y: monitoring/testing/recordkeeping/reporting
40 C.F.R. Part 82, Subpart F: testing/recordkeeping
State Only: 45CSR4: monitoring/recordkeeping
45CSR39: monitoring/recordkeeping/reporting
45CSR40: monitoring/recordkeeping/reporting
45CSR41: monitoring/recordkeeping/reporting

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

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

20. Facility-Wide Applicable Requirements *(Continued)* - *Attach additional pages as necessary.*
List all facility-wide applicable requirements. For each applicable requirement, include the rule citation and/or permit with the condition number. N/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.) N/A
Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit *(if any)*
R13-1477B	**06/03/2003**	
R13-2988A	**11/09/2012**	
G60-C049	**11/28/2012**	
R30-033000015-2015 (MM01)	**06/02/2015**	
R13-2988B	**08/10/2016**	
G60-D049A	**11/25/2019**	
G60-D049B	**11/?/2019**	Pending Issuance
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22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
N/A	**N/A**	**N/A**
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Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	**Potential Emissions**
Carbon Monoxide (CO)	**1,888**
Nitrogen Oxides (NO_X)	**42,072**
Lead (Pb)	**0.54**
Particulate Matter ($PM_{2.5}$)[1]	**2,769**
Particulate Matter (PM_{10})[1]	**4,135**
Total Particulate Matter (TSP)	**7,420**
Sulfur Dioxide (SO_2)	**425,533**
Volatile Organic Compounds (VOC)	**219**
Hazardous Air Pollutants[2]	**Potential Emissions**
Antimony	**0.03**
Arsenic	**0.56**
Beryllium	**0.03**
Cadmium	**0.07**
Chromium	**0.70**
Cobalt	**0.21**
Manganese	**0.89**
Mercury	**0.23**
Nickel	**0.68**
Selenium	**2.37**
Hydrochloric Acid (HCl)	**88.3**
Hydrogen Fluoride (HF)	**30.3**
Polycyclic Aromatic Hydrocarbons	**0.17**
Acetaldehyde	**1.97**
Acrolein	**1.00**
Benzene	**4.51**
Benzyl Chloride	**2.42**

Cyanide Compounds	**8.66**
Formaldehyde	**14.14**
Isophorone	**2.01**
Methyl Bromide	**0.55**
Methyl Chloride	**1.84**
Methyl Ethyl Ketone	**1.35**
Methyl Hydrazine	**0.59**
Methylene Chloride	**1.00**
Propionaldehyde	**1.32**
Toluene	**0.83**
Regulated Pollutants other than Criteria and HAP	**Potential Emissions**
None	**N/A**

[1]$PM_{2.5}$ and PM_{10} are components 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)		
☒	1.	Air compressors and pneumatically operated equipment, including hand tools.
☒	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☒	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.
☒	4.	Bathroom/toilet vent emissions.
☒	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☒	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.
☐	7.	Blacksmith forges.
☒	8.	Boiler water treatment operations, not including cooling towers.
☒	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☐	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☒	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☒	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☒	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☒	14.	Demineralized water tanks and demineralizer vents.
☐	15.	Drop hammers or hydraulic presses for forging or metalworking.
☒	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.
☐	17.	Emergency (backup) electrical generators at residential locations.
☐	18.	Emergency road flares.
☒	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: **Various Insignificant Tanks with negligible VOC emissions** _____ _____ _____ _____ _____

24. Insignificant Activities (Check all that apply)		
☐	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: _____ _____ _____ _____ _____
☐	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
☒	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
☐	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.
☒	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
☐	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
☒	26.	Fire suppression systems.
☒	27.	Firefighting equipment and the equipment used to train firefighters.
☐	28.	Flares used solely to indicate danger to the public.
☒	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.
☐	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☒	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☐	32.	Humidity chambers.
☒	33.	Hydraulic and hydrostatic testing equipment.
☒	34.	Indoor or outdoor kerosene heaters.
☒	35.	Internal combustion engines used for landscaping purposes.
☐	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☒	37.	Laundry activities, except for dry-cleaning and steam boilers.
☒	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☒	39.	Oxygen scavenging (de-aeration) of water.
☐	40.	Ozone generators.

24. Insignificant Activities (Check all that apply)		
☒	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.)
☒	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.
☒	43.	Process water filtration systems and demineralizers.
☒	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.
☒	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☒	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☒	50.	Space heaters operating by direct heat transfer.
☒	51.	Steam cleaning operations.
☒	52.	Steam leaks.
☐	53.	Steam sterilizers.
☒	54.	Steam vents and safety relief valves.
☒	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.
☒	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.
☐	57.	Such other sources or activities as the Director may determine.
☒	58.	Tobacco smoking rooms and areas.
☒	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**.
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

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. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered 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: **Gary L. Dinzeo**	Title: **Director, Harrison Plant**

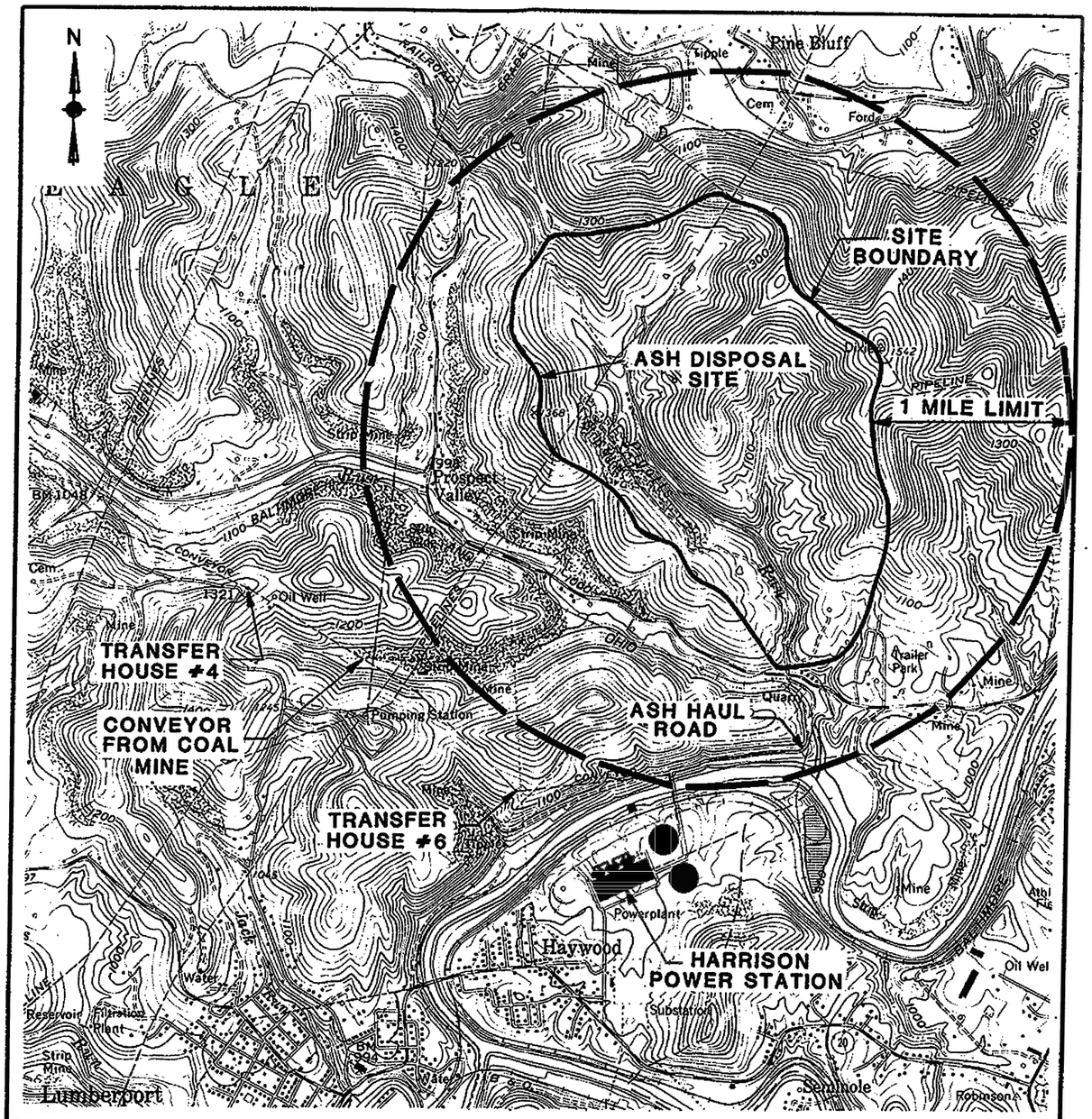
Responsible Official's signature:

Signature: _____ Signature Date: 11/20/2019

(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:	
☒	ATTACHMENT A: Area Map
☒	ATTACHMENT B: Plot Plan(s)
☒	ATTACHMENT C: Process Flow Diagram(s)
☒	ATTACHMENT D: Equipment Table
☒	ATTACHMENT E: Emission Unit Form(s)
☐	ATTACHMENT F: Schedule of Compliance Form(s)
☒	ATTACHMENT G: Air Pollution Control Device Form(s)
☐	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.



REFERENCE:

U.S.G.S. 7.5' Topographic Map; Shinnston, W.V. Quadrangle; Dated 1960, Photorevised 1977.

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SE TECHNOLOGIES
98 VANADIUM ROAD
BRIDGEVILLE, PA 15017
(412) 221-1100 • (800) 685-0354

ALLEGHENY POWER SYSTEM
HARRISON POWER STATION
TITLE V PERMIT DRAWINGS
SITE LOCATION PLAN

DWN. BY:	CAD FILE:	SCALE:	DATE:	DRAWING No.	REV.
CHKD. BY:		1"=2000'	5/22/96	L8910001	A

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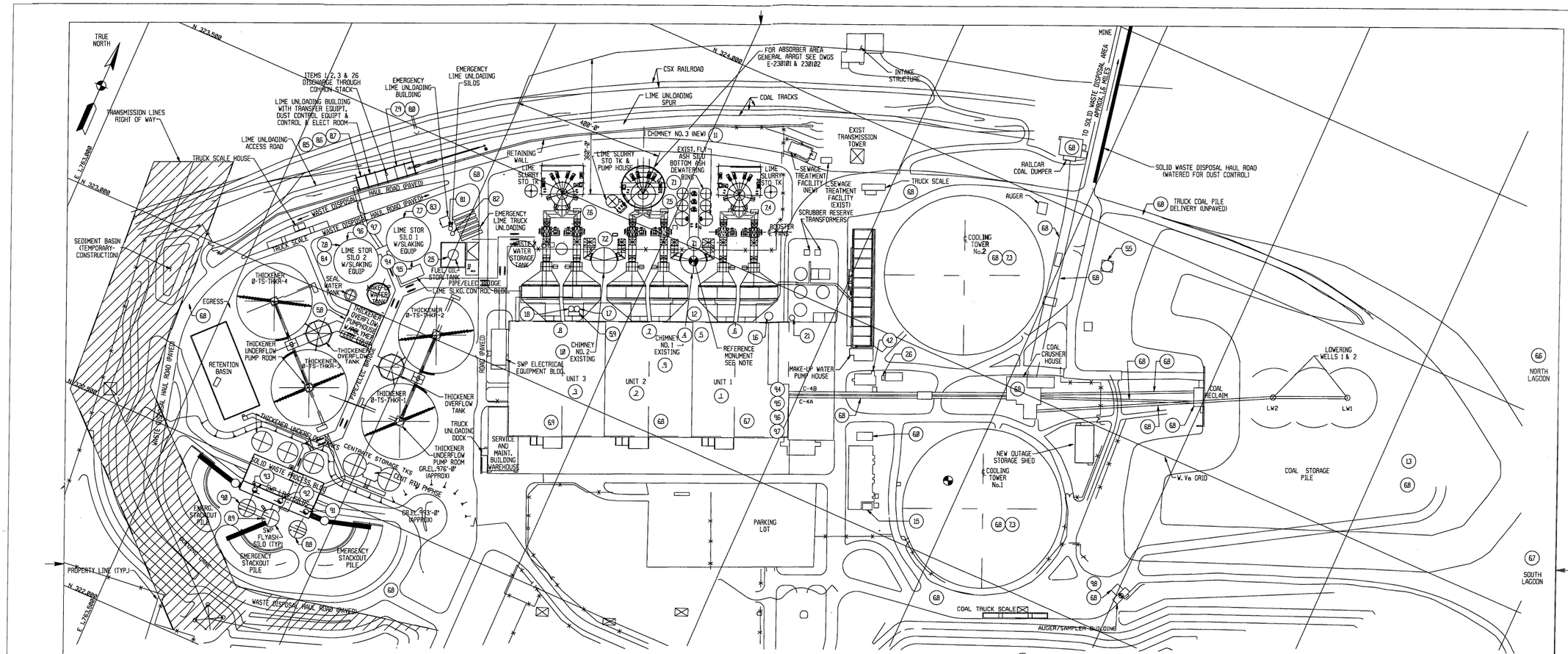


EMISSION POINT/ITEM No. IDENTIFICATION LIST

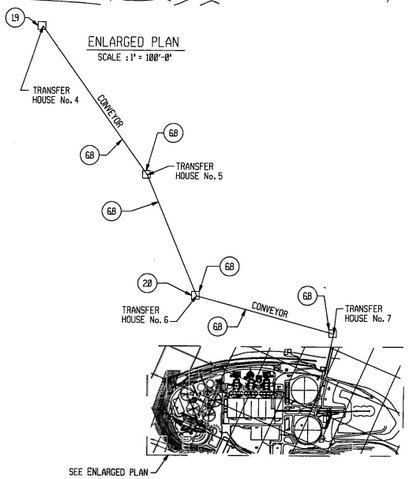
ITEM No.	LOCAL I.D.	DESCRIPTION	SUBSTANCE STORED OR EMITTED	COMMENTS
1	BOILER_1	FOSTER_WHEELER_BOILER_No._1	FLUE_GAS	
2	BOILER_2	FOSTER_WHEELER_BOILER_No._2	FLUE_GAS	
3	BOILER_3	FOSTER_WHEELER_BOILER_No._3	FLUE_GAS	
4	BOILER_1A	BABCOCK_&_WILCOX_AUX._BOILER_1A	FLUE_GAS	
5	BOILER_2A	BABCOCK_&_WILCOX_AUX._BOILER_1B	FLUE_GAS	
6	ESP-1	AMERICAN_STANDARD_PRECIP._No._1	FLUE_GAS	
7	ESP-2	AMERICAN_STANDARD_PRECIP._No._2	FLUE_GAS	
8	ESP-3	AMERICAN_STANDARD_PRECIP._No._3	FLUE_GAS	
9	STACK_1	BOILER_No._1_STACK	FLUE_GAS	
10	STACK_2	BOILER_No._2_STACK	FLUE_GAS	
11	STACK_3	BOILER_No._3_STACK	FLUE_GAS	
12	AUX._STK.	AUX._BOILER_STACK	FLUE_GAS	
13	STKPILE	COAL_STOCKPILE	FUGITIVE_COAL_DUST	
14*	A3HN	SULFURIC_ACID_TANK_2	H2SO4	SEE_NOTE_1
15*	A4HN	SULFURIC_ACID_TANK_3	H2SO4	
16*	A5HN	COAL_FLOW_ADDITIVE_TANK_No._1	AQUASHED_175	WET_COAL_FLOW_PROMOTER
17*	A7HN	COAL_FLOW_ADDITIVE_TANK_No._2	AQUASHED_175	WET_COAL_FLOW_PROMOTER
18*	A8HN	COAL_FLOW_ADDITIVE_TANK_No._3	AQUASHED_175	WET_COAL_FLOW_PROMOTER
19*	A12HN	GLYCOL_STORAGE_TANK	ETHYLENE_GLYCOL	TRANSFER_HOUSE_No._4
20*	A13HN	GLYCOL_STORAGE_TANK	ETHYLENE_GLYCOL	TRANSFER_HOUSE_No._6
21*	A14HN	PHOSPHONATE_TANK	CALGON_PCL-438	COOLING_WATER_TREATMENT
22*	A16HN	EMERG._DIESEL_GEN._No._1_FUEL_TANK	No._2_FUEL_OIL	SEE_NOTE_3
23*	A17HN	EMERG._DIESEL_GEN._No._2_FUEL_TANK	No._2_FUEL_OIL	SEE_NOTE_3
24*	A18HN	EMERG._DIESEL_GEN._No._3_FUEL_TANK	No._2_FUEL_OIL	SEE_NOTE_3
25*	A19HN	EMERG._DIESEL_GEN._FUEL_TANK-COMMON	No._2_FUEL_OIL	
26*	A20HN	SPACE_HEATER_FUEL_TANK	KEROSENE	
27*	A21HN	BLR._FEED_PUMP_1A_TURB._OIL_RESERVOIR	TURBINE_OIL	SEE_NOTE_1
28*	A22HN	BLR._FEED_PUMP_1B_TURB._OIL_RESERVOIR	TURBINE_OIL	SEE_NOTE_1
29*	A23HN	BLR._FEED_PUMP_2A_TURB._OIL_RESERVOIR	TURBINE_OIL	SEE_NOTE_1
30*	A24HN	BLR._FEED_PUMP_2B_TURB._OIL_RESERVOIR	TURBINE_OIL	SEE_NOTE_1
31*	A25HN	BLR._FEED_PUMP_3A_TURB._OIL_RESERVOIR	TURBINE_OIL	SEE_NOTE_1
32*	A26HN	BLR._FEED_PUMP_3B_TURB._OIL_RESERVOIR	TURBINE_OIL	SEE_NOTE_1
33*	A27HN	SOOT_BLOWER_COMPRESS._1_OIL_RESERVOIR	COMPRESSOR_OIL	SEE_NOTE_1
34*	A28HN	SOOT_BLOWER_COMPRESS._2_OIL_RESERVOIR	COMPRESSOR_OIL	SEE_NOTE_1
35*	A29HN	SOOT_BLOWER_COMPRESS._3_OIL_RESERVOIR	COMPRESSOR_OIL	SEE_NOTE_1
36*	A30HN	UNIT_1_TURBINE_OIL_RESERVOIR	TURBINE_OIL	SEE_NOTE_1
37*	A32HN	UNIT_2_TURBINE_OIL_RESERVOIR	TURBINE_OIL	SEE_NOTE_1
38*	A33HN	UNIT_3_TURBINE_OIL_RESERVOIR	TURBINE_OIL	SEE_NOTE_1
39*	A37HN	UNIT_1_TURBINE_OIL_FILTER	TURBINE_OIL	SEE_NOTE_1
40*	A38HN	UNIT_2_TURBINE_OIL_FILTER	TURBINE_OIL	SEE_NOTE_1
41*	A39HN	UNIT_3_TURBINE_OIL_FILTER	TURBINE_OIL	SEE_NOTE_1
42*	A39HN	WASTE_OIL_TANK	OIL/H2O_SEPARATOR_DEGREASER	
43*	A40HN	GLYCOL_RECOVERY_TANK	ETHYLENE_GLYCOL	SEE_NOTE_1
44*	A41HN	BIOCIDE_ODH_STORAGE_TANK	CALGON_H-339A	SEE_NOTE_1
45*	A42HN	BIOCIDE_EQUAT)_STORAGE_TANK	CALGON_H-238	SEE_NOTE_1
46*	A44HN	DIESEL_FIRE_PUMP_FUEL_STORAGE_TANK	No._2_FUEL_OIL	SEE_NOTE_1
47*	A45HN	UNIT_1_GEN._LOOP_SEAL_OIL_TANK	TURBINE_OIL	SEE_NOTE_1
48*	A46HN	UNIT_2_GEN._LOOP_SEAL_OIL_TANK	TURBINE_OIL	SEE_NOTE_1
49*	A47HN	UNIT_3_GEN._LOOP_SEAL_OIL_TANK	TURBINE_OIL	SEE_NOTE_1

* - INSIGNIFICANT ACTIVITY

EMISSION POINT/ITEM No. IDENTIFICATION LIST

ITEM No.	LOCAL I.D.	DESCRIPTION	SUBSTANCE STORED OR EMITTED	COMMENTS
50*	A49HN	PART._CLEANER_TANK_(ELEC.)	SOLVENT	SEE_NOTE_1
51*	A49HN	PART._CLEANER_TANK_(GHOP)	SOLVENT	SEE_NOTE_1
52*	A50HN	PART._CLEANER_TANK_(GAP)	SOLVENT	SEE_NOTE_1
53*	A50HN	WASTE_OIL_STORAGE_TANK	WASTE_OIL	SEE_NOTE_1
54*	A52HN	HAZARDOUS_WASTE_OIL_STORAGE_TANK	HAZARDOUS_WASTE_OIL	SEE_NOTE_1
55*	A53HN	OILER_FUEL_OIL_STORAGE_TANK	No._2_FUEL_OIL	SEE_NOTE_1
56*	A54HN	PARTS_CLEANER_TANK_(No._2_MILL)	SOLVENT	SEE_NOTE_1
57*	A55HN	PARTS_CLEANER_TANK_(No._3_MILL)	SOLVENT	SEE_NOTE_1
58*	A56HN	POLYMER_STORAGE_TANK	CALGON_POLY-E-Z_275	SEE_NOTE_1
59*	U3HN	GLYCOL_HOLDING_TANK	ETHYLENE_GLYCOL	-
60	U2HN	GASOLINE_TANK	GASOLINE	-
61*	U3HN	CLEAN_TURBINE_OIL_STORAGE_TANK	TURBINE_OIL	SEE_NOTE_1
62*	U4HN	NEW_TURBINE_OIL_TANK	TURBINE_OIL	SEE_NOTE_1
63	GEN_No._1	EMERG._DIESEL_GENERATOR_No._1	EXHAUST_FUMES	SEE_NOTE_1
64	GEN_No._2	EMERG._DIESEL_GENERATOR_No._2	EXHAUST_FUMES	SEE_NOTE_1
65	GEN_No._3	EMERG._DIESEL_GENERATOR_No._3	EXHAUST_FUMES	SEE_NOTE_1
66	WASTEWATER	NORTH_LAGOON	WASTEWATER	-
67	WASTEWATER	SOUTH_LAGOON	WASTEWATER	-
68	MAT._HAND._ROADS._STOCKPILE._COOLING._TRU	FUGITIVE_DUST_EMISSION_POINTS	FUGITIVE_DUST	
69*	SPACE_HEATERS	SPACE_HEATERS_(KEROSENE)	COMBUSTION_FUMES	SEE_NOTE_1
70*	HYDROGEN_EMISSION_POINTS	HYDROGEN_EXHAUST_POINTS	HYDROGEN	SEE_NOTE_1
71	BPS-1	BYPASS_STACK_No._1	FLUE_GAS	
72	BPS-2	BYPASS_STACK_No._2	FLUE_GAS	
73	COOL._TWR.	COOLING_TOWER	FUGITIVE_EMISSIONS	
74	FGD-1	SCRUBBER_No._1	SO2	
75	FGD-2	SCRUBBER_No._2	SO2	
76	FGD-3	SCRUBBER_No._3	SO2	
77	6C	LIME_SILO_DUST_COLLECTOR	FUGITIVE_DUST	
78	8C	LIME_SILO_DUST_COLLECTOR	FUGITIVE_DUST	
79	9C	LIME_UNLOADING_DUST_COLLECTOR	FUGITIVE_DUST	
80	10C	LIME_UNLOADING_DUST_COLLECTOR	FUGITIVE_DUST	
81	11C	EMERGENCY_LIME_UNLOADING_DUST_COLLECTOR	FUGITIVE_DUST	
82	12C	EMERGENCY_LIME_UNLOADING_DUST_COLLECTOR	FUGITIVE_DUST	
83	13C	LIME_CRUSHER_DUST_COLLECTOR	FUGITIVE_DUST	
84	14C	LIME_CRUSHER_DUST_COLLECTOR	FUGITIVE_DUST	
85	15C	LIME_CONVEYING_DUST_COLLECTOR	FUGITIVE_DUST	
86	16C	LIME_CONVEYING_DUST_COLLECTOR	FUGITIVE_DUST	
87	17C	LIME_CONVEYING_DUST_COLLECTOR	FUGITIVE_DUST	
88	18C	FLY_ASH_TRANSFER_DUST_COLLECTOR	FUGITIVE_DUST	
89	19C	FLY_ASH_TRANSFER_DUST_COLLECTOR	FUGITIVE_DUST	
90	20C	FLY_ASH_TRANSFER_DUST_COLLECTOR	FUGITIVE_DUST	
91	21C	SWP_DUST_COLLECTOR	FUGITIVE_DUST	
92	22C	SWP_DUST_COLLECTOR	FUGITIVE_DUST	
93	23C	SWP_DUST_COLLECTOR	FUGITIVE_DUST	
94	24C	BALL_MILL_SLAKER_DUST_COLLECTOR	FUGITIVE_DUST	
95	25C	BALL_MILL_SLAKER_DUST_COLLECTOR	FUGITIVE_DUST	
96	26C	BALL_MILL_SLAKER_DUST_COLLECTOR	FUGITIVE_DUST	
97	27C	BALL_MILL_SLAKER_DUST_COLLECTOR	FUGITIVE_DUST	
98	28C	COAL_AUGER_HOUSE_DUST_COLLECTOR	FUGITIVE_DUST	

* - INSIGNIFICANT ACTIVITY



PROPERTY PLAN
SCALE : 1" = 800'-0"

NOTES:

1. EQUIPMENT LOCATED INSIDE PLANT, NOT SHOWN FOR CLARITY.
2. TANK VENTS AT LOCATIONS INDICATED FOR TANKS.
3. FUGITIVE EMISSIONS INCLUDE ROADS, STOCKPILE, MATERIAL HANDLING AND COOLING TOWER. THESE EMISSIONS POINTS ARE NOTED WITH NUMBER (68).
4. DIESEL GENERATOR VENT AT LOCATION INDICATED FOR GENERATOR.
5. SEE DRAWING No. L8950002 FOR ASH DISPOSAL SITE (INCLUDES ROAD, AND STOCKPILE, EMISSIONS NOTED AS FUGITIVE DUST EMISSION POINT No. 68).

SET PROJECT NO.	REV.	DESCRIPTION	BY	DATE
960244	1		---	-------
INT. REV. NO. / REV. DATE	2		---	-------
--- / ---	3		---	-------
IGDS NO.	4		---	-------
########CONVSPEC########	5		---	-------
PLOT DATE AND TIME	6		---	-------
$$$$DATE$$$$ @TIME				

SEAL

NOTICE THIS DRAWING ISSUED FOR:	REV	DATE
☐ INFORMATION/REFERENCE	---	-------
☐ APPROVAL	---	-------
☐ PROCUREMENT	---	-------
☐ BID	---	-------
☐ CONSTRUCTION/FABRICATION	---	-------

DRAWN BY: RCH
DATE: 5-21-96
CHECKED BY: ---
ENGR. APPROVAL:
PROJECT MANAGER APPROVAL:
DRAWING SCALE: AS NOTED

SE TECHNOLOGIES
98 Vanadium Road Bridgeville,PA 15017 (412) 221-1188

ALLEGHENY POWER SYSTEM

HARRISON_POWER_STATION

MONONGAHELA POWER COMPANY | WEST PENN POWER COMPANY | THE POTOMAC EDISON COMPANY

TITLE_V_PERMIT_DRAWINGS

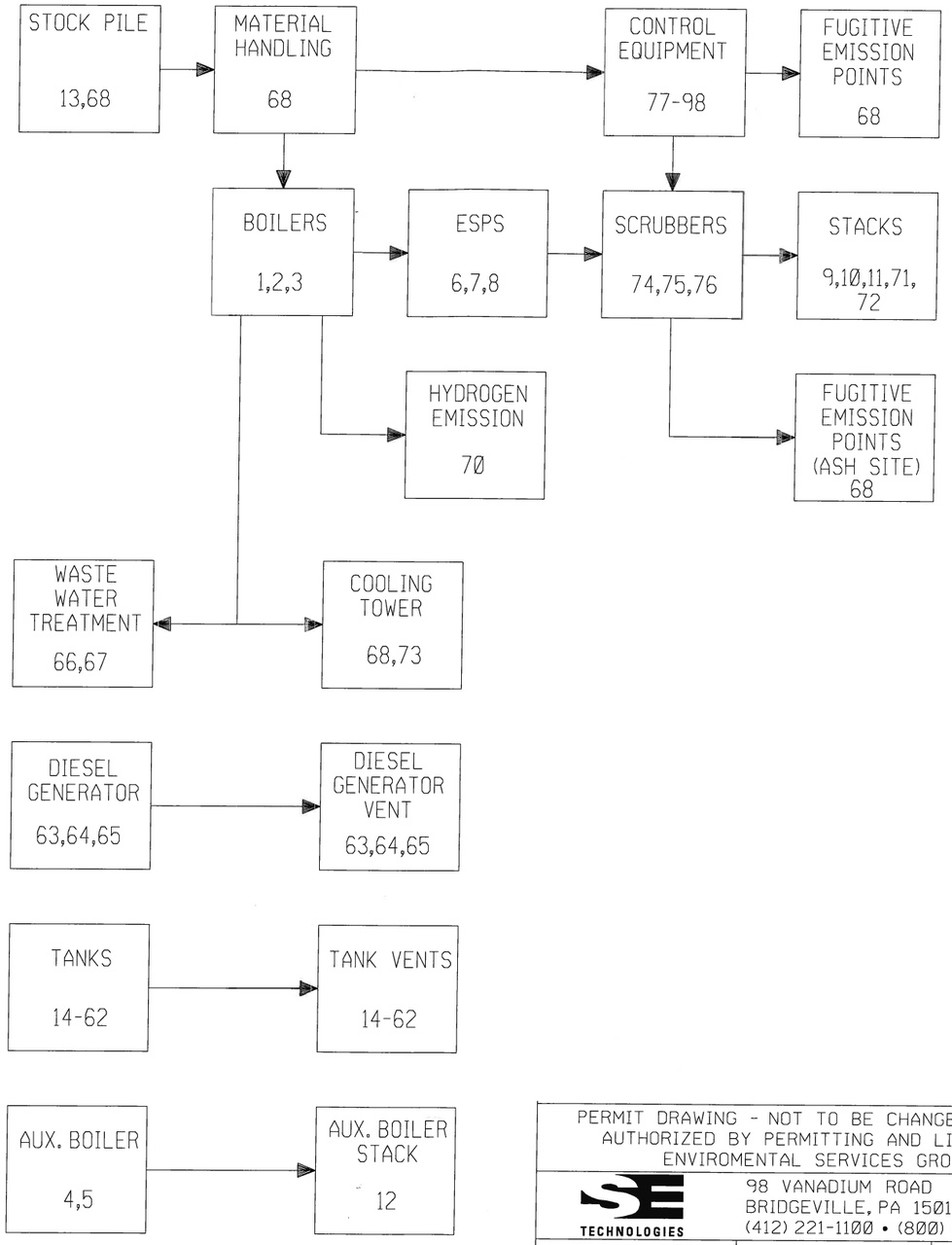
SITE_PLOT_PLAN

CONSTRUCTION SPEC. No. ---

DRAWING No. L8950001 REV. A

STANDARD TEXT SIZE
STANDARD TEXT SIZE

Drawing L8950001



NOTES:

1. SEE SITE PLOT PLAN FOR EQUIPMENT LOCATIONS, DESCRIPTIONS, TANK VENTS, FUGITIVE EMISSION POINTS AND DIESEL GENERATOR VENT.

PERMIT DRAWING - NOT TO BE CHANGED UNLESS AUTHORIZED BY PERMITTING AND LICENSING, ENVIROMENTAL SERVICES GROUP

SE TECHNOLOGIES
98 VANADIUM ROAD
BRIDGEVILLE, PA 15017
(412) 221-1100 • (800) 685-0354

_____ALLEGHENY_POWER_SYSTEM_____
_____HARRISON_POWER_STATION_____
_____TITLE_V_PERMIT_DRAWINGS_____
_____MATERIAL_FLOW_DIAGRAM_____

DWN. BY:	CAD FILE:	SCALE:	DATE:	DRAWING No.	REV.
RCH	L8920001.DGN	N.T.S.	5-21-96	L8920001 SHT. 1 OF 2	A
CHKD. BY: ___					

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STANDARD TEXT SIZE
STANDARD TEXT SIZE

EMISSION POINT/ITEM No. IDENTIFICATION LIST

ITEM No.	LOCAL I.D.	DESCRIPTION
1	BOILER 1	FOSTER WHEELER BOILER No. 1
2	BOILER 2	FOSTER WHEELER BOILER No. 2
3	BOILER 3	FOSTER WHEELER BOILER No. 3
4	BOILER 1A	BABCOCK & WILCOX AUX. BOILER 1A
5	BOILER 2A	BABCOCK & WILCOX AUX. BOILER 1B
6	ESP-1	AMERICAN STANDARD PRECIP. No. 1
7	ESP-2	AMERICAN STANDARD PRECIP. No. 2
8	ESP-3	AMERICAN STANDARD PRECIP. No. 3
9	STACK 1	BOILER No. 1 STACK
10	STACK 2	BOILER No. 2 STACK
11	STACK 3	BOILER No. 3 STACK
12	AUX. STK.	AUX. BOILER STACK
13	STKPILE	COAL STOCKPILE
14*	A3HN	SULFURIC ACID TANK 2
15*	A4HN	SULFURIC ACID TANK 1
16*	A6HN	COAL FLOW ADDITIVE TANK No. 1
17*	A7HN	COAL FLOW ADDITIVE TANK No. 2
18*	A8HN	COAL FLOW ADDITIVE TANK No. 3
19*	A12HN	GLYCOL STORAGE TANK
20*	A13HN	GLYCOL STORAGE TANK
21*	A14HN	PHOSPHONATE TANK
22*	A16HN	EMERG. DIESEL GEN. No. 1 FUEL TANK
23*	A17HN	EMERG. DIESEL GEN. No. 2 FUEL TANK
24*	A18HN	EMERG. DIESEL GEN. No. 3 FUEL TANK
25*	A19HN	EMERG. DIESEL GEN. FUEL TANK-COMMON
26*	A20HN	SPACE HEATER FUEL TANK
27*	A21HN	BLR. FEED PUMP 1A TURB. OIL RESERVOIR
28*	A22HN	BLR. FEED PUMP 1B TURB. OIL RESERVOIR
29*	A23HN	BLR. FEED PUMP 2A TURB. OIL RESERVOIR
30*	A24HN	BLR. FEED PUMP 2B TURB. OIL RESERVOIR
31*	A25HN	BLR. FEED PUMP 3A TURB. OIL RESERVOIR
32*	A26HN	BLR. FEED PUMP 3B TURB. OIL RESERVOIR
33*	A27HN	SOOT BLOWER COMPRESS. 1 OIL RESERVOIR

EMISSION POINT/ITEM No. IDENTIFICATION LIST

ITEM No.	LOCAL I.D.	DESCRIPTION
34*	A28HN	SOOT BLOWER COMPRESS. 2 OIL RESERVOIR
35*	A29HN	SOOT BLOWER COMPRESS. 3 OIL RESERVOIR
36*	A30HN	UNIT 1 TURBINE OIL RESERVOIR
37*	A31HN	UNIT 2 TURBINE OIL RESERVOIR
38*	A32HN	UNIT 3 TURBINE OIL RESERVOIR
39*	A33HN	UNIT 1 TURBINE OIL FILTER
40*	A34HN	UNIT 2 TURBINE OIL FILTER
41*	A35HN	UNIT 3 TURBINE OIL FILTER
42*	A39HN	WASTE OIL TANK
43*	A40HN	GLYCOL RECOVERY TANK
44*	A41HN	BIOCIDE (DGH) STORAGE TANK
45*	A42HN	BIOCIDE (QUAT) STORAGE TANK
46*	A44HN	DIESEL FIRE PUMP FUEL STORAGE TANK
47*	A45HN	UNIT 1 GEN. LOOP SEAL OIL TANK
48*	A46HN	UNIT 2 GEN. LOOP SEAL OIL TANK
49*	A47HN	UNIT 3 GEN. LOOP SEAL OIL TANK
50*	A48HN	PART CLEANER TANK (ELEC.)
51*	A49HN	PART CLEANER TANK (SHOP)
52*	A50HN	PART CLEANER TANK (SWP)
53*	A51HN	WASTE OIL STORAGE TANK
54*	A52HN	HAZARDOUS WASTE OIL STORAGE TANK
55*	A53HN	DOZER FUEL OIL STORAGE TANK
56*	A54HN	PARTS CLEANER TANK (No. 2 MILL)
57*	A55HN	PARTS CLEANER TANK (No. 3 MILL)
58*	A56HN	POLYMER STORAGE TANK
59*	U1HN	GLYCOL HOLDING TANK
60	U2HN	GASOLINE TANK
61*	U3HN	CLEAN TURBINE OIL STORAGE TANK
62*	U4HN	NEW TURBINE OIL TANK
63	GEN. No. 1	EMERG. DIESEL GENERATOR No. 1
64	GEN. No. 2	EMERG. DIESEL GENERATOR No. 2
65	GEN. No. 3	EMERG. DIESEL GENERATOR No. 3
66	WASTEWATER	NORTH LAGOON

EMISSION POINT/ITEM No. IDENTIFICATION LIST

ITEM No.	LOCAL I.D.	DESCRIPTION
67	WASTEWATER	SOUTH LAGOON
68	MAT. HAND, ROADS, STOCKPILE, COOLING TR.	FUGITIVE DUST EMISSION POINTS
69*	SPACE HEATERS	SPACE HEATERS (KEROSENE)
70*	HYDROGEN EMISSION POINTS	HYDROGEN EXHAUST POINTS
71	BPS-1	BYPASS STACK No. 1
72	BPS-2	BYPASS STACK No. 2
73	COOL. TWR.	COOLING TOWER
74	FGD-1	SCRUBBER No. 1
75	FGD-2	SCRUBBER No. 2
76	FGD-3	SCRUBBER No. 3
77	6C	LIME SILO DUST COLLECTOR
78	8C	LIME SILO DUST COLLECTOR
79	9C	LIME UNLOADING DUST COLLECTOR
80	10C	LIME UNLOADING DUST COLLECTOR
81	11C	EMERGENCY LIME UNLOADING DUST COLLECTOR
82	12C	EMERGENCY LIME UNLOADING DUST COLLECTOR
83	13C	LIME CRUSHER DUST COLLECTOR
84	14C	LIME CRUSHER DUST COLLECTOR
85	15C	LIME CONVEYING DUST COLLECTOR
86	16C	LIME CONVEYING DUST COLLECTOR
87	17C	LIME CONVEYING DUST COLLECTOR
88	18C	FLY ASH TRANSFER DUST COLLECTOR
89	19C	FLY ASH TRANSFER DUST COLLECTOR
90	20C	FLY ASH TRANSFER DUST COLLECTOR
91	21C	SWP DUST COLLECTOR
92	22C	SWP DUST COLLECTOR
93	23C	SWP DUST COLLECTOR
94	24C	BALL MILL SLAKER DUST COLLECTOR
95	25C	BALL MILL SLAKER DUST COLLECTOR
96	26C	BALL MILL SLAKER DUST COLLECTOR
97	27C	BALL MILL SLAKER DUST COLLECTOR
98	28C	COAL AUGER HOUSE DUST COLLECTOR

* - INSIGNIFICANT ACTIVITY

PERMIT DRAWING - NOT TO BE CHANGED UNLESS AUTHORIZED BY PERMITTING AND LICENSING, ENVIROMENTAL SERVICES GROUP

SE TECHNOLOGIES
98 VANADIUM ROAD
BRIDGEVILLE, PA 15017
(412) 221-1100 • (800) 685-0354

ALLEGHENY POWER SYSTEM
HARRISON POWER STATION
TITLE V PERMIT DRAWINGS
MATERIAL FLOW DIAGRAM

DWN. BY:	CAD FILE:	SCALE:	DATE:	DRAWING No.	REV.
RCH	L8920002.DGN	N.T.S.	5-21-96	L8920001 SHT. 2 OF 2	A
CHKD. BY:					

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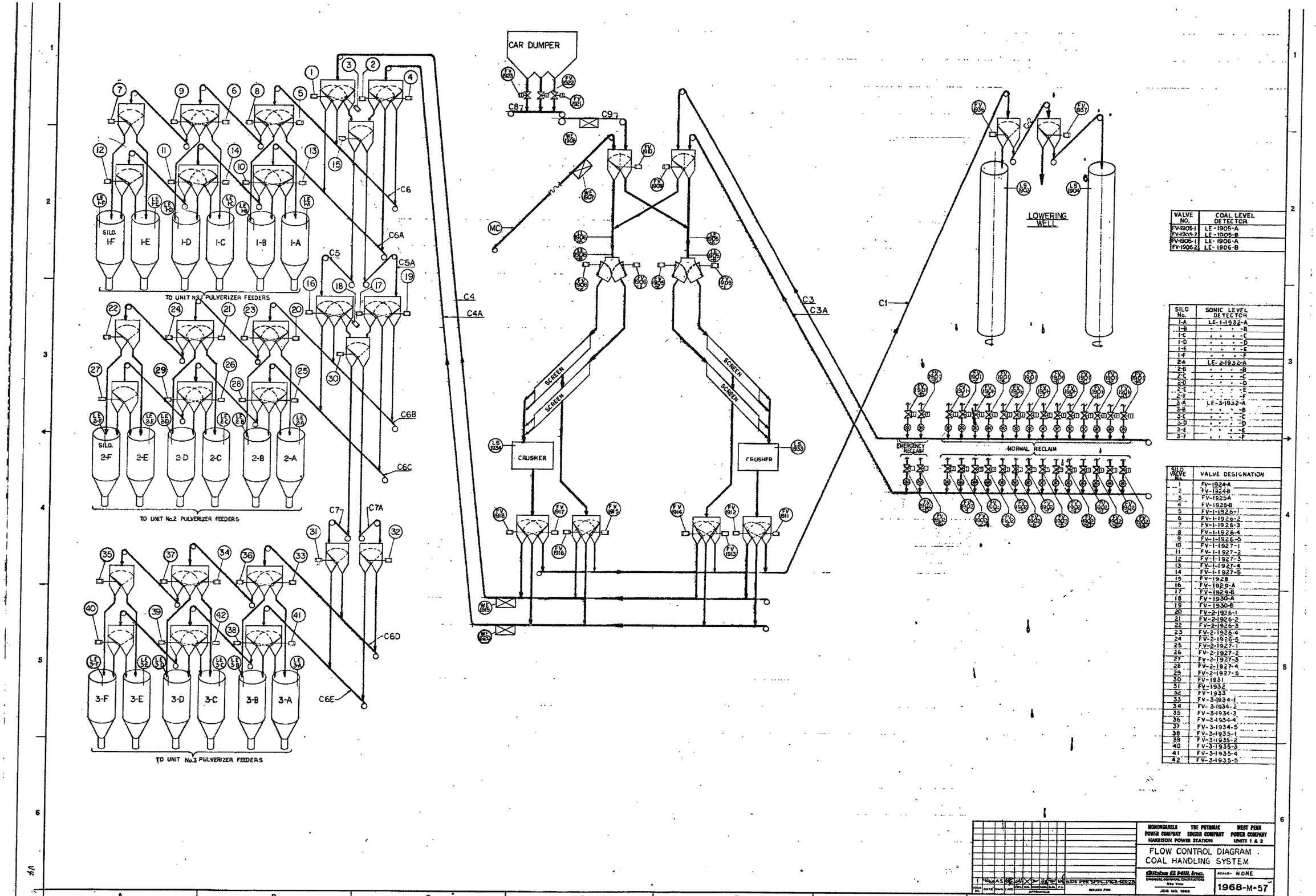


VALVE NO.	COAL LEVEL DETECTOR
FV-1905-1	LE-1905-A
FV-1905-2	LE-1905-B
FV-1906-1	LE-1906-A
FV-1906-2	LE-1906-B

SILO No.	SONIC LEVEL DETECTOR
1-A	LE-1-1932-A
1-B	" -B
1-C	" -C
1-D	" -D
1-E	" -E
1-F	" -F
2-A	LE-2-1932-A
2-B	" -B
2-C	" -C
2-D	" -D
2-E	" -E
2-F	" -F
3-A	LE-3-1932-A
3-B	" -B
3-C	" -C
3-D	" -D
3-E	" -E
3-F	" -F

SILO VALVE No.	VALVE DESIGNATION
1	FV-1924-A
2	FV-1924-B
3	FV-1925-A
4	FV-1925-B
5	FV-1-1926-1
6	FV-1-1926-2
7	FV-1-1926-3
8	FV-1-1926-4
9	FV-1-1926-5
10	FV-1-1927-1
11	FV-1-1927-2
12	FV-1-1927-3
13	FV-1-1927-4
14	FV-1-1927-5
15	FV-1928
16	FV-1929-A
17	FV-1929-B
18	FV-1930-A
19	FV-1930-B
20	FV-2-1926-1
21	FV-2-1926-2
22	FV-2-1926-3
23	FV-2-1926-4
24	FV-2-1926-5
25	FV-2-1927-1
26	FV-2-1927-2
27	FV-2-1927-3
28	FV-2-1927-4
29	FV-2-1927-5
30	FV-1931
31	FV-1932
32	FV-1933
33	FV-3-1934-1
34	FV-3-1934-2
35	FV-3-1934-3
36	FV-3-1934-4
37	FV-3-1934-5
38	FV-3-1935-1
39	FV-3-1935-2
40	FV-3-1935-3
41	FV-3-1935-4
42	FV-3-1935-5

MONONGAHELA POWER COMPANY — THE POTOMAC EDISON COMPANY — WEST PENN POWER COMPANY
HARRISON POWER STATION — UNITS 1 & 2

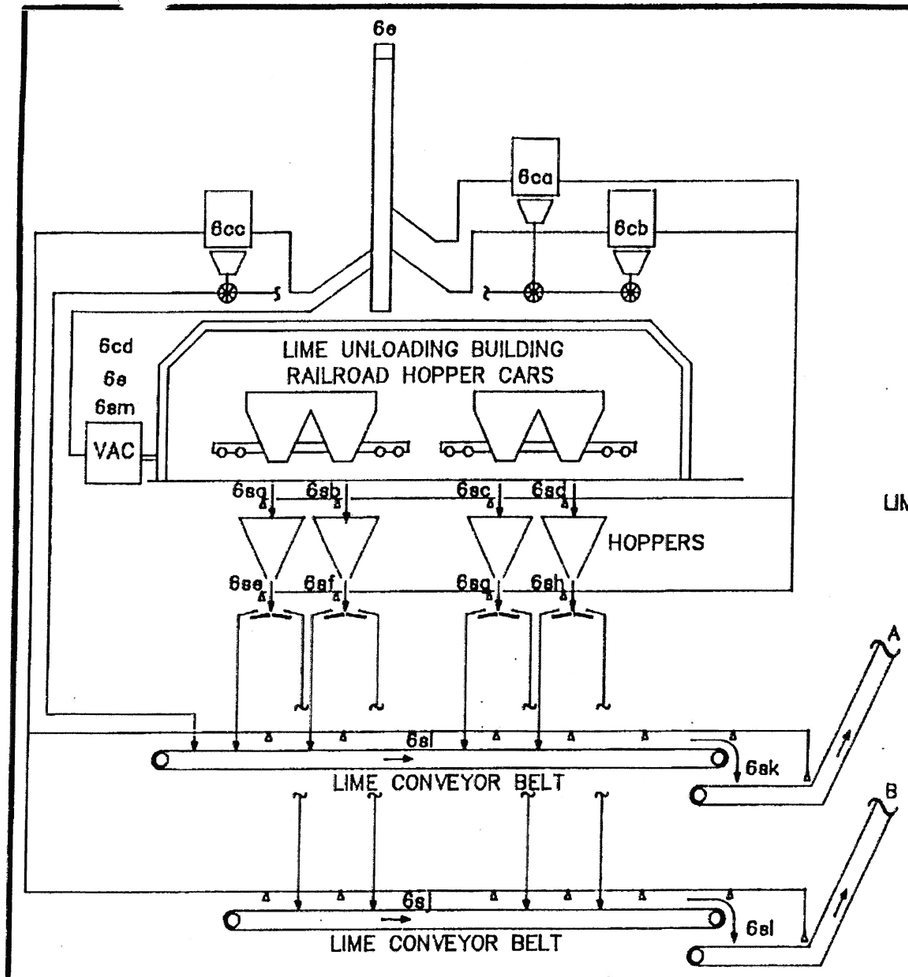
FLOW CONTROL DIAGRAM
COAL HANDLING SYSTEM

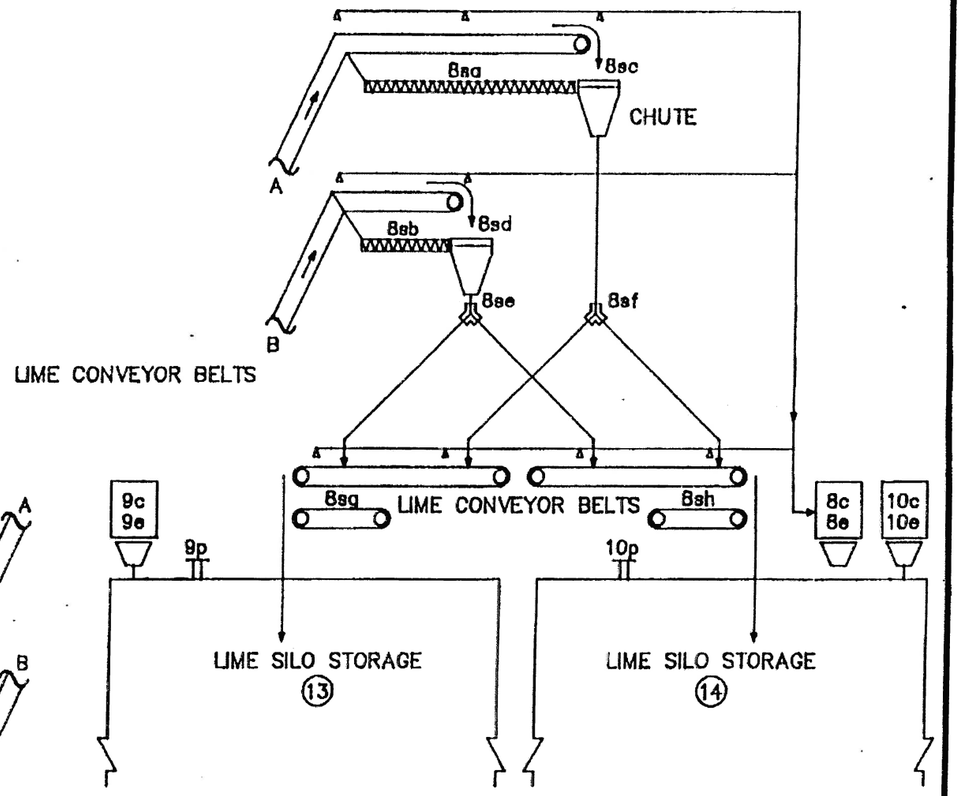
Gibbs & Hill, Inc. — ENGINEER-DESIGNING CONTRACTOR — New York
JOB NO. 1968

SCALE: NONE

1968-M-57

Drawing 1968-M-57





CONTINUED ON SKETCH MHP-003 & MHP-005

LEGEND

- DRY DUST COLLECTOR
- Xcx CONTROL DEVICE
- Xsx EMISSION SOURCE
- Xe EMISSION POINT
- Xp RELIEF VENT
- PICKUP POINT
- LIME FLOW
- SCREW CONVEYOR

FOOTNOTE:
(XX) – ITEM No. ON DWG 9899-E-23002

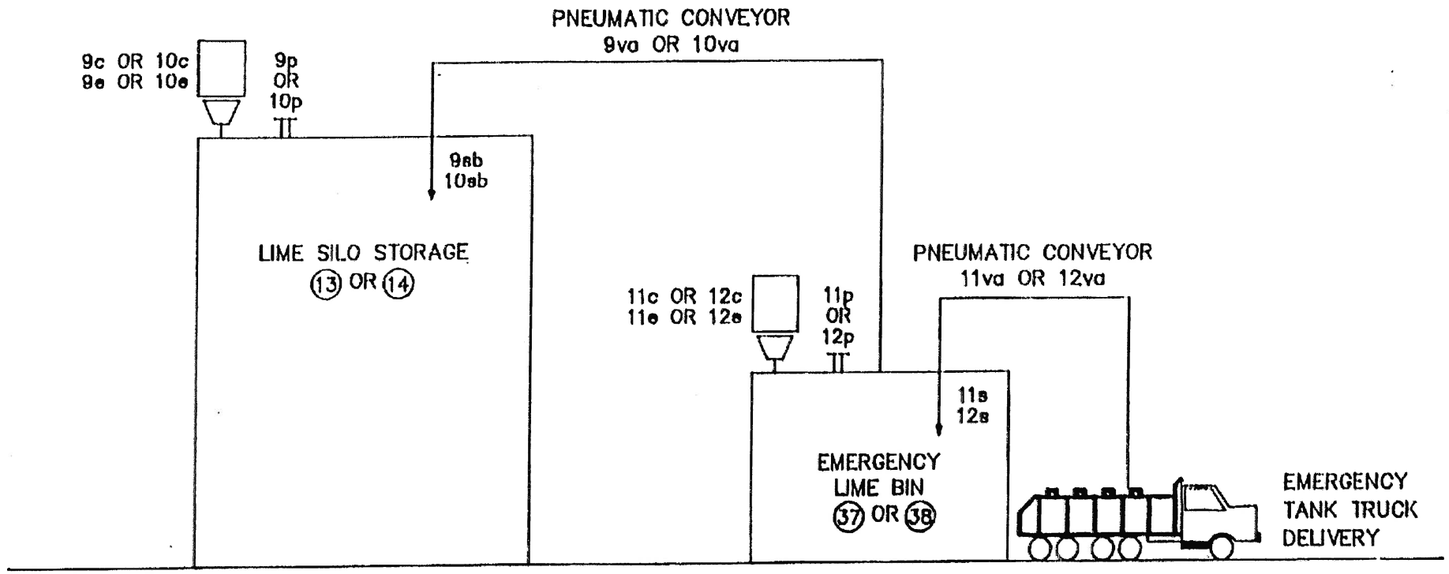
United Engineers & Constructors
A Raytheon Company

HARRISON POWER STATION UNITS 1, 2 & 3
SO_2 REMOVAL PROJECT

MONONGAHELA POWER COMPANY | THE POTOMAC EDISON COMPANY | WEST PENN POWER COMPANY

SYSTEM FLOW DIAGRAM
LIME HANDLING

SKETCH MHP-001 | 3/3/92



LEGEND

- DRY DUST COLLECTOR
- Xcx CONTROL DEVICE
- Xsx EMISSION SOURCE
- Xe EMISSION POINT
- Xp RELIEF VENT
- Xvx NON-SOURCE CONVEYOR
- → LIME FLOW

FOOTNOTE:
(XX) – ITEM No. ON DWG 9899-E-230002

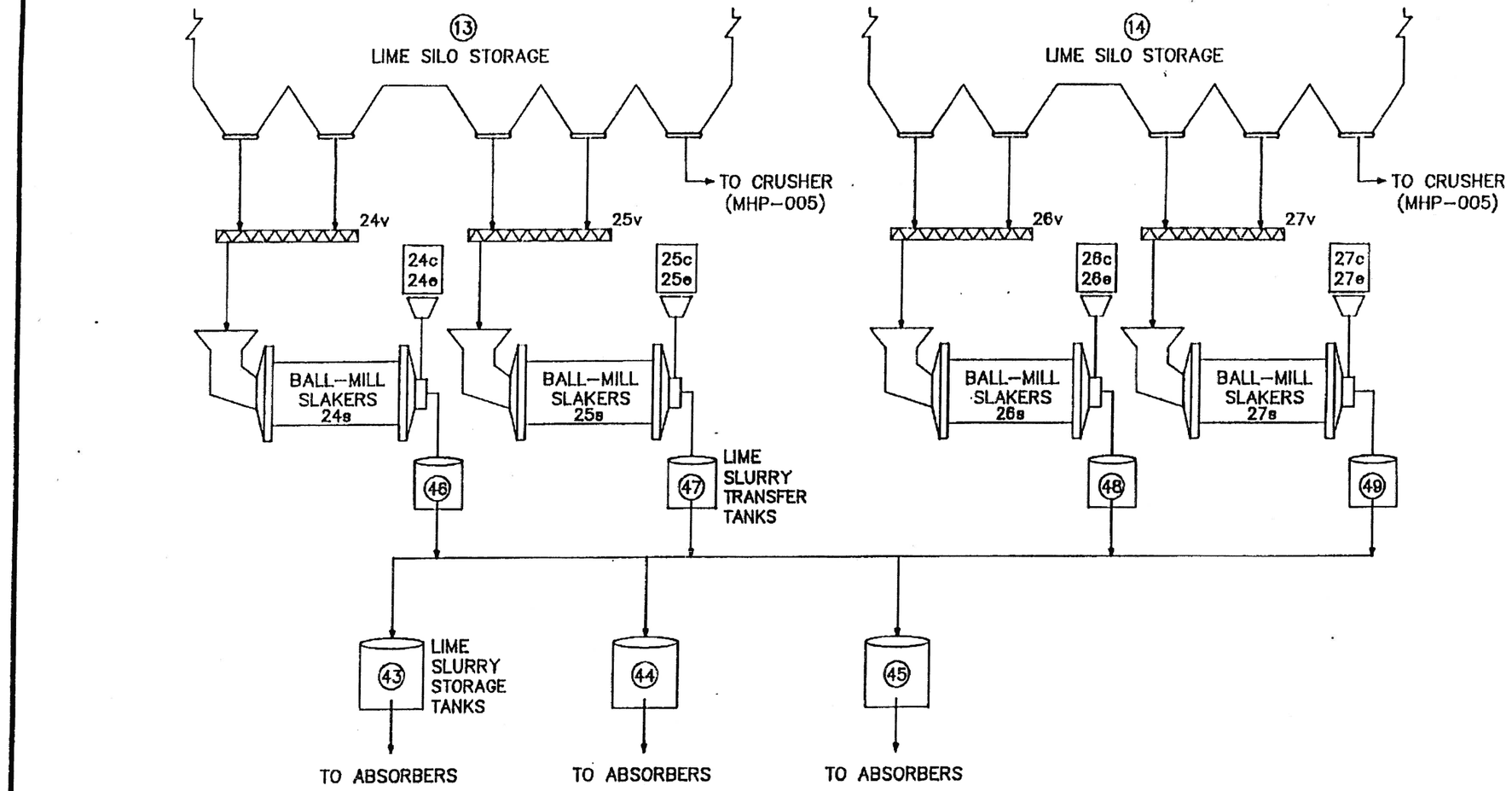
United Engineers & Constructors
A Raytheon Company

HARRISON POWER STATION UNITS 1, 2 & 3
SO_2 REMOVAL PROJECT

MONONGAHELA POWER COMPANY	THE POTOMAC EDISON COMPANY	WEST PENN POWER COMPANY

SYSTEM FLOW DIAGRAM
EMERGENCY LIME HANDLING

SKETCH MHP-002 | 3/3/92



LEGEND

- WET DUST COLLECTOR
- Xcx CONTROL DEVICE
- Xsx EMISSION SOURCE
- Xe EMISSION POINT
- Xvx NON-SOURCE CONVEYOR
- → LIME FLOW
- SCREW CONVEYOR

CONTINUED ON SKETCH MHP-004

FOOTNOTE:
(XX) – ITEM No. ON DWG 9899-E-230002

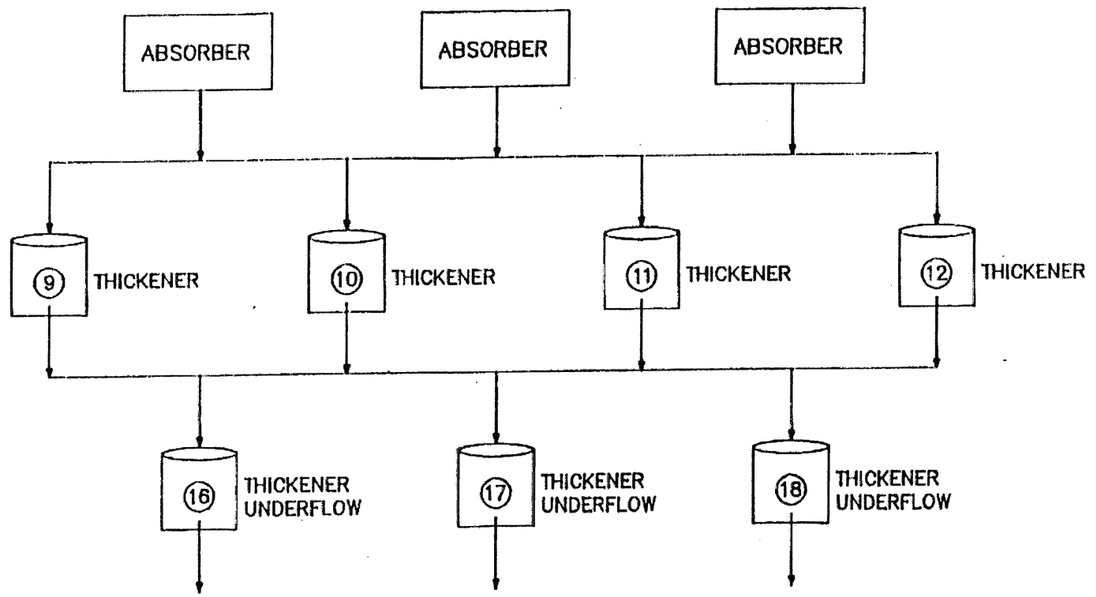
United Engineers & Constructors
A Raytheon Company

HARRISON POWER STATION UNITS 1, 2 & 3
SO_2 REMOVAL PROJECT

MONONGAHELA POWER COMPANY | THE POTOMAC EDISON COMPANY | WEST PENN POWER COMPANY

SYSTEM FLOW DIAGRAM
LIME SLURRY HANDLING

SKETCH MHP-003 | 3/3/92



CONTINUED ON SKETCH MHP-007

LEGEND

- WET DUST COLLECTOR
- Xcx CONTROL DEVICE
- Xsx EMISSION SOURCE
- Xe EMISSION POINT
- Xvx NON-SOURCE CONVEYOR
- LIME FLOW
- SCREW CONVEYOR

FOOTNOTE:
(XX) – ITEM No. ON DWG 9699-E-230002

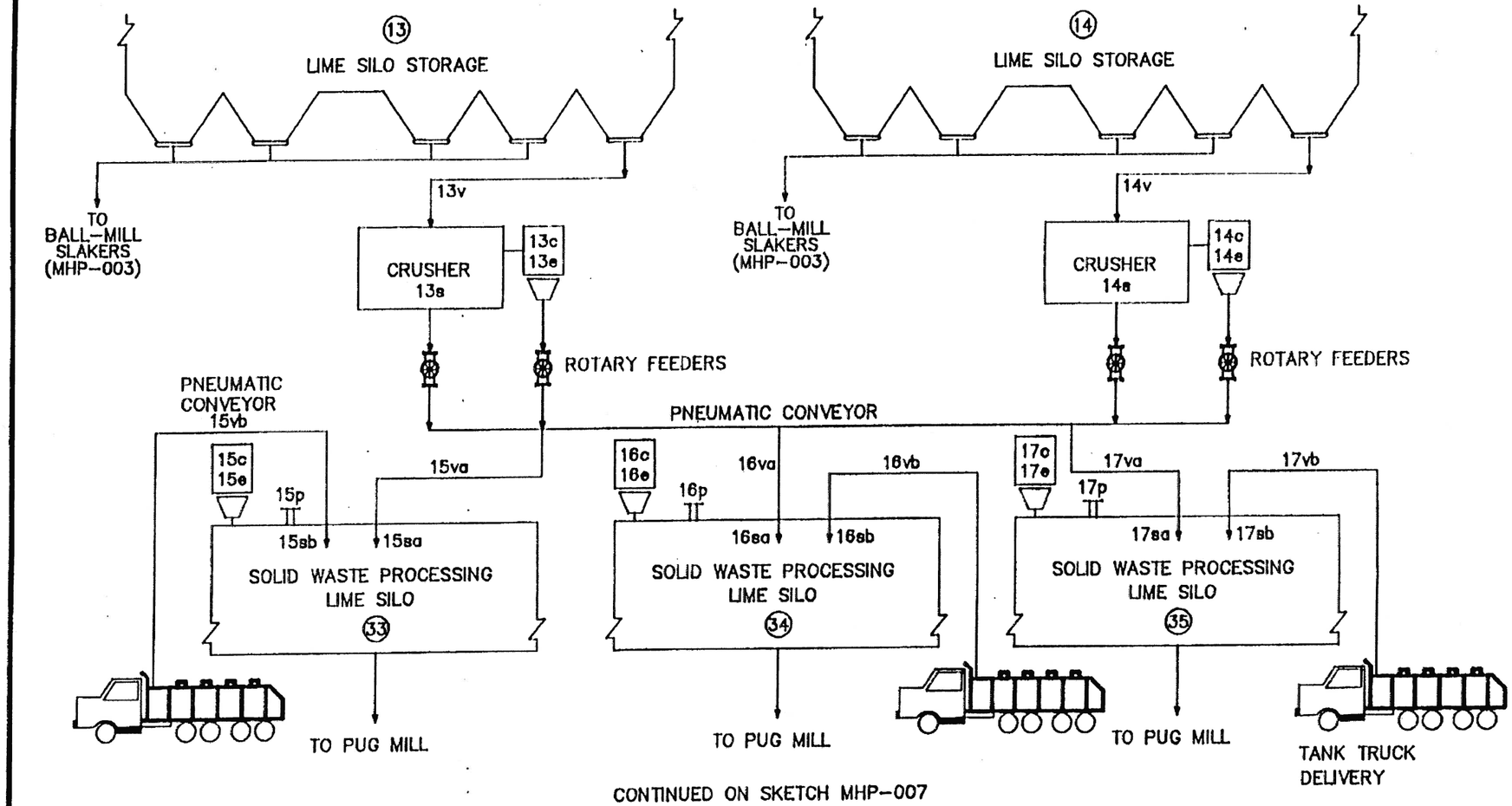
United Engineers & Constructors
A Raytheon Company

HARRISON POWER STATION UNITS 1, 2 & 3
SO_2 REMOVAL PROJECT

MONONGAHELA POWER COMPANY | THE POTOMAC EDISON COMPANY | WEST PENN POWER COMPANY

SYSTEM FLOW DIAGRAM ABSORBER SLUDGE HANDLING

SKETCH MHP-004 | 3/3/92



LEGEND

- DRY DUST COLLECTOR
- Xcx CONTROL DEVICE
- Xsx EMISSION SOURCE
- Xe EMISSION POINT
- Xp RELIEF VENT
- Xvx NON-SOURCE CONVEYOR
- → LIME FLOW

FOOTNOTE:
(XX) – ITEM No. ON DWG 9899-E-230002

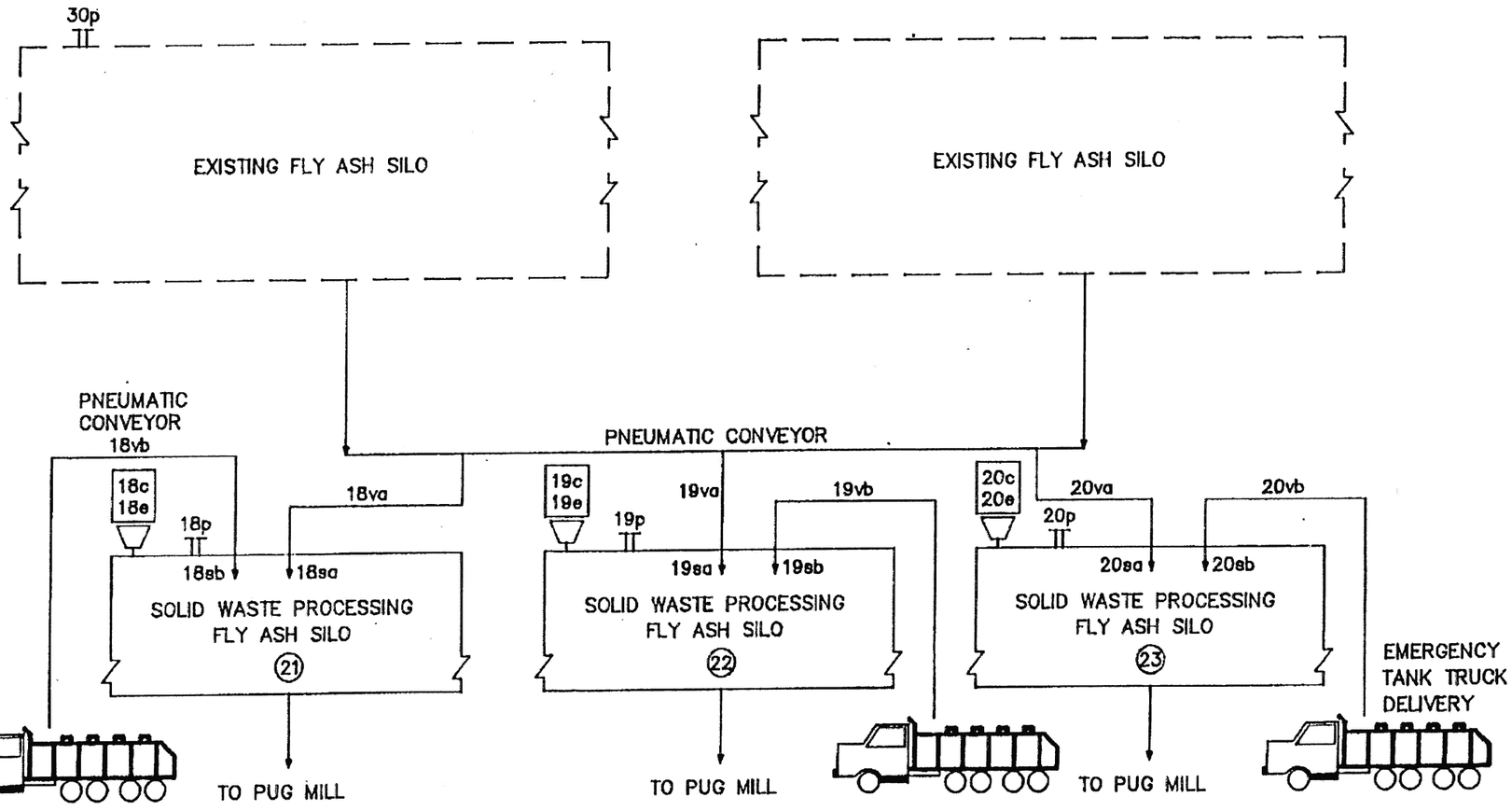
United Engineers & Constructors
A Raytheon Company

HARRISON POWER STATION UNITS 1, 2 & 3
SO_2 REMOVAL PROJECT

MONONGAHELA POWER COMPANY | THE POTOMAC EDISON COMPANY | WEST PENN POWER COMPANY

SYSTEM FLOW DIAGRAM
LIME HANDLING

SKETCH MHP-005 | 3/3/92



LEGEND

- DRY DUST COLLECTOR
- Xcx CONTROL DEVICE
- Xsx EMISSION SOURCE
- Xe EMISSION POINT
- Xp RELIEF VENT
- Xvx NON-SOURCE CONVEYOR
- → FLY ASH FLOW

CONTINUED ON SKETCH MHP-007

FOOTNOTE:
(XX) – ITEM No. ON DWG 9899-E-230002

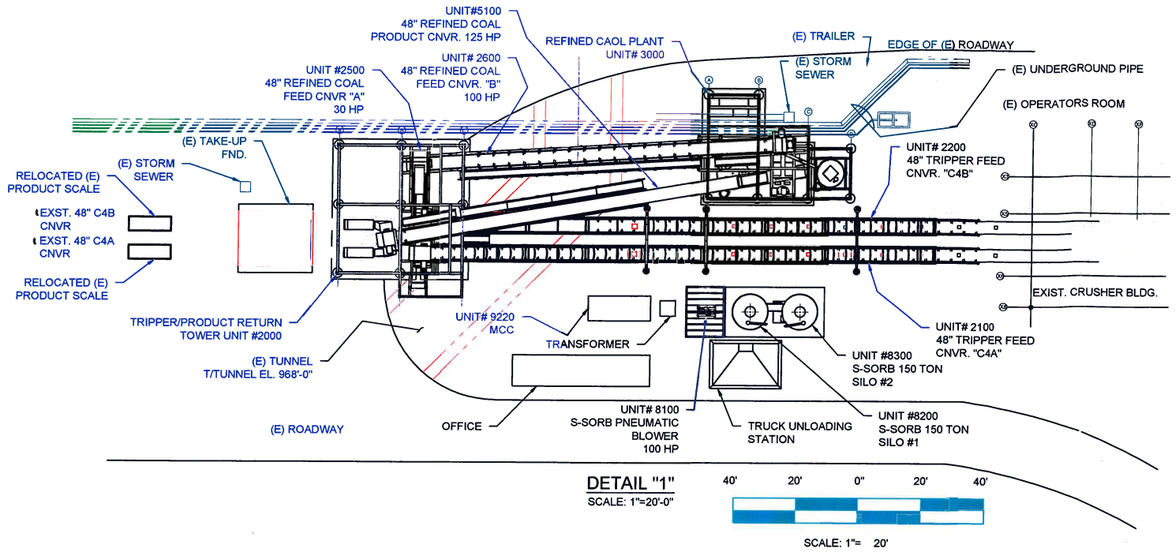
United Engineers & Constructors
A Raytheon Company

HARRISON POWER STATION UNITS 1, 2 & 3
SO_2 REMOVAL PROJECT

MONONGAHELA POWER COMPANY | THE POTOMAC EDISON COMPANY | WEST PENN POWER COMPANY

SYSTEM FLOW DIAGRAM
FLY ASH HANDLING

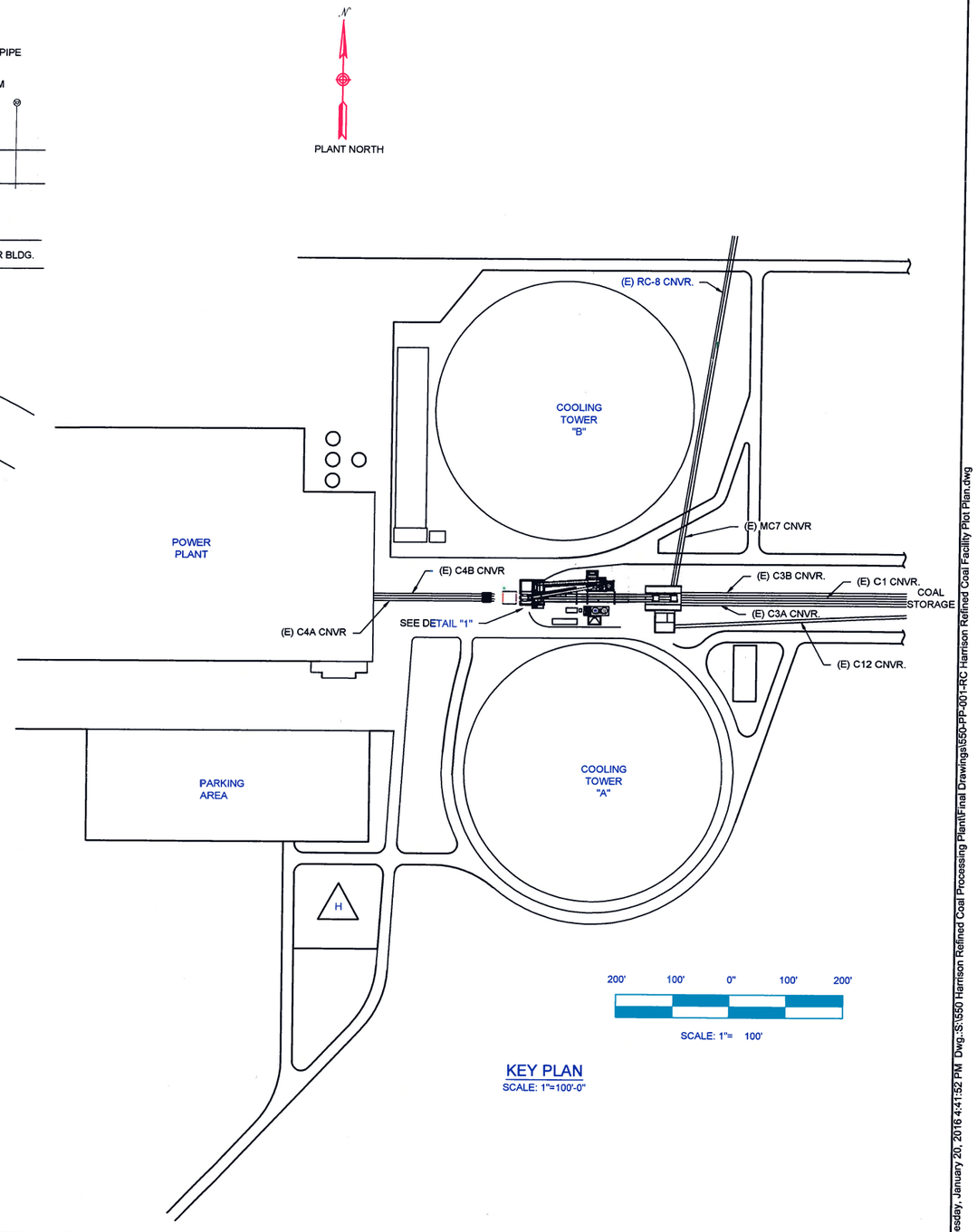
SKETCH MHP-006 | 3/3/92



DETAIL "1"
SCALE: 1"=20'-0"

40' 20' 0" 20' 40'

SCALE: 1"= 20'



KEY PLAN
SCALE: 1"=100'-0"

REV.			
D	UPDATED LOCATION OF REFINED COAL FACILITY	01/20/15	RJF
C	RVS'D PRODUCT SCALES LOCATION	11/03/15	MDM
B	PERMIT	10/30/15	MDM
A	ISSUED		

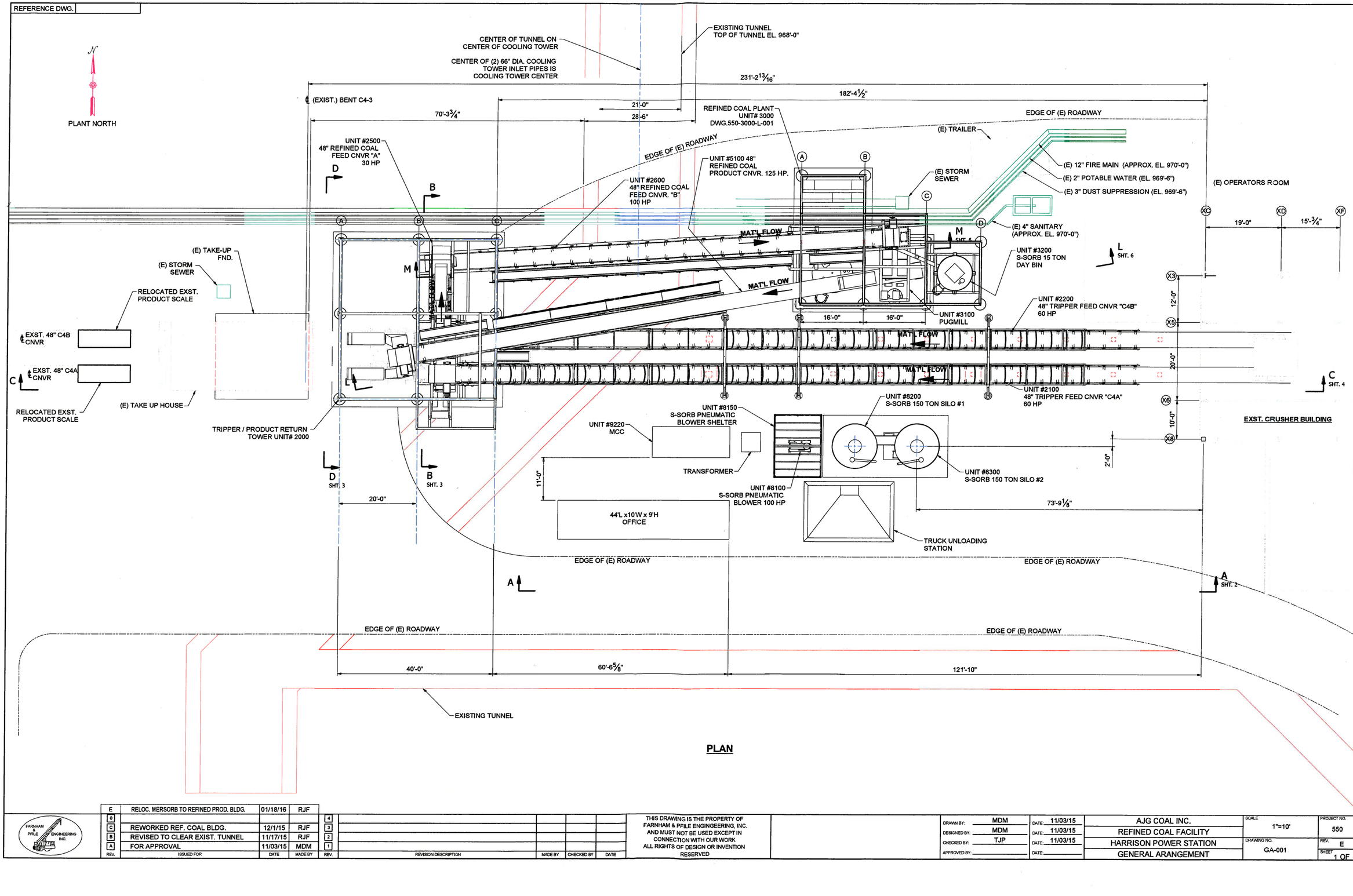
REV.				
4				
3				
2				
1	ISSUED FOR PERMIT			

DRAWN BY:	MDM	10/30/15
DESIGNED BY:	MDM	10/30/15
CHECKED BY:	TJP	10/30/15
APPROVED BY:		

AJG COAL INC.	
REFINED COAL FACILITY	SCALE: 1"=100'
HARRISON POWER STATION	JOB NO. 550
PLOT PLAN	DWG. NO. PP-001 REV. C
	SHEET 1 OF 1

Plot Date: Wednesday, January 20, 2016 4:41:52 PM Dwg::S:\550 Harrison Refined Coal Processing Plant\Final Drawings\550-PP-001-RC Harrison Refined Coal Facility Plot Plan.dwg

REFERENCE DWG.



PLAN

REV.	ISSUED FOR	DATE	MADE BY
E	RELOC. MERSORB TO REFINED PROD. BLDG.	01/18/16	RJF
C	REWORKED REF. COAL BLDG.	12/1/15	RJF
B	REVISED TO CLEAR EXIST. TUNNEL	11/17/15	RJF
A	FOR APPROVAL	11/03/15	MDM

REV.	REVISION DESCRIPTION	MADE BY	CHECKED BY	DATE
4				
3				
2				
1				

FARNHAM & PFILE ENGINEERING INC.

DRAWN BY:	MDM	DATE: 11/03/15
DESIGNED BY:	MDM	DATE: 11/03/15
CHECKED BY:	TJP	DATE: 11/03/15
APPROVED BY:		DATE:

AJG COAL INC.
REFINED COAL FACILITY
HARRISON POWER STATION
GENERAL ARANGEMENT

SCALE 1"=10'
PROJECT NO. 550
DRAWING NO. GA-001
REV. E
SHEET 1 OF 6

TRIPPER BUILDING DETAILS (UNIT 2000):

SLOPED ROOF WITH SHEET METAL SIDINGS.

NON-HEATED.

LOUVERS ONLY FOR VENTILATION.

ELECTRICAL AREA CLASSIFICATION: CLASS II, DIVISION 1,GROUP F.

REFINED COAL PLANT BUILDING DETAILS (UNIT3000):

SLOPED ROOF WITH SHEET METAL SIDINGS AND INSULATION.

LOUVERS ONLY FOR VENTILATION.

WASH DOWN PIPING HEADER, 2" CARBON STEEL,WITH ONE 3/4" HOSE STATION FOR EVERY FLOOR LEVEL

OUTSIDE WASH DOWN PIPING WILL BE 120V HEAT TRACED AND INSULATED TO CUSTOMER'S FRESH WATER SOURCE.

100' OF HEAT TRACING AND INSULATION HAS BEEN BUDGETED. .

MERSORB PUMP HOUSE (INSULATED) UNIT 3400

15 KW SPACE HEATER UNIT 3410

15 KW SPACE HEATER UNIT 3415

MERSORB 405 GALLON DOUBLE WALLED DAY TANK UNIT 3700

MERSORB FEED PUMP #1 1 HP VFD UNIT 3720 PRIMARY

MERSORB FEED PUMP #2 1HP VFD UNIT 3730 STANDBY

DUPLEX BASKET STRAINER UNIT 3740

MERSORB RECIRC. PUMP 1HP UNIT 3510

TRUCK FILL

MERSORB 6100 GALLON STORAGE TANK WITH CONTAINMENT UNIT 3500

MERSORB TRANSFER PUMP 1 HP UNIT 3520

125 GAL. AIR RECEIVER TK-3054

AIR COMPRESSOR 20 HP UNIT 3050

REFRIGERATED DRYER DY-3052 1.2 HP.

DESICCANT DRYER UNIT 3053

MERSORB FLOW METER UNIT 3750

GROUND

AIR TO SILO AND DAY BINS

DUST SUPPRESSION SYSTEM UNIT 2400

FROM DUST COLLECTION HOODS

TRIPPER PRODUCT RETURN TOWER UNIT 2000

WORK POINT

EXISTING CONVEYOR C4A W/350 HP HEAD DRIVE

CONVEYOR C4A TRIPPER DRIVE 60 HP UNIT 2100

TRANSFER POINT (A) FLOP GATES UNITS 2110 / 2120

WORK POINT

FROM COAL PILE RECLAIMING HOPPERS)

TRANSFER POINT (B)

EXISTING CONVEYOR C4B W/350 HP HEAD DRIVE

FLOP GATES UNITS 2210 / 2220

CONVEYOR C4B TRIPPER DRIVE 60 HP UNIT 2200

TO UNIT 2400

TO UNIT 2400

TRAMP METAL DETECTOR UNIT 5120

PRODUCT RETURN TRANSFER C4A-C4B SELECTOR GATE PROPORTIONAL UNIT 5700

REFINED COAL FEED CONVEYOR #2 48" 1500 TPH 100 HP - 620 FPM UNIT 2600

REFINED COAL FEED CONVEYOR #1 48" 1500 TPH 30 HP-620 FPM UNIT 2500

TO UNIT 2400

MODIFIED EXISTING CONVEYOR 4A,48" 1500 TPH 620 FPM

TO UNIT 2400

TO UNIT 5300

RELOCATED SCALE UNIT 5710

WORK POINT CONVEYOR C4A

TRANSFER POINT (C)

TO UNIT 5300

WORK POINT CONVEYOR C4B

TO UNIT 2400

MODIFIED EXISTING CONVEYOR 4B,48" 1500 TPH 620 FPM

TRANSFER POINT (D)

RELOCATED SCALE UNIT 5720

TRANSFORMER UNIT 9100

GROUND

REFINED COAL PLANT (INSULATED) UNIT 3000

BIN VENT UNIT 3230

120V

S-SORB 15 TON DAY BIN UNIT 3200

LEVEL SYSTEM UNIT 3240

WEIGH SYSTEM UNIT 3200A THRU D

SCREW CONVEYOR 10 HP UNIT 3220

ROTARY VANE FEEDER UNIT 3210 2 HP VFD

CLASS II, DIVISION 1 GROUP F

ELECTRICAL CLASS BARRIER

1500B PUGMILL UNIT 3100 TWIN 100 HP

DRIVE "A" UNIT 3100A

DRIVE "B" UNIT 3100B

DUST SUPPRESSION SYSTEM UNIT 3300

PUGMILL PRODUCT CONVEYOR 48" 1500 TPH - 125 HP - 620 FPM UNIT 6100

(2) 30 KW SPACE HEATERS

UNIT 3010

UNIT 3015

7.5 HP CLEAN-UP SUMP & PUMP UNIT 3030

TO DISPOSAL (BY OTHERS)

UNIT 8230

120V

BIN VENT

150 TON S-SORB SILO #1 UNIT 8200

LEVEL SYSTEM UNIT 8240 120V

BIN DISCHARGER UNIT 8250

3HP

2HP VFD

ROTARY VANE #1 FEEDER UNIT 8210

TRUCK FILL

UNIT 8330

120V

BIN VENT

150 TON S-SORB SILO #2 UNIT 8300

LEVEL SYSTEM UNIT 8340 120V

BIN DISCHARGER UNIT 8350

3HP

2HP VFD

ROTARY VANE #2 FEEDER UNIT 8310

TRUCK FILL

BLOWER SHELTER UNIT 8150

S-SORB PNUEMATIC BLOWER 100 HP

UNIT 8100

ELECTRICAL EQUIPMENT TRAILER #2 9400

CR SECTION HVAC UNIT 9450

CONTROL ROOM UNIT 9420

ELECTRICAL EQUIPMENT ROOM #1 (20' L x 8' W x 8.75' H) UNIT 9200

MCC SECTION HVAC UNIT 9250

EER LIGHTING TRANSFORMER UNIT 9260

MOTOR CONTROL CENTER UNIT 9220

GROUND

= RELOCATED EQUIPMENT

PLANT FEED RATES (TPH)		ANNUAL MAX BURN (TONS)	TONS/WEEK	HOURS/WEEK BASED ON MAX RECLAIM RATE
1500	CONVEYORS 4A & 4B COMBINED MAX RECLAIM	5,000,000	96,000	64

STORAGE CAPACITY - 5 DAYS							
	CKD - S- SORB			MERSORB			
MAX BURN RATE TONS PER DAY	TPD	STORAGE (TONS)	SILO (TONS)	GPD	STORAGE (GAL)	TANKS (GAL)	
18,500	65	324	(2) - 150	313	1,563	(1) - 6,150	

	PERCENT BY WEIGHT			CHEMICAL FLOW (TPH)			CHEMICAL FLOW (GPH)		
	LOW	DESIGN	HIGH	LOW	DESIGN	HIGH	LOW	DESIGN	HIGH
MERSORB	0.01%	0.012%	0.03%	0.15	0.18	0.45	21.13	25.38	63.38
S-SORB	0.20%	0.35%	0.50%	3.0	5.25	7.5			

REV	DATE	BY	DESCRIPTION
L	01/15/16	MtL	REVISED MERSORB STORAGE TANK DESCRIPTION (UNIT 3500)
K	11/16/15	MtL	ADD REFINED FEED CONV.#2 & REMOVED PUGMILL PRODUCT CONV.#2
J	11/09/15	MtL	REMOVED TRUCK FILL FROM PNUEMATIC BLOWER
H	11/08/15	MtL	ADDED TRAMP METAL DETECTOR & BUILDING UNIT NUMBER
G	11/03/15	MtL	RELOCATED BELT SCALE & IDENTIFIED SELECTOR GATE
F	10/27/15	MtL	REVISED CONVEYOR NAME'S

FARNHAM & PFILE ENGINEERING INC.

AJG COAL INC. REFINED COAL FACILITY
HARRISON POWER STATION
FLOW SHEET

DRAWN BY:	MtL	DATE:	10/08/15	DWG No:	REV.
CHECKED BY:	TJP	SCALE:	N.T.S.	550-FS-001	L

Plot Date: Friday, January 15, 2016 12:56 PM

Attachment D
Emission Units Table

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
Combustion Sources					
Unit B1	Stack1	Harrison Unit 1	1972	6325 MMBtu/hr	ESP-1, FGD-1, SCR-1
Unit B2	Stack2	Harrison Unit 2	1973	6325 MMBtu/hr	ESP-2, FGD-2, SCR-2
Unit B3	Stack3	Harrison Unit 3	1974	6325 MMBtu/hr	ESP-3, FGD-3, SCR-3
Boiler 1A	Aux Boiler Stack	Auxiliary Boiler A	1972	202.2 MMBtu/hr	N/A
Aux Blr PB	Aux Boiler Stack	Auxiliary Boiler B	1972	202.2 MMBtu/hr	N/A
EDG1	EDG1	Emergency Generator No. 1	1971	800 kW	N/A
EDG2	EDG2	Emergency Generator No. 2	1971	800 kW	N/A
EDG3	EDG3	Emergency Generator No. 3	1994	350 kW	N/A
FP-01	FP-01	Emergency Diesel Fire Pump	2019	510 bhp	N/A
FP-02	FP-02	Emergency Diesel Fire Pump	1971	335 bhp	N/A
EG-1	EG-1	Wetlands Pump House Emergency Generator	2012	145 HP/108.2 kW	N/A
EG-2	EG-2	Leachate Collection/Conveyance System Emergency Generator	2019	605 bhp	N/A
Material Handling Sources					
LRCH	LRCH	Lime Rail Car Unloading Hoppers	1994	380 TPH	6ca, 6cb, 6cc, 6cd
6si, 6sj	6si, 6sj	Lime Unloading Conveyor and Transfer Points	1994	450 TPH	6ca, 6cb, 6cc
8sa, 8sb, 8sg, 8sh	8sa, 8sb, 8sg, 8sh	Lime Transfer and Storage Conveyors with Associated Dribble Conveyors	1994	450 TPH (Trans.) 900 TPH (Stor.)	8c
13	13	Lime Storage Silo	1994	101,788 Tons	9c
14	14	Lime Storage Silo	1994	101,788 Tons	10c
11va, 12va	11va, 12va	Emergency Lime Pneumatic Delivery Conveyor (from trucks)	1994	75 Tons (each)	Full Enclosure
37	37	Emergency Lime Storage Silo	1994	150 Tons	11c
38	38	Emergency Lime Storage Silo	1994	150 Tons	12c
9va, 10va	9va, 10va	Emergency Lime Pneumatic Conveyor (from Emergency Lime to Lime Storage Silos)	1994	627,546 TPY	Full Enclosure

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
24v, 25v, 26v, 27v	24v, 25v, 26v, 27v	Ball-Mill Delivery Screw Conveyors	1994	30 TPH	Full Enclosure
24s, 25s, 26s, 27s	24s, 25s, 26s, 27s	Ball-Mill Slakers	1994	30 TPH	24c, 25c, 26c, 27c
15va, 16va, 17va	15va, 16va, 17va	Solid Waste Processing Lime Silo (SWPLS) Loading Pneumatic Conveyors from Lime Crushers	1994	25 TPH	Full Enclosure
15vb, 16vb, 17vb	15vb, 16vb, 17vb	Solid Waste Processing Lime Silo (SWPLS) Loading Pneumatic Conveyors from trucks	1994	25 TPH	Full Enclosure
33	33	Solid Waste Processing Lime Silo	1994	388 Tons	15c
34	34	Solid Waste Processing Lime Silo	1994	388 Tons	16c
35	35	Solid Waste Processing Lime Silo	1994	388 Tons	17c
18va, 19va, 20va	18va, 19va, 20va	Solid Waste Processing Fly Ash Silo (SWPFAS) Loading Pneumatic Conveyors from Fly Ash Silos	1994	120 TPH	Full Enclosure
18vb, 19vb, 20vb	18vb, 19vb, 20vb	Solid Waste Processing Fly Ash Silo (SWPFAS) Loading Pneumatic Conveyors from trucks	1994	120 TPH	Full Enclosure
21	21	Solid Waste Processing Fly Ash Silo	1994	10,479 Tons	18c
22	22	Solid Waste Processing Fly Ash Silo	1994	10,479 Tons	19c
23	23	Solid Waste Processing Fly Ash Silo	1994	10,479 Tons	20c
21va, 22va, 23va	21va, 22va, 23va	Solid Waste Processing Fly Ash Screw Conveyors	1994	70 TPH	Full Enclosure
21vb, 22vb, 23vb	21vb, 22vb, 23vb	Solid Waste Processing Lime Screw Conveyors	1994	10 TPH	Full Enclosure
21vc, 22vc, 23vc	21vc, 22vc, 23vc	Solid Waste Processing Lime/Fly Ash Screw Conveyors	1994	80 TPH	Full Enclosure
21vd, 22vd, 23vd	21vd, 22vd, 23vd	Solid Waste Processing Lime/Fly Ash Screw Conveyors	1994	80 TPH	Full Enclosure
37v, 38v	37v, 38v	Centrifuge Cake Screw Conveyors	1994	150 TPH	Full Enclosure
21s	21s	Solid Waste Processing Pug Mill	1994	600 TPH	21c
22s	22s	Solid Waste Processing Pug Mill	1994	600 TPH	22c
23s	23s	Solid Waste Processing Pug Mill	1994	600 TPH	23c
RCCD	RCCD	Rail Car Coal Dumpers	1971	1500 TPH	Water Spray
ST-1	ST-1	Coal Stockpile	1971	1,000,000 Tons	Water Spray

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
ST-2	ST-2	Ash Disposal Areas	1971	64,320,000 Tons	Water Spray
BH Conv	BH Conv	Boiler House Conveyors (S-1a/b, S-2a/b, S-3a/b, C-5a/b, C-6a/b)	1971	1500 TPH	Partial Enclosure
C-12	C-12	Conveyor from Surge Bin to Lowering Well #2	1971	1500 TPH	Partial Enclosure
C-1	C-1	Conveyor from Crusher House to Lowering Well #2	1971	1500 TPH	Partial Enclosure
C-3a/b	C-3a/b	Conveyor From Coal Reclaim to Crusher House Transfer Bin	1971	1500 TPH	Partial Enclosure
C-4a/b	C-4a/b	Conveyor From Crusher House to Boiler House Conveyors	1971	1500 TPH	Partial Enclosure
RC-7	RC-7	Conveyor From Rail Dumper to RC-8	1971	1500 TPH	Partial Enclosure
RC-8	RC-8	Conveyor From RC-7 to Crusher House	1971	1500 TPH	Partial Enclosure
MC-7	MC-7	Conveyor From Mine to Crusher House	1971	1500 TPH	Partial Enclosure
C-2b	C-2b	Conveyor From Chute to Lowering Well #1	1971	800 TPH	Partial Enclosure
C-10	C-10	Internal Crusher House Conveyor to Surge Bin	1971	1500 TPH	Partial Enclosure
C-11	C-11	Internal Crusher House Conveyor from Surge Bin	1979	1500 TPH	Partial Enclosure
CRU-01	CRU-01	Coal Crusher	1971	1500 TPH	Full Enclosure, Water Spray
CRU-02	CRU-02	Coal Crusher	1972	1500 TPH	Full Enclosure, Water Spray
CRU-03	CRU-03	Coal Crusher	1977	1500 TPH	Full Enclosure, Water Spray
UR-1	UR-1	Urea Storage Silos (4)	1994	25 TPH (each)	28c, 29c, 30c, 31c
UR-2	UR-2	Urea Feed Hoppers (2)	1994	16 TPH (each)	32c, 33c
Miscellaneous Sources					
COOL-01	Cooling Towers (2)	Natural Draft Cooling Towers (2)	1971	585,000 gpm	N/A
PVR	Paved Roads	Plant Paved Roads	N/A	N/A	N/A
UPVR	Unpaved Roads	Plant Unpaved Roads	N/A	N/A	N/A

ATTACHMENT D - Emission Units Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Unit ID[1]	Emission Point ID[1]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Control Device[1]
U2HN	U2HN	Underground Gasoline Storage Tank	1990	2000 gallons	N/A
WASTE-WATER	Harrison Wastewater Operations	Harrison Wastewater Treatment Operations (Insignificant Activity)	N/A	6,084.55 MMgal/year	N/A
Insig Tanks	N/A	Insignificant Storage Tanks (Insignificant Activity)	N/A	N/A	N/A

Miscellaneous Sources (Rapid Discharge Rail Unloading) *					
Emission Unit ID	**Emission Point ID**	**Emission Unit Description**	**Year Installed**	**Design Capacity**	**Control Device**
RDRU	EP-1	Rapid Discharge Rail Unloader to Belt Feeder	TBD	3,000 TPH	Chemical Fogging System
BF-01	EP-2	Unloading Belt Feeder	TBD	3,000 TPH	Enclosure/CFS
CV-01	EP-3	Load-out Conveyor	TBD	3,000 TPH	Enclosure/CFS
CV-02	EP-4	Conveyor	TBD	3,000 TPH	Enclosure/CFS
CV-03	EP-5	Conveyor to Transfer Tower	TBD	3,000 TPH	Enclosure/CFS
CV-04	EP-6	Conveyor to Stacking Tubes	TBD	3,000 TPH	Enclosure/CFS
ST-003	EP-7	Stacking Tube/Coal Pile	TBD	3,000 TPH	None

These sources were included in Permit R13-2988 but have not yet been installed as of the date of this application

Attachment E
Emission Unit Forms

Combustion Sources

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit.**
Unit B1	Harrison Unit 1	ESP-1, FGD-1, SCR-1

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
6,325 MMBtu/hr Foster Wheeler opposed wall fired boiler. The primary fuel is coal with natural used for start-up and stabilization. The flue gas emissions are controlled with an ESP for particulate control, a wet scrubber for SO_2 control and low-NOx burners and an SCR for NOx control.

Manufacturer:	**Model number:**	**Serial number:**
Foster and Wheeler		
Construction date:	**Installation date:** 1972	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 6,325 MMBtu/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
263.54 tons/hour coal	2,308,625 tons/year coal	8,760 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** _X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6,325 MMBtu/hr	**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.

Bituminous coal – 263.54 tons/hr; 2,308,625 tons/yr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Coal (Primary)	4.0%	N/A	~12,000 Btu/lb
Natural Gas (Start-Up/Stabilization)	N/A	N/A	1,020 Btu/scf
#2 Fuel Oil (Start-Up/Stabilization)	N/A	N/A	140,000 Btu/gal

Emissions Data		
Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)[a]	131.8	577.2
Nitrogen Oxides (NO_X)[b]	3,162.5	13,851.8
Lead (Pb)[c]	0.0408	0.179
Particulate Matter ($PM_{2.5}$)[a]	161.3	706.4
Particulate Matter (PM_{10})[a]	224.5	983.5
Total Particulate Matter (TSP)[d]	316.3	1,385.2
Condensable PM[g]	126.5	554.1
Sulfur Dioxide (SO_2)[e]	32,384.0	141,841.9
Volatile Organic Compounds (VOC)[a]	15.8	69.3
Hazardous Air Pollutants	**Potential Emissions**	
	PPH	**TPY**
Antimony[c]	0.00253	0.011
Arsenic[c]	0.0417	0.183
Beryllium[c]	0.00221	0.0097
Cadmium[c]	0.00506	0.0222
Chromium[c]	0.0534	0.234
Cobalt[c]	0.0158	0.0693
Manganese[c]	0.0679	0.297
Mercury[c]	0.0173	0.0759
Nickel[c]	0.0512	0.224
Selenium[c]	0.18	0.79
Hydrochloric Acid (HCl)[c]	6.72	29.45
Hydrogen Flourine (HF)[c]	2.31	10.11
Sulfuric Acid (H_2SO_4)[c]	249.99	1094.95
Dioxin Compounds[c]	.000000464	.00000203
Polycyclic Organics[c]	.0132	.0576
Acetaldehyde[a]	0.15	0.658
Acrolein[a]	0.076	0.335
Benzene[a]	0.343	1.501
Benzyl chloride[a]	0.184	0.808
Cyanide Compounds[a]	0.659	2.886
Formaldehyde[a]	0.063	0.277
Isophorone[a]	0.153	0.670
Methyl Bromide[a]	0.042	0.185
Methyl Chloride[a]	0.140	0.612
Methyl Ethyl Ketone[a]	0.103	0.450
Methyl Hydrazine[a]	0.045	0.196
Methylene chloride[a]	0.076	0.335
Propionaldehyde[a]	0.100	0.439
Toluene[a]	0.063	0.277

Emissions Data (Continued)

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
CO_2[a]	1,591,791.7	6,972,047.5
Methane[f]	14.0	61.2
N_2O[f]	22.3	97.8

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.).

[a] Emissions based on AP-42, Section 1.1 (Revised 9/98).
[b] Emissions based on 0.50 lbs/MMBtu NO_x limit from current Phase II Acid Rain Permit.
[c] Emissions based on Electric Power Research Institute (EPRI) LARK-TRIPP RY2006 software.
[d] Emissions based on 45 CSR 2-4.1a TSP limit of 0.05 lbs/MMBtu.
[e] Emissions based on 5.12 lbs/MMBtu SO_2 limit per 45 CSR 10.
[f] Emissions based on 40 CFR Part 98, Subpart C, Tables C-1 and C-2.
[g] Emissions based on AP-42, Table 1.1-5, "All PM controls combined with an FGD control"
Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Combustion Emissions Unit ("**C**") applicable requirements are listed below as references to an Appendix containing the actual requirements. Each applicable requirement code below is linked by a reference number (e.g. "C-1") to detailed information for that requirement contained in Table C-AR. Each requirement in Table C-AR then references appropriate **C**ombustion **T**esting/**R**ecordkeeping/**R**eporting ("**CTRR**") requirements in Table C-TRR.

Applicable requirement codes below are actively hyperlinked to Table C-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

C-1	C-11	
C-2	**Error! Reference source not found.**	
C-4	C-13	C-20
C-6	C-14	C-21
C-8	C-16	C-22
C-9	C-17	

_**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.)
Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table C-TRR and are associated with the Applicable Requirements for this emissions unit within Table C-TRR.

Are you in compliance with all applicable requirements for this emission unit? _**X**_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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
Unit B2	Harrison Unit 2	ESP-2, FGD-2, SCR-2

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
6,325 MMBtu/hr Foster Wheeler opposed wall fired boiler. The primary fuel is coal with natural used for start-up and stabilization. The flue gas emissions are controlled with an ESP for particulate control, a wet scrubber for SO_2 control and low-NOx burners and an SCR for NOx control.

Manufacturer:	**Model number:**	**Serial number:**
Foster and Wheeler		
Construction date:	**Installation date:**	**Modification date(s):**
	1973	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 6,325 MMBtu/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
263.54 tons/hour coal	2,308,625 tons/year coal	8760 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** _X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6,325 MMBtu/hr	**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.

Bituminous coal – 263.54 tons/hr; 2,308,625 tons/yr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Coal (Primary)	4.0%	N/A	~12,000 Btu/lb
Natural Gas (Start-Up/Stabilization)	N/A	N/A	1,020 Btu/scf
#2 Fuel Oil (Start-Up/Stabilization)	N/A	N/A	140,000 Btu/gal

Emissions Data		
Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)[a]	131.8	577.2
Nitrogen Oxides (NO_X)[b]	3162.5	13,851.8
Lead (Pb)[c]	0.0408	0.179
Particulate Matter ($PM_{2.5}$)[a]	161.3	706.4
Particulate Matter (PM_{10})[a]	224.5	983.5
Total Particulate Matter (TSP)[d]	316.3	1385.2
Condensable PM[g]	126.5	554.1
Sulfur Dioxide (SO_2)[e]	32,384.0	141,841.9
Volatile Organic Compounds (VOC)[a]	15.8	69.3
Hazardous Air Pollutants	**Potential Emissions**	
	PPH	**TPY**
Antimony[c]	0.00253	0.011
Arsenic[c]	0.0417	0.183
Beryllium[c]	0.00221	0.0097
Cadmium[c]	0.00506	0.0222
Chromium[c]	0.0534	0.234
Cobalt[c]	0.0158	0.0693
Manganese[c]	0.0679	0.297
Mercury[c]	0.0173	0.0759
Nickel[c]	0.0512	0.224
Selenium[c]	0.18	0.79
Hydrochloric Acid (HCl)[c]	6.72	29.45
Hydrogen Flourine (HF)[c]	2.31	10.11
Sulfuric Acid (H_2SO_4)[c]	249.99	1094.95
Dioxin Compounds[c]	.000000464	.00000203
Polycyclic Organics[c]	.0132	.0576
Acetaldehyde[a]	0.15	0.658
Acrolein[a]	0.076	0.335
Benzene[a]	0.343	1.501
Benzyl chloride[a]	0.184	0.808
Cyanide Compounds[a]	0.659	2.886
Formaldehyde[a]	0.063	0.277
Isophorone[a]	0.153	0.670
Methyl Bromide[a]	0.042	0.185
Methyl Chloride[a]	0.140	0.612
Methyl Ethyl Ketone[a]	0.103	0.450
Methyl Hydrazine[a]	0.045	0.196
Methylene chloride[a]	0.076	0.335
Propionaldehyde[a]	0.100	0.439
Toluene[a]	0.063	0.277

Emissions Data (Continued)

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
CO_2[a]	1,591,791.7	6,972,047.5
Methane[a]	14.0	61.2
N_2O[a]	22.3	97.8

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.).

[a] Emissions based on AP-42, Section 1.1 (Revised 9/98).
[b] Emissions based on 0.50 lbs/MMBtu NO_x limit from current Phase II Acid Rain Permit.
[c] Emissions based on Electric Power Research Institute (EPRI) LARK-TRIPP RY2006 software.
[d] Emissions based on 45 CSR 2-4.1a TSP limit of 0.05 lbs/MMBtu.
[e] Emissions based on 5.12 lbs/MMBtu SO_2 limit per 45 CSR 10.
[f] Emissions based on 40 CFR Part 98, Subpart C, Tables C-1 and C-2.
[g] Emissions based on AP-42, Table 1.1-5, "All PM controls combined with an FGD control"
Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Combustion Emissions Unit ("**C**") applicable requirements are listed below as references to an Appendix containing the actual requirements. Each applicable requirement code below is linked by a reference number (e.g. "C-1") to detailed information for that requirement contained in Table C-AR. Each requirement in Table C-AR then references appropriate **C**ombustion **T**esting/**R**ecordkeeping/**R**eporting ("**CTRR**") requirements in Table C-TRR.

Applicable requirement codes below are actively hyperlinked to Table C-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

C-1	C-11	
C-2	**Error! Reference source not found.**	
C-4	C-13	C-20
C-6	C-14	C-21
C-8	C-16	C-22
C-9	C-17	

_**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.)
Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table C-TRR and are associated with the Applicable Requirements for this emissions unit within Table C-TRR.

Are you in compliance with all applicable requirements for this emission unit? _**X**_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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
Unit B3	Harrison Unit 3	ESP-3, FGD-3, SCR-3

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
6,325 MMBtu/hr Foster Wheeler opposed wall fired boiler. The primary fuel is coal with natural gas used for start-up and stabilization. The flue gas emissions are controlled with an ESP for particulate control, a wet scrubber for SO_2 control and low-NOx burners and an SCR for NOx control.

Manufacturer:	**Model number:**	**Serial number:**
Foster and Wheeler		
Construction date:	**Installation date:**	**Modification date(s):**
	1974	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 6,325 MMBtu/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
263.54 tons/hour coal	2,308,625 tons/year coal	8760 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** _X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 6,325 MMBtu/hr	**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.

Bituminous coal – 263.54 tons/hr; 2,308,625 tons/yr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Coal (Primary)	4.0%	N/A	~12,000 Btu/lb
Natural Gas (Start-Up/Stabilization)	N/A	N/A	1,020 Btu/scf
#2 Fuel Oil (Start-Up/Stabilization)	N/A	N/A	140,000 Btu/gal

Emissions Data		
Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)[a]	131.8	577.2
Nitrogen Oxides (NO_X)[b]	3162.5	13,851.8
Lead (Pb)[c]	0.0408	0.179
Particulate Matter ($PM_{2.5}$)[a]	161.3	706.4
Particulate Matter (PM_{10})[a]	224.5	983.5
Total Particulate Matter (TSP)[d]	316.3	1385.2
Condensable PM[g]	126.5	554.1
Sulfur Dioxide (SO_2)[e]	32,384.0	141,841.9
Volatile Organic Compounds (VOC)[a]	15.8	69.3
Hazardous Air Pollutants	**Potential Emissions**	
	PPH	**TPY**
Antimony[c]	0.00253	0.011
Arsenic[c]	0.0417	0.183
Beryllium[c]	0.00221	0.0097
Cadmium[c]	0.00506	0.0222
Chromium[c]	0.0534	0.234
Cobalt[c]	0.0158	0.0693
Manganese[c]	0.0679	0.297
Mercury[c]	0.0173	0.0759
Nickel[c]	0.0512	0.224
Selenium[c]	0.18	0.79
Hydrochloric Acid (HCl)[c]	6.72	29.45
Hydrogen Flourine (HF)[c]	2.31	10.11
Sulfuric Acid (H_2SO_4)[c]	249.99	1094.95
Dioxin Compounds[c]	.000000464	.00000203
Polycyclic Organics[c]	.0132	.0576
Acetaldehyde[a]	0.15	0.658
Acrolein[a]	0.076	0.335
Benzene[a]	0.343	1.501
Benzyl chloride[a]	0.184	0.808
Cyanide Compounds[a]	0.659	2.886
Formaldehyde[a]	0.063	0.277
Isophorone[a]	0.153	0.670
Methyl Bromide[a]	0.042	0.185
Methyl Chloride[a]	0.140	0.612
Methyl Ethyl Ketone[a]	0.103	0.450
Methyl Hydrazine[a]	0.045	0.196
Methylene chloride[a]	0.076	0.335
Propionaldehyde[a]	0.100	0.439
Toluene[a]	0.063	0.277

Emissions Data (Continued)

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
CO_2[a]	1,591,791.7	6,972,047.5
Methane[a]	14.0	61.2
N_2O[a]	22.3	97.8

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.).

[a] Emissions based on AP-42, Section 1.1 (Revised 9/98).
[b] Emissions based on 0.50 lbs/MMBtu NO_x limit from current Phase II Acid Rain Permit.
[c] Emissions based on Electric Power Research Institute (EPRI) LARK-TRIPP RY2006 software.
[d] Emissions based on 45 CSR 2-4.1a TSP limit of 0.05 lbs/MMBtu.
[e] Emissions based on 5.12 lbs/MMBtu SO_2 limit per 45 CSR 10.
[f] Emissions based on 40 CFR Part 98, Subpart C, Tables C-1 and C-2.
[g] Emissions based on AP-42, Table 1.1-5, "All PM controls combined with an FGD control"
Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Combustion Emissions Unit ("**C**") applicable requirements are listed below as references to an Appendix containing the actual requirements. Each applicable requirement code below is linked by a reference number (e.g. "C-1") to detailed information for that requirement contained in Table C-AR. Each requirement in Table C-AR then references appropriate **C**ombustion **T**esting/**R**ecordkeeping/**R**eporting ("**CTRR**") requirements in Table C-TRR.

Applicable requirement codes below are actively hyperlinked to Table C-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

C-1	C-11	
C-2	**Error! Reference source not found.**	
C-4	C-13	C-20
C-6	C-14	C-21
C-8	C-16	C-22
C-9	C-17	

_**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.)
Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table C-TRR and are associated with the Applicable Requirements for this emissions unit within Table C-TRR.

Are you in compliance with all applicable requirements for this emission unit? _**X**_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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
Boiler 1A	Aux Boiler A	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The auxiliary boiler is rated at 202.2 MMBtu/hr and is natural gas and No. 2 fuel oil fired.

Manufacturer:	**Model number:**	**Serial number:**
Babcock and Wilcox	FM-11797A	
Construction date:	**Installation date:** 1972	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 202.2MMBtu/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
202,200 scf/hour Natural Gas 1,455 gal/hour No. 2 Oil	1,771 MMscf Natural Gas 12,742,964 gal/yr No. 2 Oil	8,760 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** _X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 202.2 MMBtu/hr	**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.

Natural Gas – 202,200 scf/hr, 1,771 MMscf/yr
No. 2 Fuel Oil - 1,455 gal/hr; 12,742,964 gal/yr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	N/A		1,020 btu/scf
No. 2 Fuel Oil	1.0%		139,000 btu/gal

Emissions Data

Criteria Pollutants[a]	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)	16.98	74.39
Nitrogen Oxides (NO_X)	56.62	247.98
Lead (Pb)	1.80E-03	7.88E-03
Particulate Matter ($PM_{2.5}$)	2.25	9.88
Particulate Matter (PM_{10})	3.35	14.65
Total Particulate Matter (TSP)	4.80	21.03
Sulfur Dioxide (SO_2)	205.11	539.03
Volatile Organic Compounds (VOC)	1.11	4.87

Hazardous Air Pollutants[a]	**Potential Emissions**	
	PPH	**TPY**
Arsenic	8.49E-04	3.72E-03
Beryllium	5.06E-04	2.21E-03
Cadmium	2.22E-03	9.74E-03
Chromium	1.35E-02	5.93E-02
Manganese	2.83E-03	1.24E-02
Mercury	6.07E-04	2.66E-03
Nickel	3.44E-02	1.51E-01
Polycyclic Organic Compounds	4.85E-03	2.13E-02
Formaldehyde	1.52	6.64

Regulated Pollutants other than Criteria and HAP[a]	**Potential Emissions**	
	PPH	**TPY**
CO_2	32,439	142,084
Methane	0.47	2.04
N_2O	0.44	1.95

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.).

[a] Potential emissions for each pollutant based on worst case fuel (natural gas or No. 2 oil). Natural gas emissions based on AP-42, Section 1.4 (rev 7/98) and No. 2 oil emissions based on AP-42, Section 1.3 (rev 9/98).

Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Combustion Emissions Unit ("**C**") applicable requirements are listed below as references to an Appendix containing the actual requirements. Each applicable requirement code below is linked by a reference number (e.g. "C-1") to detailed information for that requirement contained in Table C-AR. Each requirement in Table C-AR then references appropriate **C**ombustion **T**esting/**R**ecordkeeping/**R**eporting ("**CTRR**") requirements in Table C-TRR.

Applicable requirement codes below are actively hyperlinked to Table C-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

C-1	C-11
C-3	C-15
C-5	C-16
C-7	
C-10	

_**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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table C-TRR and are associated with the Applicable Requirements for this emissions unit within Table C-TRR.

Are you in compliance with all applicable requirements for this emission unit? _**X**_ 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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
Boiler 1B	Aux Boiler B	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
The auxiliary boiler is rated at 202.2 MMBtu/hr and is natural gas and No. 2 fuel oil fired.

Manufacturer:	**Model number:**	**Serial number:**
Babcock and Wilcox	FM-11797A	
Construction date:	**Installation date:** 1972	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 202.2MMBtu/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
202,200 scf/hour Natural Gas 1,455 gal/hour No. 2 Oil	1,771 MMscf Natural Gas 12,742,964 gal/yr No. 2 Oil	8760 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** _X_ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 202.2 MMBtu/hr	**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.

Natural Gas – 202,200 scf/hr, 1,771 MMscf/yr
No. 2 Fuel Oil - 1,455 gal/hr; 12,742,964 gal/yr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	N/A		1,020 btu/scf
No. 2 Fuel Oil	1.0%		139,000 btu/gal

Emissions Data

Criteria Pollutants[a]	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)	16.98	74.39
Nitrogen Oxides (NO_X)	56.62	247.98
Lead (Pb)	1.80E-03	7.88E-03
Particulate Matter ($PM_{2.5}$)	2.25	9.88
Particulate Matter (PM_{10})	3.35	14.65
Total Particulate Matter (TSP)	4.80	21.03
Sulfur Dioxide (SO_2)	205.11	539.03
Volatile Organic Compounds (VOC)	1.11	4.87

Hazardous Air Pollutants[a]	**Potential Emissions**	
	PPH	**TPY**
Arsenic	8.49E-04	3.72E-03
Beryllium	5.06E-04	2.21E-03
Cadmium	2.22E-03	9.74E-03
Chromium	1.35E-02	5.93E-02
Manganese	2.83E-03	1.24E-02
Mercury	6.07E-04	2.66E-03
Nickel	3.44E-02	1.51E-01
Polycyclic Organic Compounds	4.85E-03	2.13E-02
Formaldehyde	1.52	6.64

Regulated Pollutants other than Criteria and HAP[a]	**Potential Emissions**	
	PPH	**TPY**
CO_2	32,439	142,084
Methane	0.47	2.04
N_2O	0.44	1.95

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.).

[a] Potential emissions for each pollutant based on worst case fuel (natural gas or No. 2 oil). Natural gas emissions based on AP-42, Section 1.4 (rev 7/98) and No. 2 oil emissions based on AP-42, Section 1.3 (rev 9/98).

Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Combustion Emissions Unit ("**C**") applicable requirements are listed below as references to an Appendix containing the actual requirements. Each applicable requirement code below is linked by a reference number (e.g. "C-1") to detailed information for that requirement contained in Table C-AR. Each requirement in Table C-AR then references appropriate **C**ombustion **T**esting/**R**ecordkeeping/**R**eporting ("**CTRR**") requirements in Table C-TRR.

Applicable requirement codes below are actively hyperlinked to Table C-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

C-1	C-11
C-3	C-15
C-5	C-16
C-7	
C-10	

_**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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table C-TRR and are associated with the Applicable Requirements for this emissions unit within Table C-TRR.

Are you in compliance with all applicable requirements for this emission unit? _**X**_ 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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
EDG1	Emergency Generator No. 1	None

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
1000 kW, 1341 HP No. 2 fuel oil-fired emergency generator

Manufacturer:	**Model number:**	**Serial number:**
Caterpillar	D399TA	

Construction date:	**Installation date:**	**Modification date(s):**
	1971	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 800 kW

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
61.8 gal/hour	30,900 gal/year	500 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired _X_ Direct Fired
Maximum design heat input and/or maximum horsepower rating: 8.59 MMBtu/hr	**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.

No. 2 Fuel Oil - 61.8 gal/hr; 30,900 gal/yr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
No. 2 Fuel Oil	1.0%	N/A	139,000 btu/gal

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	**TPY**
Carbon Monoxide (CO)[a]	7.30	1.83
Nitrogen Oxides (NO_X)[a]	27.49	6.87
Lead (Pb)[c]	7.73E-05	1.93E-05
Particulate Matter ($PM_{2.5}$)[a]	0.48	0.12
Particulate Matter (PM_{10})[a]	0.49	0.12
Total Particulate Matter (TSP)[a]	0.60	0.15
Sulfur Dioxide (SO_2)	8.71	2.18
Volatile Organic Compounds (VOC)[a]	0.77	0.19
Hazardous Air Pollutants	**Potential Emissions**	
	PPH	**TPY**
Arsenic[c]	3.44E-05	8.59E-06
Beryllium[c]	2.58E-05	6.44E-06
Cadmium[c]	2.58E-05	6.44E-06
Chromium[c]	2.58E-05	6.44E-06
Manganese[c]	5.15E-05	1.29E-05
Mercury[c]	2.58E-05	6.44E-06
Nickel[c]	2.58E-05	6.44E-06
Polycyclic Organic Compounds[d]	1.12E-03	2.79E-04
Benzene[d]	6.67E-03	1.67E-03
Toluene[d]	2.41E-03	6.03E-04
Xylenes[d]	1.66E-03	4.14E-04
Acetaldehyde[d]	2.16E-04	5.41E-05
Acrolein[d]	6.77E-05	1.69E-05
Formaldehyde[d]	6.78E-04	1.69E-04
Regulated Pollutants other than Criteria and HAP	**Potential Emissions**	
	PPH	**TPY**
CO_2[a]	1417.4	354.4

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.).

[a] EPA AP-42, Tables 3.4-1 and 3.4-2 (10/96) for large stationary diesel engines.
[b] SO2 emission based on 1.0% oil sulfur content.
[c] EPA AP-42, Table 1.3-10(9/98), Assumed oil-fired boiler emission factors.
[d] EPA AP-42, Table 3.4-3 and 3.4-4 (10/96).

Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Combustion Emissions Unit ("**C**") applicable requirements are listed below as references to an Appendix containing the actual requirements. Each applicable requirement code below is linked by a reference number (e.g. "C-1") to detailed information for that requirement contained in Table C-AR. Each requirement in Table C-AR then references appropriate **C**ombustion **T**esting/**R**ecordkeeping/**R**eporting ("**CTRR**") requirements in Table C-TRR.

Applicable requirement codes below are actively hyperlinked to Table C-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

C-18

_**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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table C-TRR and are associated with the Applicable Requirements for this emissions unit within Table C-TRR.

Are you in compliance with all applicable requirements for this emission unit? _<u>X</u>_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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
EDG2	Emergency Generator No. 2	None

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
1000 kW, 1341 HP No. 2 fuel oil-fired emergency generator

Manufacturer:	**Model number:**	**Serial number:**
Caterpillar	D399TA	

Construction date:	**Installation date:**	**Modification date(s):**
	1971	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 800 kW

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
61.8 gal/hour	30,900 gal/year	500 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired _X_ Direct Fired
Maximum design heat input and/or maximum horsepower rating: 8.59 MMBtu/hr	**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.

No. 2 Fuel Oil - 61.8 gal/hr; 30,900 gal/yr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
No. 2 Fuel Oil	1.0%	N/A	139,000 btu/gal

Emissions Data		
Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)[a]	7.30	1.83
Nitrogen Oxides (NO_X)[a]	27.49	6.87
Lead (Pb)[c]	7.73E-05	1.93E-05
Particulate Matter ($PM_{2.5}$)[a]	0.48	0.12
Particulate Matter (PM_{10})[a]	0.49	0.12
Total Particulate Matter (TSP)[a]	0.60	0.15
Sulfur Dioxide (SO_2)	8.71	2.18
Volatile Organic Compounds (VOC)[a]	0.77	0.19
Hazardous Air Pollutants	**Potential Emissions**	
	PPH	**TPY**
Arsenic[c]	3.44E-05	8.59E-06
Beryllium[c]	2.58E-05	6.44E-06
Cadmium[c]	2.58E-05	6.44E-06
Chromium[c]	2.58E-05	6.44E-06
Manganese[c]	5.15E-05	1.29E-05
Mercury[c]	2.58E-05	6.44E-06
Nickel[c]	2.58E-05	6.44E-06
Polycyclic Organic Compounds[d]	1.12E-03	2.79E-04
Benzene[d]	6.67E-03	1.67E-03
Toluene[d]	2.41E-03	6.03E-04
Xylenes[d]	1.66E-03	4.14E-04
Acetaldehyde[d]	2.16E-04	5.41E-05
Acrolein[d]	6.77E-05	1.69E-05
Formaldehyde[d]	6.78E-04	1.69E-04
Regulated Pollutants other than Criteria and HAP	**Potential Emissions**	
	PPH	**TPY**
CO_2[a]	1417.4	354.4

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.).

[a] EPA AP-42, Tables 3.4-1 and 3.4-2 (10/96) for large stationary diesel engines.
[b] SO2 emission based on 1.0% oil sulfur content.
[c] EPA AP-42, Table 1.3-10(9/98), Assumed oil-fired boiler emission factors.
[d] EPA AP-42, Table 3.4-3 and 3.4-4 (10/96).

Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Combustion Emissions Unit ("**C**") applicable requirements are listed below as references to an Appendix containing the actual requirements. Each applicable requirement code below is linked by a reference number (e.g. "C-1") to detailed information for that requirement contained in Table C-AR. Each requirement in Table C-AR then references appropriate **C**ombustion **T**esting/**R**ecordkeeping/**R**eporting ("**CTRR**") requirements in Table C-TRR.

Applicable requirement codes below are actively hyperlinked to Table C-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

C-18

_**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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table C-TRR and are associated with the Applicable Requirements for this emissions unit within Table C-TRR.

Are you in compliance with all applicable requirements for this emission unit? _**<u>X</u>**_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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
EDG3	Emergency Generator No. 3	None

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
350 kW, 470 HP No. 2 fuel oil-fired emergency generator

Manufacturer:	**Model number:**	**Serial number:**
Caterpillar	3406	

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 350 kW

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
27.0 gal/hour	13,500 gal/year	500 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired _X_ Direct Fired
Maximum design heat input and/or maximum horsepower rating: 3.75 MMBtu/hr	**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.

No. 2 Fuel Oil - 27.0 gal/hr; 13,500 gal/yr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
No. 2 Fuel Oil	1.0%	N/A	139,000 btu/gal

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	**TPY**
Carbon Monoxide (CO)[a]	3.19	0.80
Nitrogen Oxides (NO_X)[a]	12.01	3.00
Lead (Pb)[c]	3.38E-05	8.44E-06
Particulate Matter ($PM_{2.5}$)[a]	0.21	0.05
Particulate Matter (PM_{10})[a]	0.22	0.05
Total Particulate Matter (TSP)[a]	0.26	0.07
Sulfur Dioxide (SO_2)	3.81	0.95
Volatile Organic Compounds (VOC)[a]	0.34	0.08

Hazardous Air Pollutants	Potential Emissions	
	PPH	**TPY**
Arsenic[c]	1.50E-05	3.75E-06
Beryllium[c]	1.13E-05	2.81E-06
Cadmium[c]	1.13E-05	2.81E-06
Chromium[c]	1.13E-05	2.81E-06
Manganese[c]	2.25E-05	5.63E-06
Mercury[c]	1.13E-05	2.81E-06
Nickel[c]	1.13E-05	2.81E-06
Polycyclic Organic Compounds[d]	4.88E-04	1.22E-04
Benzene[d]	2.91E-03	7.28E-04
Toluene[d]	1.05E-03	2.64E-04
Xylenes[d]	7.24E-04	1.81E-04
Acetaldehyde[d]	9.46E-05	2.36E-05
Acrolein[d]	2.96E-05	7.39E-06
Formaldehyde[d]	2.96E-04	7.40E-05

Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	**TPY**
CO_2[a]	619.25	154.81

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.).

[a] EPA AP-42, Tables 3.4-1 and 3.4-2 (10/96) for large stationary diesel engines.
[b] SO2 emission based on 1.0% oil sulfur content.
[c] EPA AP-42, Table 1.3-10(9/98), Assumed oil-fired boiler emission factors.
[d] EPA AP-42, Table 3.4-3 and 3.4-4 (10/96).

Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Combustion Emissions Unit ("**C**") applicable requirements are listed below as references to an Appendix containing the actual requirements. Each applicable requirement code below is linked by a reference number (e.g. "C-1") to detailed information for that requirement contained in Table C-AR. Each requirement in Table C-AR then references appropriate **C**ombustion **T**esting/**R**ecordkeeping/**R**eporting ("**CTRR**") requirements in Table C-TRR.

Applicable requirement codes below are actively hyperlinked to Table C-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

C-18

_**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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table C-TRR and are associated with the Applicable Requirements for this emissions unit within Table C-TRR.

Are you in compliance with all applicable requirements for this emission unit? _**<u>X</u>**_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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
EG-1	Wetlands Pump House Emergency Generator	None

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
108.2 kW, 145-HP LPG-fired emergency generator

Manufacturer:	**Model number:**	**Serial number:**
Kohler	100REZGD	

Construction date:	**Installation date:**	**Modification date(s):**
	2012	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 108.2 kW

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	N/A	500 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X_ Yes ___ No	**If yes, is it?** ___ Indirect Fired _X_ Direct Fired
Maximum design heat input and/or maximum horsepower rating: 145 BHP	**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.

Liquid Propane Gas @ 12.81 gal/hr; 6,403 gal/yr

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Liquid Propane Gas	N/A	N/A	92,500 btu/gal

Emissions Data

Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)[a]	1.41	0.4
Nitrogen Oxides (NO_X)[a]	0.32	0.1
Lead (Pb)[c]	Negligible = "Neg."	Neg.
Particulate Matter ($PM_{2.5}$)[a]	Neg.	Neg.
Particulate Matter (PM_{10})[a]	Neg.	Neg.
Total Particulate Matter (TSP)[a]	Neg.	Neg.
Sulfur Dioxide (SO_2)	Neg.	Neg.
Volatile Organic Compounds (VOC)[a]	0.23	0.1
Hazardous Air Pollutants	**Potential Emissions**	
	PPH	**TPY**
Arsenic[c]	Neg.	Neg.
Beryllium[c]	Neg.	Neg.
Cadmium[c]	Neg.	Neg.
Chromium[c]	Neg.	Neg.
Manganese[c]	Neg.	Neg.
Mercury[c]	Neg.	Neg.
Nickel[c]	Neg.	Neg.
Polycyclic Organic Compounds[d]	Neg.	Neg.
Benzene[d]	Neg.	Neg.
Toluene[d]	Neg.	Neg.
Xylenes[d]	Neg.	Neg.
Acetaldehyde[d]	Neg.	Neg.
Acrolein[d]	Neg.	Neg.
Formaldehyde[d]	Neg.	Neg.
Regulated Pollutants other than Criteria and HAP	**Potential Emissions**	
	PPH	**TPY**
CO_2[a]	No factor available	No factor available

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.).

[a] Emission factors from the engine's "Equipment Exhaust Emission Data Sheet"

Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Class II General Permit G60-C049, issued 11/28/2012
Sections 1 through 4
Section 5: Source-Specific Requirements (Reciprocating Internal Combustion Engines)
Section 8: Source Specific Requirements (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines); 40 CFR Part 60, Subpart JJJJ
Operating hours are limited to 500 hours/year (100 hours per year for readiness and maintenance testing, included in this total is 50 hours/year for non-emergency use)

_**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.)

Class II General Permit G60-C049, Condition 5.4.1. Record amount and type of fuel combusted in the emergency engine; record hours of operation and reason for operation (emergency, readiness testing, etc.) in order to demonstrate compliance with Condition 8.4.4.

Are you in compliance with all applicable requirements for this emission unit? _**X**_ Yes ___No

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

Table C-AR

Source-Specific Applicable Requirements for Combustion Sources – Harrison Power Station

(Compilation of Applicable Requirements)

TABLE C-AR

Source-Specific Applicable Requirements for Combustion Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Point ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Attachment E Form	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Applicable Requirement Summary	Link to Monitoring / Testing / Recordkeeping / Reporting Requirements
Stack 1, Stack 2, Stack 3, Aux Blr Stk	C-1	45CSR§2-10.1. State-Enforceable only	4.0.1	**Emergency Operating Scenarios** In the event of an unavoidable shortage of fuel having characteristics or specifications necessary to comply with the visible emission standard set forth in permit condition 4.1.1. of this permit, or any emergency situation or condition creating a threat to public safety or welfare, the Secretary may grant an exemption to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days, provided that visible emissions during that period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the weight emission standards under permit conditions 4.1.3. and/or 4.1.4. of this permit, will not be exceeded during the exemption period.	None Required
Stack 1, Stack 2, Stack 3	C-2	45CSR§2-3.1.	4.1.1	**Visible Emissions:** Visible Emissions from each stack shall not exceed ten (10) percent opacity based on a six-minute block average.	CTRR-1 CTRR-6 CTRR-7 CTRR-8 CTRR-9 CTRR-10 CTRR-11

Source-Specific Applicable Requirements for Combustion Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Point ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Attachment E Form	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Applicable Requirement Summary	Link to Monitoring / Testing / Recordkeeping / Reporting Requirements
Aux Blr Stk	C-3	45CSR§2-3.1.	4.1.1	**Visible Emissions:** Visible Emissions from this stack shall not exceed ten (10) percent opacity based on a six-minute block average.	CTRR-2 CTRR-6 CTRR-7 CTRR-8 CTRR-9 CTRR-10 CTRR-11
Stack 1, Stack 2, Stack 3	C-4	45CSR§2-3.2., 45CSR§2A-6]	4.1.2	**Visible Emissions Compliance:** Compliance with the visible emission requirements of 45CSR2 section 3.1 shall be determined in accordance with the approved monitoring plan.	CTRR-1
Aux Boiler Stk	C-5	45CSR§2-3.2., 45CSR§2A-6]	4.1.2	**Visible Emissions Compliance:** Compliance with the visible emission requirements of 45CSR2 section 3.1 shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 and as described in the approved monitoring plan.	CTRR-2
Stack 1, Stack 2, Stack 3	C-6	45CSR§2-4.1.a.	4.1.3	**Particulate Matter:** Particulate matter emissions from each stack shall not exceed 316.25 lb/hr.	CTRR-3 CTRR-6 CTRR-7 CTRR-8 CTRR-11
Aux Boiler Stk	C-7	45CSR§2-4.1.b.	4.1.4	**Particulate Matter:** Particulate matter emissions from this stack shall not exceed 36.40 lb/hr.	CTRR-6 CTRR-7 CTRR-8 CTRR-11
Stack 1,Stack 2, Stack 3	C-8	45CSR§2-4.4.	4.1.5	**Addition of Sulfur Oxides for Particulate Control:** The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment is prohibited unless written approval for such addition is provided by the Secretary.	None Required

Source-Specific Applicable Requirements for Combustion Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Point ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Attachment E Form	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Applicable Requirement Summary	Link to Monitoring / Testing / Recordkeeping / Reporting Requirements
Stack 1, Stack 2, Stack 3	C-9	45CSR§2-9.1.	4.1.11	**Visible Emissions Applicability**: The visible emission standards of permit condition 4.1.1., shall apply at all times except in periods of start-ups, shutdowns and malfunctions.	CTRR-1
Aux Boiler Stk	C-10	45CSR§2-9.1.	4.1.11	**Visible Emissions Applicability:** The visible emission standards of permit condition 4.1.1., shall apply at all times except in periods of start-ups, shutdowns and malfunctions.	CTRR-2
Stack 1, Stack 2, Stack 3, Aux Boiler Stk	C-11	45CSR§2-9.2., 45CSR16	4.1.12	**Good Pollution Control Practice:** Any fuel burning unit(s) including associated air pollution control equipment, shall at all times, including periods of start-up, shutdowns, and malfunctions, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions.	None Required
Stack 1, Stack 2, Stack 3	C-13	45CSR33	4.1.14	**Nitrogen Oxides:** Nitrogen oxides emissions, expressed as NO_2, from each stack (*Stack 1, Stack 2, and Stack 3*) shall not exceed the limits specified in the Acid Rain Permit.	CTRR-5 CTRR-18
Stack 1, Stack 2, Stack 3	C-14	45CSR10-3.3.a.	4.1.15	**Sulfur Dioxide:** Sulfur dioxide emissions from each stack (*Stack 1, Stack 2, and Stack 3*) shall not exceed 32,384 lb/hr.	CTRR-5 CTRR-18
Aux Boiler Stack	C-15	45CSR§10-3.1.e.	4.1.16	**Sulfur Dioxide:** Sulfur dioxide emissions from the auxiliary boiler stack (A*ux Boiler Stk)* shall not exceed 1294.08 lb/hr.	CTRR-4 CTRR-10

Source-Specific Applicable Requirements for Combustion Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Point ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Attachment E Form	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Applicable Requirement Summary	Link to Monitoring / Testing / Recordkeeping / Reporting Requirements
Stack 1, Stack 2, Stack 3, Aux Boiler Stack	C-16	45CSR§10-3.8.	4.1.17	**Sulfur Dioxide Compliance:** Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. Emissions shall not be allowed to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month. During this one (1) continuous twenty-four-hour period, emissions shall not be allowed to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.	CTRR-4 CTRR-10

Source-Specific Applicable Requirements for Combustion Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Point ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Attachment E Form	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Applicable Requirement Summary	Link to Monitoring / Testing / Recordkeeping / Reporting Requirements
Stack 1, Stack 2, Stack 3	C-17	45CSR33, 40 C.F.R. Parts 72, 73, 74, 75, 76, 77, 78.	4.1.18	**Phase II Acid Rain Requirements:** Unit No 1, Unit No. 2, and Unit No. 3 are Phase II Acid Rain affected units under 45CSR33, as defined by 40 C.F.R § 72.6, and as such are required to meet the requirements of 40 C.F.R. Parts 72, 73, 74, 75, 76, 77 and 78. These requirements include, but are not limited to: **a**. Hold an Acid Rain permit; **b.** Hold allowances, as of the allowance transfer deadline, in the unit's compliance sub-account of not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; **c.** Comply with the applicable Acid Rain emissions for sulfur dioxide; **d.** Comply with the applicable Acid Rain emissions for nitrogen oxides; **e.** Comply with the monitoring requirements of 40 CFR. Part 75 and section 407 of the Clean Air Act of 1990 and regulations implementing section 407 of the Act; **f.** Submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.	CTRR-5 CTRR-18

Source-Specific Applicable Requirements for Combustion Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Point ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Attachment E Form	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Applicable Requirement Summary	Link to Monitoring / Testing / Recordkeeping / Reporting Requirements
EDG1, EDG2, EDG3, EG-1	C-18	40 CFR 60, Subpart JJJJ (EG-1 only); 40 CFR 63.6640(f) Subpart ZZZZ	New	Track hours of operation, not to exceed 500 hours per any 12-month period; total non-emergency use not to exceed 100 hours per 12-month period, including 50 hours for readiness testing and maintenance. EG-1: Operate the engine in accordance with terms and conditions of General Permit G60-C049, Sections 1.0-5.0, and 8.0	N/A

Source-Specific Applicable Requirements for Combustion Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Point ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Attachment E Form	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Applicable Requirement Summary	Link to Monitoring / Testing / Recordkeeping / Reporting Requirements
				CAIR NOx Annual Permit: Upon issuance of a CAIR NOx annual permit by the Secretary, Units B-1, B-2 and B-3 must be operated in compliance with such permit.	
Stack 1, Stack 2, Stack 3	C-20	45CSR§39-6.1.b.	3.1.12		CTRR-5

Source-Specific Applicable Requirements for Combustion Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Point ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Attachment E Form	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Applicable Requirement Summary	Link to Monitoring / Testing / Recordkeeping / Reporting Requirements
Stack 1, Stack 2, Stack 3	C-21	45CSR§40-6.1.b.	3.1.12	**CAIR NOx Ozone Season Trading Program**: Upon issuance of a CAIR NOx Ozone Season permit by the Secretary, Units B-1, B-2 and B-3 must be operated in compliance with such permit.	CTRR-5
Stack 1, Stack 2, Stack 3	C-22	45CSR§41-21.1 and 45CSR§41-6.1.b	3.1.12	**CAIR SO_2:** Submit to the WVDEP a complete CAIR SO_2 permit application incorporating the information requirements under section 22 of 45CSR§41 by July 1, 2008**.** : Upon issuance of a CAIR SO_2 permit by the Secretary, Units B1, B2 and B3 must be operated in compliance with such permit.	CTRR-5

Table C-TRR

C-TRR. Combustion Sources – Emissions Unit Testing, Recordkeeping and Reporting Requirements – Harrison Power Station

(Compilation of Monitoring, Testing, Reporting and Recordkeeping Requirements)

TABLE C-TRR

C-TRR. Combustion Sources – Emissions Unit Testing, Recordkeeping and Reporting Requirements – Harrison Power Station				
Link Referenced from Applicable Requirements	**Emission Point ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Emission Unit-Specific Applicable Requirement Summary**
CTRR-1	Stack 1, Stack 2, Stack 3	45CSR§§2-3.2. & 8.2.	4.2.1	Compliance with the visible emission requirements for *Stack 1, Stack 2 and Stack 3* shall be determined as outlined in Section I.A. of Revision 2 of the "45CSR2 Monitoring Plan" submitted/revised on September 25, 2002. (Monitoring Plan Approval Date – 08/06/03)
CTRR-2	Aux Boiler Stk	45CSR§§2-3.2. & 8.2.	4.2.1	Compliance with the visible emission requirements for *Aux Boiler Stk* shall be determined as outlined in Section I.B. of Revision 2 of the "45CSR2 Monitoring Plan" submitted/revised on September 25, 2002. (Monitoring Plan Approval Date – 08/06/03)
	Stack 1, Stack 2, Stack 3	45CSR§30-5.1.c.; 40 CFR §64.3(b)(1) and (b)(4)(ii)	4.2.2	ESP secondary voltage and secondary current shall be measured continuously in order to calculate the total power input to each ESP. Total power is the sum of the products of secondary voltage and secondary current in each field, in accordance with Condition 4.4.3
	Stack 1, Stack 2, Stack 3	45CSR§30-5.1.c.; 40 CFR §64.3(b)(3)	4.2.3	Calibrate, maintain, and operate the instrumentation used to measure the secondary voltages and currents in Condition 4.2.2 in accordance with manufacturers' specifications.
	Stack 1, Stack 2, Stack 3	45CSR16, 45CSR45, 40CFR§75.10, 40CFR§60.45	4.2.4	Install, calibrate, certify, operate, and maintain continuous monitoring systems that measure all SO_2, NO_X, and CO_2 emissions from each stack as specified in 40CFR60, Subpart D and 40CFR75.
	Stack 1, Stack 2, Stack 3	45CSR§10-3.8	4.2.5	Maintain compliance with the allowable sulfur dioxide emissions limitations in Conditions 4.1.15 and 4.1.16 of the TVOP, based on a continuous 24-hour averaging time, except for one continuous 24-hour period each calendar month. In this case, emissions shall not exceed the limitation by more than 10%.
	Stack 1, Stack 2, Stack 3	45CSR§30-5.1.c., 40CFR§64.4(e)	4.2.6	Maintain compliance with established monitoring parameters in accordance with approved site-specific Compliance Assurance Monitoring Plan (CAM) and testing protocol – implementation began 2Q2010.

C-TRR. Combustion Sources – Emissions Unit Testing, Recordkeeping and Reporting Requirements – Harrison Power Station

Link Referenced from Applicable Requirements	Emission Point ID (See Attachment D "Equipment Table" For Key)	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emission Unit-Specific Applicable Requirement Summary
CTRR-3	Stack 1, Stack 2, Stack 3	45CSR§2-8.1., 45CSR§2A-5.2.	4.3.1	The owner or operator shall conduct, or have conducted, tests to determine the compliance of *Unit B1, Unit B2, and Unit B3* with the particulate matter mass emission limitations. Such tests shall be conducted in accordance with the appropriate method set forth in 45CSR2 Appendix - Compliance Test Procedures for 45CSR2 or other equivalent EPA approved method approved by the Secretary. Such tests shall be conducted in accordance with the schedule set forth in the following table.

Test Frequency	**Test Results**	**Retesting**
Initial Baseline	≤50% of weight emission standard	Once/3 years
Initial Baseline	between 50% and 80 % of weight emission standard	Once/2 years
Initial Baseline	≥80% of weight emission standard	Annual
Annual	after three successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Annual	after two successive tests indicate mass emission rates <80 % of weight emission standard	Once/2 years
Annual	any test indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/2 years	after two successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Once/2 years	any test indicates a mass emission rate <80 % of weight emission standard	Once/2 years
Once/2 years	any test indicates a mass emission rate >80% of weight emission standard	Annual
Once/3 years	any test indicates a mass emission rate ≤50% of weight emission standard	Once/3 years
Once/3 years	any test indicates mass emission rates between 50% and 80 % of weight emission standard	Once/2 years
Once/3 years	any test indicates a mass emission rate ≥80% of weight emission standard	Annual

C-TRR. Combustion Sources – Emissions Unit Testing, Recordkeeping and Reporting Requirements – Harrison Power Station				
Link Referenced from Applicable Requirements	**Emission Point ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Emission Unit-Specific Applicable Requirement Summary**
CTRR-4	Stack 1, Stack 2, Stack 3, Aux Boiler Stk	45CSR§§2-8.3.c	4.4.1 4.4.2	Maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit as outlined in Revision 2 of the "45CSR2 Monitoring Plan" submitted/revised on September 25, 2002. (Monitoring Plan Approval Date – 08/06/03). Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.
	Stack 1, Stack 2, Stack 3	45CSR§30-5.1.c.; 40 CFR §64.9(b)	4.4.3	Total secondary ESP power input (in kW) shall be calculated and recorded no less than four times per hour, equally spaced over each hour, in an electronic data acquisition system, and averaged on a 3-hour basis.
CTRR-5	Stack 1, Stack 2, Stack 3	45CSR33, 40 C.F.R. § 75.64	4.5.1	The designated representative shall electronically report SO_2, NO_x, and CO_2 emissions data and information as specified in 40 C.F.R. § 75.64 to the Administrator of USEPA, quarterly. Each electronic report must be submitted within thirty (30) days following the end of each calendar quarter.
CTRR-6	Stack 1, Stack 2, Stack 3, Aux Boiler Stk	45CSR§2-9.3.a. State-Enforceable only	4.5.3.1	Excess opacity periods, resulting from any malfunction, meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Director: **a**. The excess opacity period does not exceed thirty (30) minutes within any twenty-four (24) hour period; and **b.** Excess opacity does not exceed forty percent (40%).

C-TRR. Combustion Sources – Emissions Unit Testing, Recordkeeping and Reporting Requirements – Harrison Power Station				
Link Referenced from Applicable Requirements	**Emission Point ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Emission Unit-Specific Applicable Requirement Summary**
CTRR-7	Stack 1, Stack 2, Stack 3, Aux Boiler Stk	45CSR§2-9.3.b. State-Enforceable only	4.5.3.2	The owner or operator shall report to the Director by telephone, telefax, or e-mail any malfunction which results in excess particulate matter or excess opacity by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Secretary within thirty (30) days providing the following information: **a**. A detailed explanation of the factors involved or causes of the malfunction; **b**. The date, and time of duration (with starting and ending times) of the period of excess emissions; **c**. An estimate of the mass of excess emissions discharged during the malfunction period; **d.** The maximum opacity measured or observed during the malfunction; **e**. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and **f.** A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

C-TRR. Combustion Sources – Emissions Unit Testing, Recordkeeping and Reporting Requirements – Harrison Power Station				
Link Referenced from Applicable Requirements	**Emission Point ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Emission Unit-Specific Applicable Requirement Summary**
CTRR-8	Stack 1, Stack 2, Stack 3, Aux Boiler Stk	45CSR§2-8.1.a.	4.1.6	Compliance with the visible emission limit shall be demonstrated by periodic testing in accordance with 40 CFR Part 60, Appendix A, Method 9, a certified continuous opacity monitoring system, or through use of the alternative monitoring method outlined in Revision 2 of the "45CSR2 Monitoring Plan" submitted/revised on September 25, 2002. (Monitoring Plan Approval Date – 08/06/03) as approved by the Secretary. Compliance with the weight emission limit shall be demonstrated by periodic particulate matter stack testing, conducted in accordance with the appropriate test method set forth in the Appendix to 45CSR2 or other equivalent EPA approved method or as outlined in Revision 2 of the "45CSR2 Monitoring Plan" submitted/revised on September 25, 2002. (Monitoring Plan Approval Date – 08/06/03) as approved by the Secretary. Such testing shall be conducted at a frequency to be established by the Secretary.
CTRR-9	Stack 1, Stack 2, Stack 3, Aux Boiler Stk	45CSR§2-8.2.a.	4.1.7	Compliance with the visible emissions limit shall be monitored as set forth in Revision 2 of the "45CSR2 Monitoring Plan" submitted/revised on September 25, 2002. (Monitoring Plan Approval Date – 08/06/03)
CTRR-10	Stack 1, Stack 2, Stack 3, Aux Boiler Stk	45CSR§2-8.3.a.	4.1.8	Records of monitored data established in the monitoring plan shall be maintained on site and shall be made available to the Secretary or his duly authorized representative upon request.
CTRR-11	Stack 1, Stack 2, Stack 3, Aux Boiler Stk	45CSR§2-8.3.b., 45CSR2A	4.1.9 4.5.2	A periodic exception report shall be submitted to the Secretary, in a manner and at a frequency to be established by the Secretary. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken. Compliance with the periodic exception reporting of shall be demonstrated as outlined in Revision 2 of the "45CSR2 Monitoring Plan" submitted/revised on September 25, 2002. (Monitoring Plan Approval Date – 08/06/03).

C-TRR. Combustion Sources – Emissions Unit Testing, Recordkeeping and Reporting Requirements – Harrison Power Station				
Link Referenced from Applicable Requirements	**Emission Point ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Emission Unit-Specific Applicable Requirement Summary**
CTRR-12	Stack 1, Stack 2, Stack 3, Aux Boiler Stk	45CSR§2-8.3.c.	4.1.10	Records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit, shall be maintained on-site in a manner to be established by the Secretary and made available to the Secretary or his duly authorized representative upon request.
CTRR-18	Stack 1, Stack 2, Stack 3	40CFR Part 75	No Explicit Condition in 2009 Permit	**Continuous Emission Monitoring (CEM)**: Pollutant emissions monitoring for pollutants listed below is through installation, calibration, certification, operation, and maintenance of continuous monitoring systems. Continuous emissions monitoring is required as the primary method for the following pollutants and parameters: • SO_2 (CEM is Primary Method) • SO_2 (Alternate Method -- ASTM compliant fuel sampling and analysis or other appropriate method in the absence of CEMS data per section II.A.3. of Revision 2 of the "45CSR10 Monitoring Plan" submitted/revised on September 25, 2002. (Monitoring Plan Approval Date – 08/06/03) • NOx • CO_2 (By CEM or by alternative calculation) • Flue gas flow
	Lime Handling Facilities	45CSR13; R13-1477, Cond. A.1.	5.1.1	In accordance with the information filed in Permit Application R13-1477A, R13-1477B and any amendments thereto, the maximum throughputs in Section 1.0 shall not be exceeded and, at a minimum, the control equipment specified in Section 1.0 shall be installed, maintained, and operated so as to minimize particulate matter emissions.
	Lime Handling Facilities	45CSR13; R13-1477, Cond. A.2.	5.1.2	In accordance with the information filed in Permit Application R13-1477A, R13-1477B and any amendments thereto, particulate matter emissions from the emission points shall not exceed the limitations and maximum exit flows from the associated control devices as specified in the table listed in Condition 5.1.2 of TVOP R30-03300015-2009.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit.**
Insig Tanks	Insignificant Storage Tanks	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Storage tanks that store volatile organic (or non-volatile/ non-organic) liquids that are not subject to any applicable state or federal requirements. Emissions from these tanks are negligible based on the products stored, tank capacity and annual throughputs.

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

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): See attached table for list of tank capacities and product stored.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:** 8760 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes __X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data

Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	Negligible	

Hazardous Air Pollutants	**Potential Emissions**	
	PPH	**TPY**
	Negligible	

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.).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

__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.)

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

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

Harrison Power Station
Storage Tank Inventory for Emission Unit: "Insig Tanks"

Tank ID#	Year Installed	Tank Capacity (gal)	Stored Substance
A3HN	1991	10,000	Sulfuric Acid Tank 2
A4HN	1978	10,000	Sulfuric Acid Tank 1
A6HN	1980	12,000	Coal Flow Additive
A7HN	1980	12,000	Coal Flow Additive
A8HN	1980	12,000	Coal Flow Additive
A9HN	1971	1200	Propylene glycol
A10HN	1971	1200	Propylene glycol
A11HN	1971	1200	Propylene glycol
A12HN	2002	500	(propylene glycol)
A14HN	2000	4,000	Phosphonate
A15HN	1971	750,000	Chemical Cleaning Waste
A16HN	1971	300	No. 2 Fuel Oil
A17HN	1971	300	No. 2 Fuel Oil
A18HN	1971	200	No. 2 Fuel Oil
A19HN	1978	125,000	Diesel Fuel
A21HN	1974	800	Turbine Oil Reservoir
A22HN	1974	800	Turbine Oil Reservoir
A23HN	1974	800	Turbine Oil Reservoir
A24HN	1974	800	Turbine Oil Reservoir
A25HN	1974	800	Turbine Oil Reservoir
A26HN	1974	800	Turbine Oil Reservoir
A27HN	1971	800	Oil Reservoir
A28HN	1971	800	Oil Reservoir
A29HN	1971	800	Oil Reservoir
A30HN	1971	12,200	Turbine Oil Reservoir
A31HN	1971	12,200	Turbine Oil Reservoir
A32HN	1971	12,200	Turbine Oil Reservoir
A33HN	1971	932	Turbine Oil Filter
A34HN	1971	932	Turbine Oil Filter
A35HN	1971	932	Turbine Oil Filter
A36HN	1971	300	Hydraulic Oil
A37HN	1971	300	Hydraulic Oil
A38HN	1971	300	Hydraulic Oil
A39HN	1971	1,000	Waste Oil
A51HN	1989	1200	Waste Oil
A52HN	1984	100	Hazardous Waste Oil
A53HN	1990	12,000	Dozer Fuel Oil
A80HN	1995	2000	Polymer
A95HN	1995	275	No. 2 Fuel Oil
A97HN	1971	1500	Biocide DGH
A98HN	1971	1500	Biocide QUAT
A301HN	1971	250	Loop Seal Oil
A302HN	1971	250	Loop Seal Oil
A303HN	1971	250	Loop Seal Oil
A163HN	App 1980	10	Part Cleaner
A164HN	App 1980	50	Part Cleaner
A173HN	App 1980	50	Part Cleaner
A166HN	App 1980	50	Parts Cleaner
A167HN	App 1980	50	Parts Cleaner
A299HN	1990	2,000	Turbine Oil
A300HN	1972	15,000	Waste Turbine Oil
A96HN	1972	15,000	Ammonium Hydroxide

Harrison Power Station
Storage Tank Inventory for Emission Unit: "Insig Tanks" (continued)

Tank ID#	Year Installed	Tank Capacity (gal)	Stored Substance
A101HN	1985	600	Polymer (Nalco 2706)
A102HN	1985	100	Coagulant (Nalco7735)
A103HN	1995	50	Sodium Sulfite
A104HN	1968	600	(Nalco LCS 3800)
A107HN	1995	340	Biocide (Nalco H-135)
A109HN	1995	340	Biocide (Nalco H-135)
A110HN	1995	300	Sodium Hypochlorite (15%)
A116HN	1968	75	Ammonium Hydroxide
A117HN	1968	75	Ammonium Hydroxide
A118HN	1968	75	Ammonium Hydroxide
A120HN	1968	50	Trisodium Phosphate
A121HN	1968	50	Ammonium Hydroxide-
A122HN	1968	75	Calgon C-5
A123HN	1968	100	Sodium Hypochlorite (15%) (Potable Water)
A125 HN	2000	3135	Polypropylene Glycol
A126HN	2000	3135	Polypropylene Glycol
A164HN	2001	13450	Urea Solution (40%)
A165HN	2001	13450	Urea Solution (40%)
A166HN	2001	40000	Urea Solution (40%)
A167HN	2002	2000	Biocide (Nalco 7320)
A175HN	2001	200	Hydraulic Oil
A176HN	2001	200	Hydraulic Oil
A177HN	2001	200	Hydraulic Oil
A178HN	1991	65	Lube Oil
A179HN	1991	65	Lube Oil
A180HN	1991	65	Lube Oil
A181HN	1991	65	Lube Oil
A182HN	2001	65	Hydraulic Oil
A183HN	2001	65	Hydraulic Oil
A184HN	2001	65	Hydraulic Oil
A281HN	2001	110	Lube Oil
A282HN	2001	110	Lube Oil
A283HN	2001	110	Lube Oil
A284HN	2001	110	Lube Oil
A285HN	2001	110	Lube Oil
A286HN	2001	110	Lube Oil
A287HN	1991	110	Lube Oil
A288HN	1991	110	Lube Oil
A289HN	1991	110	Lube Oil
A290HN	1991	110	Lube Oil
A291HN	1991	110	Lube Oil
A292HN	1991	110	Lube Oil
A294HN	2002	500	Propylene Glycol
A295HN	2002	500	Propylene Glycol
A296HN	2002	100	Propylene Glycol
A297HN	2002	2500	Biocide (Nalco 7320)

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:** None
FP-01	Emergency Diesel Fire Pump 1	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Fire pump engine used to provide emergency back-up water supply in the event of lost main facility power supply

Manufacturer:	**Model number:**	**Serial number:**
Clarke (John Deere)	JX6H-UFAD60	N/A
Construction date:	**Installation date:**	**Modification date(s):**
April 2019	November 2019	N/A

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

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
22 gal/hr ULSD	11,000 gal/year	500 hours/year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X__ Yes ___ No	**If yes, is it?** ___ Indirect Fired __X__ Direct Fired
Maximum design heat input and/or maximum horsepower rating: 3.0 MMBtu/hr; 510 bhp	**Type and Btu/hr rating of burners:** N/A - Internal Combustion

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.

Ultra-Low Sulfur Diesel fuel

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
ULSD	15 ppm	N/A	137,000 btu/gal

Emissions Data		
Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)	2.86	0.72
Nitrogen Oxides (NO_X)	3.37	0.84
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.17	0.04
Particulate Matter (PM_{10})	0.17	0.04
Total Particulate Matter (TSP)	0.17	0.04
Sulfur Dioxide (SO_2)	0.87	0.22
Volatile Organic Compounds (VOC)	1.05	0.26
Hazardous Air Pollutants	**Potential Emissions**	
	PPH	TPY
Total HAPs	0.0090	0.0022
Formaldehyde	0.0036	0.0009
Benzene	0.0028	0.0007
Toluene	0.0012	0.0003
Xylenes	0.0009	0.0002
Regulated Pollutants other than Criteria and HAP	**Potential Emissions**	
	PPH	TPY
CO_2e	494	124

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.).

For NOx and PM, used limits set forth in Table 4 to 40 CFR Part 60, Subpart IIII, for Emergency Fire Pump Engines, Model Year 2009+

For all other pollutants, calculated using engine specs and AP-42 factors from Tables 3.3-1 and 3.3-2 for diesel fuel.

Excel calculations spreadsheet enclosed as part of this Title V renewal submittal.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

45CSR§30, Title V Operating Permit Condition 3.4 – Recordkeeping Requirements, Retention of Records

Operating hours are limited to 500 hours/year (100 hours per year for readiness and maintenance testing, included in this total is 50 hours/year for non-emergency use)

40 CFR Part 60, Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

40 CFR Part 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

__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.)

Record amount and type of fuel combusted in the emergency fire pump engine; record hours of operation and reason for operation (emergency, readiness testing, etc.).

Perform and record annual maintenance activities as per 40 CFR Part 60, Subpart IIII and 40 CFR Part 63, Subpart ZZZZ.

Are you in compliance with all applicable requirements for this emission unit? __X__ 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:	**Emission unit name:**	**List any control devices associated with this emission unit:** None
FP-02	Emergency Diesel Fire Pump 2	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Fire pump engine used to provide emergency back-up water supply in the event of lost main facility power supply

Manufacturer:	**Model number:**	**Serial number:**
Cummins	NTC335	27175340
Construction date:	**Installation date:**	**Modification date(s):**
1971	August 1971	N/A

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

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
18 gal/hr ULSD	9,000 gal/year	500 hours/year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X__ Yes ___ No	**If yes, is it?** ___ Indirect Fired __X__ Direct Fired
Maximum design heat input and/or maximum horsepower rating: 335 bhp	**Type and Btu/hr rating of burners:** N/A - Internal Combustion

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.

Ultra-Low Sulfur Diesel fuel

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
ULSD	15 ppm	n/a	137,000 btu/gal

Emissions Data		
Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)	2.3	0.59
Nitrogen Oxides (NO_X)	10.9	2.72
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.76	0.19
Particulate Matter (PM_{10})	0.76	0.19
Total Particulate Matter (TSP)	0.76	0.19
Sulfur Dioxide (SO_2)	0.72	0.18
Volatile Organic Compounds (VOC)	0.86	0.22
Hazardous Air Pollutants	**Potential Emissions**	
	PPH	TPY
Total HAPs	0.0073	0.0018
Regulated Pollutants other than Criteria and HAP	**Potential Emissions**	
	PPH	TPY
CO_2e	404	101

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 engine specs and AP-42 factors from Tables 3.3-1 and 3.3-2 for diesel fuel. Excel calculations spreadsheet enclosed as part of this Title V renewal submittal.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

45CSR§30, Title V Operating Permit Condition 3.4 – Recordkeeping Requirements, Retention of Records

Operating hours are limited to 500 hours/year (100 hours per year for readiness and maintenance testing, included in this total is 50 hours/year for non-emergency use)

_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.)

Record amount and type of fuel combusted in the emergency fire pump engine; record hours of operation and reason for operation (emergency, readiness testing, etc.).

Are you in compliance with all applicable requirements for this emission unit? _X_ 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:	**Emission unit name:**	**List any control devices associated with this emission unit:** None
EG-2	Leachate Collection System Emergency Generator	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

This generator is for emergency back-up power supply purposes and is located near the Leachate Collection and Conveyance System in the Harrison CCB Landfill.

Manufacturer:	**Model number:**	**Serial number:**
Kohler Power systems	400REZXB	N/A
Construction date:	**Installation date:**	**Modification date(s):**
2019	November 2019	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
605 bhp, three (3) 1,000-gallon LPG tanks

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
39 gal/hr LPG	19,360 gal/year LPG	500 hours/year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? __X__ Yes ___ No	**If yes, is it?** ___ Indirect Fired __X__ Direct Fired
Maximum design heat input and/or maximum horsepower rating: 3.54 MMBtu/hr; 605 bhp (full standby load)	**Type and Btu/hr rating of burners:** N/A - Internal Combustion

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.

Propane gas @ 39 gal/hr and 19,360 gal/year

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

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
LPG	-	-	91,502 btu/gal

Emissions Data		
Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)	5.33	1.33
Nitrogen Oxides (NO_X)	2.67	0.67
Lead (Pb)	0	0
Particulate Matter ($PM_{2.5}$)	0.034	0.008
Particulate Matter (PM_{10})	0.034	0.008
Total Particulate Matter (TSP)	0.034	0.008
Sulfur Dioxide (SO_2)	0.002	0.0005
Volatile Organic Compounds (VOC)	1.33	0.33
Hazardous Air Pollutants	**Potential Emissions**	
	PPH	TPY
Total HAPs	0.081	0.0202
Formaldehyde	0.073	0.018
Benzene	0.006	0.0014
Toluene	0.002	0.0005
Xylenes	0.001	0.0002
Regulated Pollutants other than Criteria and HAP	**Potential Emissions**	
	PPH	TPY
CO_2e	390	97
CH_4	0.08	0.02

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.).

For NOx, CO and VOCs, used limits set forth in Table 1 to 40 CFR Part 60, Subpart JJJJ, for SI Emergency Engines

For all other pollutants, calculated using engine specs and AP-42 factors from Table 3.2-3, "Rich-Burn Engines;" however, since no factors exist for LPG, natural gas combustion factors were used.

Excel calculations spreadsheet enclosed as part of this Title V renewal submittal.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

45CSR§30, Title V Operating Permit Condition 3.4 – Recordkeeping Requirements, Retention of Records

Operating hours are limited to 500 hours/year (100 hours per year for readiness and maintenance testing, included in this total is 50 hours/year for non-emergency use)

40 CFR Part 60, Subpart JJJJ: Standards of Performance for Stationary Spark-Ignition Internal Combustion Engines

40 CFR Part 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

__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.)

Record amount and type of fuel combusted in the emergency engine; record hours of operation and reason for operation (emergency, readiness testing, etc.).

Perform and record annual maintenance activities as per 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ.

Are you in compliance with all applicable requirements for this emission unit? __X__ Yes ___No

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

ATTACHMENT E

Materials Handling Emissions Units
Part I: Coal, Lime and Ash Handling

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
RCCD	RCCD	Partial Enclosure, Water Spray

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Railcar Coal Unloading, indoor process partially enclosed with a water spray dust prevention system.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1971	1971	n/a

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour, 6,925,875 tons/year coal.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _x__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.01	0.01
Particulate Matter (PM_{10})	0.04	0.09
Total Particulate Matter (TSP)	0.09	0.20
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.).

Emissions based upon Section 13.2.4 (Materials Handling) for AP-42 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific applicable requirements for RCCD

__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.)

There are no emissions unit-specific monitoring / testing / recordkeeping / reporting requirements for RCCD

Are you in compliance with all applicable requirements for this emission unit? __X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
ST-1	Coal Stockpile	Water Spray

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
A 1,000,000 ton coal pile controlled by water spray. This unit consists of wind erosion from the coal pile, all bulldozing and grading operations on the pile (8760 hours/year), and fugitive emissions from the truck unloading of coal. This source also includes fugitive emissions from all materials transfers related to stock-out operations.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1971	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	N/A	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	**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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	531.26	6.63
Particulate Matter (PM_{10})	1,364.55	172.86
Total Particulate Matter (TSP)	2,797.12	632.85
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.).

Emissions based upon Bulldozing activity – AP-42 Section 11.9.2 (Revised 10/1998), Materials Transfer Section – AP-42 Section 13.2.4 (Revised 11/2006) and Industrial Wind Erosion – AP-42 Section 13.2.5 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific applicable requirements for ST-1

__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.)

There are no emissions unit-specific monitoring / testing / recordkeeping / reporting requirements for ST-1

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
ST-2	Ash Disposal Areas	Water Spray

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
An approximately 64,320,000-ton ash disposal area controlled by water spray. This unit consists of wind erosion from the ash disposal pile, all bulldozing and grading operations on the pile (160 hours/year), and fugitive emissions from the loading/unloading of trucks hauling ash for sale, re-use or disposal.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
	1971	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
64,320,000 tons

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	N/A	8,760 hours for all except 160 hours/year flyash surface bulldozing

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	287.07	0.58
Particulate Matter (PM_{10})	858.63	6.98
Total Particulate Matter (TSP)	1,888.81	20.79
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.).

Emissions based upon Bulldozing activity – AP-42 Section 11.9.2 (Revised 10/1998), Materials Transfer Section – AP-42 Section 13.2.4 (Revised 11/2006) and Industrial Wind Erosion – AP-42 Section 13.2.5 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

MH-1 Limit on amount of bottom ash transported
MH-2 Limit on amount of fly ash transported
MH-3 Limit on amount of fly ash disposed in landfill
MH-4 Limit on amount of FGD sludge disposed of
MH-5 Limit on fly ash surface bulldozing operations
MH-6 Minimum stabilized sludge moisture content

__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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1 Method of calculation
MHTRR-7 Throughput and Bulldozing Recordkeeping Requirements

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
BH Conv	Boilerhouse Conveyors	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
All boiler-house conveyors (and associated transfer points) for Conveyors S-1a/b, S-2a/b, S-3a/b, C-5a/b, C-6a/b.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1971	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _x__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.07	0.16
Particulate Matter (PM_{10})	0.62	1.42
Total Particulate Matter (TSP)	1.61	3.71
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for BH Conv

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for BH Conv

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
C-12	Conveyor -12	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Conveyor from Surge Bin to Lowering Well #2 (and all associated transfers).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1971	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.06	0.14
Particulate Matter (PM_{10})	0.58	1.33
Total Particulate Matter (TSP)	1.52	3.51
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

1. ***Applicable Requirements***

2. **List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.**

There are no emissions unit-specific requirements for C-12

20. __X__ Permit Shield

21. 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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for C-12

41. **Are you in compliance with all applicable requirements for this emission unit?** __X_Yes ___No

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

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
C-1	Conveyor -1	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Conveyor from Crusher House to Lowering Well #2 (and all associated transfers).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1971	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.06	0.14
Particulate Matter (PM_{10})	0.58	1.33
Total Particulate Matter (TSP)	1.52	3.51
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for C-1

_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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for C-1

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
C-3a/b	Conveyor -3a/b	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Conveyor from Coal Reclaim to Crusher House Transfer Bin (and all associated transfers).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1971	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.07	0.16
Particulate Matter (PM_{10})	0.62	1.42
Total Particulate Matter (TSP)	1.61	3.71
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for C-3a/b

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for C-3a/b

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
C-4a/b	Conveyor-4a/b	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Conveyor from Crusher House to Boiler House Conveyors (and all associated transfers).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1971	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.06	0.14
Particulate Matter (PM_{10})	0.58	1.33
Total Particulate Matter (TSP)	1.52	3.51
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for C-4a/b

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for C-4a/b

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
RC-7	Conveyor RC-7	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Conveyor from Rail Dumper to RC-8 (and all associated transfers).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1971	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.06	0.13
Particulate Matter (PM_{10})	0.54	1.24
Total Particulate Matter (TSP)	1.44	3.31
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for RC-7

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for RC-7

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
RC-8	Conveyor RC-8	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Conveyor from RC-7 to Crusher House (and all associated transfers).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1971	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _x__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.03	0.07
Particulate Matter (PM_{10})	0.30	0.66
Total Particulate Matter (TSP)	0.81	1.76
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for RC-8

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for RC-8

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
MC-7	Conveyor –MC-7	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Conveyor from Mine to Crusher House (and all associated fugitive emissions from 4 associated transfer houses).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1971	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.07	0.17
Particulate Matter (PM_{10})	0.66	1.52
Total Particulate Matter (TSP)	1.69	3.91
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for RC-8

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for MC-7

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
C-2b	Conveyor -2b	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Conveyor from Chute to Lowering Well #1 (and all associated transfers).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1971	**Modification date(s):**

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
800 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.03	0.07
Particulate Matter (PM_{10})	0.30	0.67
Total Particulate Matter (TSP)	0.81	1.76
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for C-2b

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for C-2b

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
C-10	Conveyor -10	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Internal Crusher House Conveyor to Surge Bin (and all associated transfers).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1971	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.05	0.11
Particulate Matter (PM_{10})	0.50	1.14
Total Particulate Matter (TSP)	1.35	3.12
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for C-10

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for C-10

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
C-11	Conveyor 11	Partial Enclosure

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Internal Crusher House Conveyor from Surge Bin (and all associated transfers).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1979	**Modification date(s):** n/a

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.05	0.06
Particulate Matter (PM_{10})	0.50	0.57
Total Particulate Matter (TSP)	1.35	1.56
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.).

Emissions based upon Conveyor activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for C-11

_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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for C-11

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
CRU-01	Coal Crusher 01	Full Enclosure, Water Spray

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
This emission unit is 1 of 3 1500 TPH Coal Crushers at Harrison Station.

Manufacturer:	**Model number:**	**Serial number:**
Pennsylvania Crusher Corp.	TK8 – 72CD	N/A
Construction date:	**Installation date:** 1971	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X_ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.08	0.17
Particulate Matter (PM_{10})	1.80	4.16
Total Particulate Matter (TSP)	4.05	9.35
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.).

Emissions based upon Crusher activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for CRU-01

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for CRU-01

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
CRU-02	Coal Crusher 02	Full Enclosure, Water Spray

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
This emission unit is 1 of 3 1500 TPH Coal Crushers at Harrison Station.

Manufacturer:	**Model number:**	**Serial number:**
Pennsylvania Crusher Corp.	TK8 – 72CD	N/A
Construction date:	**Installation date:** 1972	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.08	0.17
Particulate Matter (PM_{10})	1.80	4.16
Total Particulate Matter (TSP)	4.05	9.35
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.).

Emissions based upon Crusher activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for CRU-02

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for CRU-02

Are you in compliance with all applicable requirements for this emission unit? __X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
CRU-03	Coal Crusher 03	Full Enclosure, Water Spray

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
This emission unit is 1 of 3 1500 TPH Coal Crushers at Harrison Station.

Manufacturer:	**Model number:**	**Serial number:**
Pennsylvania Crusher Corp.	TK8 – 72CD	N/A
Construction date:	**Installation date:** 1977	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
1,500 tons/hour

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,500 tons	6,925,875 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.08	0.17
Particulate Matter (PM_{10})	1.80	4.16
Total Particulate Matter (TSP)	4.05	9.35
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.).

Emissions based upon Crusher activity – AP-42 Section 11.19.2 (Revised 8/2004) and Material Transfers – AP-42 Section 13.2.4 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement code below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

MH-7 Opacity Limit

__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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-4 Monitoring and Testing Requirements
MHTRR-5 Performance Test Methods
MHTRR-6 Records Retention

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

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

Materials Handling Emissions Units
Completed “Attachment E” Forms

Part II - Lime Unloading Circuit

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
LRCH	LRCH	Baghouse dust collectors 6ca, 6cb, 6cc, Vacuum system 6cd

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Railcar Lime Unloading Transfer Hoppers (4) and transfers to Lime Unloading Conveyors, venting to dust collectors, and supplemented with a vacuum system.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
380 tons/hour, 627,546 tons/year Lime.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
380 tons	627,546 tons	2,920 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	14.96	21.84
Particulate Matter (PM_{10})	14.96	21.84
Total Particulate Matter (TSP)	14.96	21.84
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.).

Emissions based upon outlet grain loading of 0.009 gr/cf, for collectors 6ca, 6cb, and 6cc (combining for 175,000 cfm), and collector 6cd with grain loading of 0.18 gr/cf and 947 cfm rating.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.
Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units

MH-8 Throughput Limits and Control Equipment Requirements
MH-9 Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-10 Limit on Annual Input to Lime Handling System
MH-11 Hours Limit on Lime Unloading Operations:
MH-12 Opacity Limit – Process Sources
MH-14 Particulate Weight Emission Limits – Process Sources
MH-15 Process Fugitive Particulate Control Requirement

__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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1 Method of Calculation
MHTRR-3 Test Methods for PM Emissions
MHTRR-7 Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8 Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? __X__ 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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
6si, 6sj	6si, 6sj	Baghouse dust collectors 6ca, 6cb, 6cc

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Lime Unloading Conveyor Belts (2) from the Railcar Unloading Transfer Hoppers to the Lime Transfer/Storage conveyors. These conveyors are vented to common dust collectors (6ca, 6cb, and 6cc).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
450 tons/hour, 627,546 tons/year Lime (each).

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
450 tons (each)	627,546 tons (each)	2,920 hours (each)

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

These emissions are contained within the Railcar Unloading Process, controlled by building baghouse dust collectors 6ca, 6cb, and 6cc.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-10	Limit on Annual Input to Lime Handling System
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
8sa, 8sb, 8sg, 8sh	8sa, 8sb, 8sg, 8sh	Baghouse Dust Collector 8c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Two (2) Lime Transfer Conveyor Belts, each rated at 450 TPH, and two (2) Lime Storage Conveyor Belts each rated at 900 TPH, as well as associated Dribble conveyors, all enclosed and venting to a common dust collector (8c).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
450 tons/hour, 627,546 tons/year Lime (each transfer conveyor)
900 tons/hour, 627,546 tons/year Lime (each storage conveyor)

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
450 TPH (each transfer conv.) 900 TPH (each storage conv.)	627,546 tons (each)	2,920 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.72	1.05
Particulate Matter (PM_{10})	0.72	1.05
Total Particulate Matter (TSP)	0.72	1.05
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.).

Emissions based upon outlet grain loading of 0.003 gr/cf, and 28,000 cfm collector for collector 8c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-10	Limit on Annual Input to Lime Handling System
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
13	13	Dust Collector 9c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Lime Storage Silo with a 101,788-ton capacity, fed by enclosed conveyor (9va) and vented to Dust Collector 9c.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
313,773 tons/year Lime

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	313,773 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.26	0.38
Particulate Matter (PM_{10})	0.26	0.38
Total Particulate Matter (TSP)	0.26	0.38
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.).

Emissions based upon dust collector 9c, outlet grain loading of 0.003 gr/cf, and 10,000 cfm collector.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
14	14	Dust Collector 10c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Lime Storage Silo with a 101,788-ton capacity, fed by enclosed conveyor (10va) and vented to Dust Collector 10c.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
313,773 tons/year Lime

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	313,773 tons	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.26	0.38
Particulate Matter (PM_{10})	0.26	0.38
Total Particulate Matter (TSP)	0.26	0.38
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.).

Emissions based upon dust collector 10c, outlet grain loading of 0.003 gr/cf, and 10,000 cfm collector.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

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

Materials Handling Emissions Units
Completed “Attachment E” Forms

Part III - Emergency Lime Storage Circuit

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
11va, 12va	11va, 12va	Full Enclosure to Fabric Filter

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Emergency Lime Pneumatic Delivery Conveyor from trucks, with a 75 ton/hour capacity, fully enclosed to 150 ton Emergency Lime Bins 37 and 38.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

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

Maximum Hourly Throughput	**Maximum Annual Throughput:** n/a	**Maximum Operating Schedule:** 2,920 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these sources are contained within the Emergency Lime Bin (dust collector 9c).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-10	Limit on Annual Input to Lime Handling System
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
37	37	Dust Collector 11c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
A 150 ton Emergency Lime Storage Bin, with pneumatic conveyor fill, and transfer to Lime Silos. This source is controlled by dust collector 11c.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
	627,546 TPY	2,920 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.05	0.08
Particulate Matter (PM_{10})	0.05	0.08
Total Particulate Matter (TSP)	0.05	0.08
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.).

Emissions based upon dust collector 9c, with grain loading of 0.003 gr/cf, and rated at 2,100 cfm.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-10	Limit on Annual Input to Lime Handling System
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
38	38	Dust Collector 12c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
A 150-ton Emergency Lime Storage Bin, with pneumatic conveyor fill, and transfer to Lime Silos. This source is controlled by dust collector 12c.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
01/01/1994	12/31/1994	n/a

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
n/a	n/a	2,920 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.05	0.08
Particulate Matter (PM_{10})	0.05	0.08
Total Particulate Matter (TSP)	0.05	0.08
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.).

Emissions based upon dust collector 9c, with grain loading of 0.003 gr/cf, and rated at 2,100 cfm.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-10	Limit on Annual Input to Lime Handling System
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
9va, 10va	9va, 10va	Full Enclosure to Fabric Filter

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fully enclosed Pneumatic Conveyors (2) between Emergency Lime Bins and Lime Storage Silos (collectors 9c and 10c).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	627,546 TPY	2,920 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these sources are included with the dust collectors on the Lime Storage Silos being filled by these pneumatic conveyors.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-10	Limit on Annual Input to Lime Handling System
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

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

Materials Handling Emissions Units
Completed “Attachment E” Forms

Part IV - Lime Slurry Handling Circuit

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
24v, 25v, 26v, 27v	24v, 25v, 26v, 27v	Full Enclosure to Wet Scrubber

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Four (4) Identical 30 TPH Slaker Delivery Screw Conveyors, each fully enclosed, venting into a Ball-Mill slaker (24s, 25s, 26s, and 27s) equipped with a wet scrubber dust collector (collectors 24-27c).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
30 TPH (each)	262,800 tons (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed conveyors are contained within the Ball-Mill slaker wet scrubber collectors (24-27c).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
24s, 25s, 26s, 27s	24s, 25s, 26s, 27s	Wet Scrubbers 24c, 25c, 26c, 27c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Four (4) Identical Ball-Mill slakers, each with a 30 TPH, and 262,800 TPY capacity, equipped with a wet scrubber dust collector (collectors 24-27c).

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
30 TPH (each)	262,800 tons (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.31	1.35
Particulate Matter (PM_{10})	0.31	1.35
Total Particulate Matter (TSP)	0.31	1.35
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.).

Emissions based upon the combined outlet grain loading of shared dust collectors 24-27c, each rated at 0.009 gr/cf, and 1,000 cfm.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

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

Materials Handling Emissions Units
Completed “Attachment E” Forms

Part V - Lime Handling Circuit

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
15va, 16va, 17va	15va, 16va, 17va	Full Enclosure to Fabric Filter

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime Silo Loading Pneumatic Conveyors (3), each fully enclosed with a 25 ton/hour capacity, from the Lime Crushers to the SW Lime silos, with each SW Lime silo dust collector controlling these emissions.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
25 tons/hour (each)	115,623 tons/year	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed sources are contained within the SWP Lime Silos dust collectors 15c-17c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
15vb, 16vb, 17vb	15vb, 16vb, 17vb	Full Enclosure to Fabric Filter

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime Silo Loading Pneumatic Conveyors (3), each fully enclosed and with a 25 ton/hour capacity, from lime hauling trucks to the SW Lime silos, with each SW Lime silo dust collector controlling these emissions.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
25 tons/hour (each)	115,623 tons/year	2,920 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed sources are contained within the SWP Lime Silos dust collectors 15c-17c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-10	Limit on Annual Input to Lime Handling System
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
33	33	Dust Collector 15c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime Silo (1 of 3), with a 388-ton capacity, for storage of lime as it moves through the solid waste processing cycle.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
n/a	38,541 tons/year	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.07	0.30
Particulate Matter (PM_{10})	0.07	0.30
Total Particulate Matter (TSP)	0.07	0.30
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.).

Emissions based upon emissions from dust collector 15c with outlet grain loading of 0.003 gr/cf, and 2,700 cfm.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
34	34	Dust Collector 16c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime Silo (1 of 3), with a 388 ton capacity, for storage of lime as it moves through the solid waste processing cycle.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	38,541 tons/year	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.07	0.30
Particulate Matter (PM_{10})	0.07	0.30
Total Particulate Matter (TSP)	0.07	0.30
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.).

Emissions based upon emissions from dust collector 16c with outlet grain loading of 0.003 gr/cf, and 2,700 cfm.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
35	35	Dust Collector 17c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime Silo (1 of 3), with a 388 ton capacity, for storage of lime as it moves through the solid waste processing cycle.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	38,541 tons/year	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.07	0.30
Particulate Matter (PM_{10})	0.07	0.30
Total Particulate Matter (TSP)	0.07	0.30
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.).

Emissions based upon emissions from dust collector 17c with outlet grain loading of 0.003 gr/cf, and 2,700 cfm.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-11	Operating Hours Limit on Lime Unloading Operations
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

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

Materials Handling Emissions Units
Completed “Attachment E” Forms

Part VI - Fly Ash Handling Circuit

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
18va, 19va, 20va	18va, 19va, 20va	Full Enclosure to Fabric Filter

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime Silo Loading Pneumatic Conveyors (3), each fully enclosed and with a 120 ton/hour capacity, from the Fly Ash Storage Silos to the SW Fly Ash silos, with each SW Fly Ash silo dust collector controlling these emissions.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
120 tons/hour (each)	818,739 tons/year	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed sources contained within the dust collector emissions of collectors 18c-20c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
18vb, 19vb, 20vb	18vb, 19vb, 20vb	Dust Collector 18c, 19c, 20c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime Silo Loading Pneumatic Conveyors (3), each fully enclosed and with a 120 ton/hour capacity, from the Fly Ash Hauling trucks to the SW Fly Ash silos, with each SW Fly Ash silo dust collector controlling these emissions.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
120 tons/hour (each)	818,739 tons/year	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed sources contained within the dust collector emissions of collectors 18c-20c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
21	21	Dust Collector 18c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Fly Ash Silo (1 of 3), with a 10,479 ton capacity, for storage of fly ash as it moves through the solid waste processing cycle.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
10,479 tons

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	272,913 tons/year	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.16	0.70
Particulate Matter (PM_{10})	0.16	0.70
Total Particulate Matter (TSP)	0.16	0.70
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.).

Emissions based upon dust collectors 18c with outlet grain loading of 0.003 gr/cf, and 6,400 cfm rating.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
22	22	Dust Collector 19c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Fly Ash Silo (1 of 3), with a 10,479 ton capacity, for storage of fly ash as it moves through the solid waste processing cycle.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
10,479 tons

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	272,913 tons/year	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.16	0.70
Particulate Matter (PM_{10})	0.16	0.70
Total Particulate Matter (TSP)	0.16	0.70
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.).

Emissions based upon dust collectors 19c with outlet grain loading of 0.003 gr/cf, and 6,400 cfm rating.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
23	23	Dust Collector 20c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Fly Ash Silo (1 of 3), with a 10,479-ton capacity, for storage of fly ash as it moves through the solid waste processing cycle.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
10,479 tons

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	272,913 tons/year	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.16	0.70
Particulate Matter (PM_{10})	0.16	0.70
Total Particulate Matter (TSP)	0.16	0.70
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.).

Emissions based upon dust collectors 20c with outlet grain loading of 0.003 gr/cf, and 6,400 cfm rating.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-13	Visible Emissions Limit – Storage Structures
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

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

Materials Handling Emissions Units
Completed “Attachment E” Forms

Part VII - Solid Waste Handling Circuit

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
21va, 22va, 23va	21va, 22va, 23va	Full Enclosure to Scrubber

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Fly Ash Screw Conveyors (3), each with a 70 ton/hour capacity, from the SW Fly Ash Storage Silos to the Lime/Fly Ash Screw Conveyors. Each conveyor is fully enclosed, with the process venting through pug mill wet scrubbers 21-23c.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
70 tons/hour (each)	613,200 tons/year (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed sources are included in the Pug Mills, controlled by scrubbers 21-23c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
21vb, 22vb, 23vb	21vb, 22vb, 23vb	Full Enclosure to Scrubber

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime Screw Conveyors (3), each with a 10 ton/hour capacity, from the SW Lime Storage Silos to the Lime/Fly Ash Screw Conveyors. Each conveyor is fully enclosed, with the process venting through pug mill wet scrubbers 21-23c.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
10 tons/hour (each)	87,600 tons/year (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed sources are included in the Pug Mills, controlled by scrubbers 21-23c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
21vc, 22vc, 23vc	21vc, 22vc, 23vc	Full Enclosure to Scrubber

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime/Fly Ash Screw Conveyors (3), each with a 80 ton/hour capacity, from the Lime (21-23va) and Fly Ash (21-23vb) Screw Conveyors to the Lime/Fly Ash Screw Conveyors (21-23vd). Each conveyor is fully enclosed, with the process venting through pug mill wet scrubbers 21-23c.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
80 tons/hour (each)	700,800 tons/year (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed sources are included in the Pug Mills, controlled by scrubbers 21-23c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
21vd, 22vd, 23vd	21vd, 22vd, 23vd	Full Enclosure to Scrubber

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Lime/Fly Ash Screw Conveyors (3), each with a 80 ton/hour capacity, from the Lime/Fly Ash Screw Conveyors (21-23vc) to the SW processing Pug Mills (21-23s). Each conveyor is fully enclosed, with the process venting through pug mill wet scrubbers 21-23c.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:** 1994	**Modification date(s):**

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
80 tons/hour (each)	700,800 tons/year (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed sources are included in the Pug Mills, controlled by scrubbers 21-23c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
37v, 38v	37v, 38v	Full Enclosure to Scrubbers

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Centrifuge Cake Screw Conveyors (2), each with a 150 ton/hour capacity, from the Centrifuges to the SW processing Pug Mills (21-23s). Each conveyor is fully enclosed, with the process venting through pug mill wet scrubbers 21-23c.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
150 tons/hour (each)	1,314,000 tons/year (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.00	0.00
Particulate Matter (PM_{10})	0.00	0.00
Total Particulate Matter (TSP)	0.00	0.00
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.).

Emissions for these fully enclosed sources are included in the Pug Mills, controlled by scrubbers 21-23c.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
21s	21s	Wet Scrubbers 21c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Pug Mill (1 of 3), with a 600 ton/hour capacity, with a wet scrubber used as emissions control.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
600 tons/hour (each)	3,303,474 tons/year (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.51	2.25
Particulate Matter (PM_{10})	0.51	2.25
Total Particulate Matter (TSP)	0.51	2.25
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.).

Emissions based upon wet scrubber 21c with outlet grain loading of 0.03 gr/cf, and 2,000 cfm rating.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
22s	22s	Wet Scrubbers 22c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Pug Mill (1 of 3), with a 600 ton/hour capacity, with a wet scrubber used as emissions control.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
600 tons/hour (each)	3,303,474 tons/year (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.51	2.25
Particulate Matter (PM_{10})	0.51	2.25
Total Particulate Matter (TSP)	0.51	2.25
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.).

Emissions based upon wet scrubber 22c with outlet grain loading of 0.03 gr/cf, and 2,000 cfm rating.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
23s	23s	Wet Scrubbers 23c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Solid Waste Processing Pug Mill (1 of 3), with a 600 ton/hour capacity, with a wet scrubber used as emissions control.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
	1994	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
600 tons/hour (each)	3,303,474 tons/year (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.51	2.25
Particulate Matter (PM_{10})	0.51	2.25
Total Particulate Matter (TSP)	0.51	2.25
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.).

Emissions based upon wet scrubber 23c with outlet grain loading of 0.03 gr/cf, and 2,000 cfm rating.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Materials Handling ("MH") emissions unit-specific applicable requirements are listed below as references to an Appendix containing the actual requirements text. Each applicable requirement below is linked by a reference number (e.g. "MH-1") to detailed information for that requirement contained in Table MH-AR. Each requirement in Table MH-AR then references appropriate **M**aterials **H**andling **T**esting/**R**ecordkeeping/**R**eporting ("**MHTRR**") requirements in Table MH-TRR.

Applicable requirement codes below are actively hyperlinked to Table MH-AR. The actual requirement text may be seen by ctrl-clicking on the links below. Links are numbered sequentially per the following conventions: C=combustion emissions units, MH = materials handling emissions units, MI = miscellaneous emissions units.

MH-8	Throughput Limits and Control Equipment Requirements
MH-9	Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits
MH-12	Opacity Limit – Process Sources
MH-14	Particulate Weight Emission Limits – Process Sources
MH-15	Process Fugitive Particulate Control Requirement

_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.)

Monitoring / Testing / Recordkeeping / Reporting requirements are provided for this emissions unit in Table MH-TRR and are associated with the Applicable Requirements for this emissions unit within Table MH-AR.

MHTRR-1	Method of Calculation
MHTRR-3	Test Methods for PM Emissions
MHTRR-7	Throughput and Bulldozing Recordkeeping Requirements
MHTRR-8	Emission Inspection

Are you in compliance with all applicable requirements for this emission unit? _X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
UR-1	UR-1	Dust Collectors 28c, 29c, 30c, 31c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Four (4) Urea Storage Silos (each with 9,000-cubic foot capacity), each venting to a dust collector.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1994	1994	n/a

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
9,000 cubic feet.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
25 tons urea	219,000 tons urea	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.22	0.98
Particulate Matter (PM_{10})	0.22	0.98
Total Particulate Matter (TSP)	0.22	0.98
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.).

Emissions based upon (4) separate collectors, each with outlet grain loading of 0.01 gr/cf, flow rate of 655 cfm, and 8760 hours of operation.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for UR-1

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for UR-1

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
UR-2	UR-2	Dust Collectors 32c, 33c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Two (2) Urea Hoppers (handling 16 TPH each of dry pelletized urea), each venting to a dust collector.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1994	1994	n/a

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
9,000 cubic feet.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
16 tons urea (each)	140,160 tons urea (each)	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.11	0.49
Particulate Matter (PM_{10})	0.11	0.49
Total Particulate Matter (TSP)	0.11	0.49
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.).

Emissions based upon (2) separate collectors, each with outlet grain loading of 0.01 gr/cf, flow rate of 655 cfm, and 8760 hours of operation.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for UR-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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for UR-2

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

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

Materials Handling Emissions Units
Completed “Attachment E” Forms

REFERENCED TABLES

Table MH-8A:

Maximum Capacities and Required Control Devices for Lime Handling Equipment

Table MH-9A:

Outlet Grain Loading and Maximum Air Flow Requirements for Control Devices

Table MH-AR:

Source-Specific Applicable Requirements for Material Handling Sources – Harrison Power Station

Table MH-TRR

MHTRR. Materials Handling Sources – Harrison Power Station – Emissions Unit Testing, Recordkeeping and Reporting Requirements

Table MH-8A
Maximum Capacities and Required Control Devices for SO_2 Absorber-Related Process Equipment

Equipment ID	Description	Maximum Capacity (tons/hour)	Maximum Capacity (tons/year)	Control Device[1]
Lime Unloading Circuit				
LRCH	Railcar Unloading Transfer Hoppers	380	627,546	BH
6si	Lime Unloading Conveyer Belt	450	627,546	BH
6sj	Lime Unloading Conveyer Belt	450	627,546	BH
8sa	Lime Transfer Conveyer and Associated Dribble Conveyer	450	627,546	BH
8sb	Lime Transfer Conveyer and Associated Dribble Conveyer	450	627,546	BH
8sg	Lime Storage Conveyer and Associated Dribble Conveyer	900	627,546	BH
8sh	Lime Storage Conveyer and Associated Dribble Conveyer	900	627,546	BH
13	Lime Storage Silo (101,788 ton)	n/a	313,773	BH
14	Lime Storage Silo (101,788 ton)	n/a	313,773	BH
Emergency Lime Storage Circuit				
11va	Emergency Lime Bin Pneumatic Delivery Conveyer	75	n/a	BH
12va	Emergency Lime Bin Pneumatic Delivery Conveyer	75	n/a	BH
37	Emergency Lime Bin (150 ton)	n/a	n/a	BH
38	Emergency Lime Bin (150 ton)	n/a	n/a	BH
9va	Lime Storage Silo Pneumatic Delivery Conveyer	n/a	n/a	BH
10va	Lime Storage Silo Pneumatic Delivery Conveyer	n/a	n/a	BH
Lime Slurry Handling Circuit				
24v,25v 26v,27v	Ball-Mill Slaker Delivery Screw Conveyers	30 (each)	262,800 (each)	FE,SCR
24s,25s 26s,27s	Ball-Mill Slakers	30 (each)	262,800 (each)	SCR
46,47, 48,49	Lime Slurry Transfer Tanks (108,600 gal each)	n/a	712,970 (gl each)	N/R
43,44,45	Lime Slurry Storage Tanks (380,000 gal each)	n/a	950,627 (gl each)	N/R
Absorber Sludge Handling Circuit				
16,17, 18,19	Thickener Underflow Tanks (7,253 tons each)	n/a	1,428,305 (each)	N/R
Lime Handling Circuit				
13v	Lime Conveyor to Crusher	25	115,623	BH
14v	Lime Conveyor to Crusher	25	115,623	BH
13s	Lime Crusher	25	115,623	BH
14s	Lime Crusher	25	115,623	BH

[1] Codes: BH=Baghouse; FE=Full Enclosure; SCR=Wet Scrubber, N/R=None Required

Equipment ID	Description	Maximum Capacity (tons/hour)	Maximum Capacity (tons/year)	Control Device[1]
15va	Solid Waste Processing Lime Silos (SWPLS) Loading Pneumatic Conveyer	25	115,623	FE,BH
16va	(SWPLS) Loading Pneumatic Conveyer	25	115,623	FE,BH
17va	(SWPLS) Loading Pneumatic Conveyer	25	115,623	FE,BH
15vb	(SWPLS) Loading Pneumatic Conveyer from Truck	25	115,623	FE,BH
16vb	(SWPLS) Loading Pneumatic Conveyer from Truck	25	115,623	FE,BH
17vb	(SWPLS) Loading Pneumatic Conveyer from Truck	25	115,623	FE,BH
33	Solid Waste Processing Lime Silos (388 tons each)	n/a	38,541 (each)	BH
34	Solid Waste Processing Lime Silos (388 tons each)	n/a	38,541 (each)	BH
35	Solid Waste Processing Lime Silos (388 tons each)	n/a	38,541 (each)	BH
Fly Ash Handling Circuit				
18va	Solid Waste Processing Fly Ash Silos (SWPFAS) Loading Pneumatic Conveyer	120	818,739	FE,BH
19va	(SWPFAS) Loading Pneumatic Conveyer	120	818,739	FE,BH
20va	(SWPFAS) Loading Pneumatic Conveyer	120	818,739	FE,BH
18vb	(SWPFAS) Loading Pneumatic Conveyer from Truck	120	818,739	FE,BH
19vb	(SWPFAS) Loading Pneumatic Conveyer from Truck	120	818,739	FE,BH
20vb	(SWPFAS) Loading Pneumatic Conveyer from Truck	120	818,739	FE,BH
21	Solid Waste Processing Fly Ash Silos (10,479 tons each)	n/a	272,913 (each)	BH
22	Solid Waste Processing Fly Ash Silos (10,479 tons each)	n/a	272,913 (each)	BH
23	Solid Waste Processing Fly Ash Silos (10,479 tons each)	n/a	272,913 (each)	BH

Equipment ID	Description	Maximum Capacity (tons/hour)	Maximum Capacity (tons/year)	Control Device[1]
Solid Waste Handling Circuit				
21va, 22va, 23va	Fly Ash Screw Conveyers	70 (each)	613,200 (each)	FE,SCR
21vb, 22vb, 23vb	Lime Screw Conveyers	10 (each)	87,600 (each)	FE,SCR
21vc, 22vc, 23vc	Lime/Fly Ash Screw Conveyers	80 (each)	700,800 (each)	FE,SCR
21vd, 22vd, 23vd	Lime/Fly Ash Screw Conveyers	80 (each)	700,800 (each)	FE,SCR
37v,38v	Centrifuge Cake Screw Conveyers	150 (each)	1,314,000 (each)	FE,SCR
21s,22s, 23s	Solid Waste Processing (SWP) Pug Mills	600 (each)	3,303,474 (each)	SCR
31v,32v, 33v	Stabilized Sludge Screw Conveyers	600 (each)	3,303,474 (each)	FE,SCR
34v,35v, 36v	Emergency Radial Stacking Conveyers	265	n/a	N/R

Table MH-9A
Outlet Grain Loading and Maximum Air Flow Requirements for Control Devices

Control Device Identification Number	Control Device Type	Emission Point Identification Number	gr/acf[(1)]	Maximum Air Flow (acfm)[(2)]
6ca,6cb,6cc	Baghouses	6e	0.009	175,000
6cd	Baghouse	6e	0.180	950
8c	Baghouse	8e	0.003	28,000
9c	Baghouse	9e	0.003	10,000
10c	Baghouse	10e	0.003	10,000
11c	Baghouse	11e	0.003	2,100
12c	Baghouse	12e	0.003	2,100
13c	Baghouse	13e	0.003	600
14c	Baghouse	14e	0.003	600
15c	Baghouse	15e	0.003	2,700
16c	Baghouse	16e	0.003	2,700
17c	Baghouse	17e	0.003	2,700
18c	Baghouse	18e	0.003	6,400
19c	Baghouse	19e	0.003	6,400
20c	Baghouse	20e	0.003	6,400
21c	Wet Collector	21e	0.030	2,000
22c	Wet Collector	22e	0.030	2,000
23c	Wet Collector	23e	0.030	2,000
24c	Wet Collector	24e	0.009	1,000
25c	Wet Collector	25e	0.009	1,000
26c	Wet Collector	26e	0.009	1,000
27c	Wet Collector	27e	0.009	1,000
28c	Baghouse	28e	0.01	655
29c	Baghouse	29e	0.01	655
30c	Baghouse	30e	0.01	655
31c	Baghouse	31e	0.01	655
32c	Baghouse	32e	0.01	655
33c	Baghouse	33e	0.01	655

(1) gr/acf = grains per actual cubic foot of exit gas. These limits are considered instantaneous limits.
(2) Compliance with the maximum air flow is based on the maximum rated capacity of all blowers feeding the emission point.

Table MH-AR

Source-Specific Applicable Requirements for Material Handling Sources – Harrison Power Station

(Compilation of Applicable Requirements)

Source-Specific Applicable Requirements for Material Handling Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Unit ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Form E	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Requirement Summary	Monitoring / Testing / Recordkeeping / Reporting Requirement Links
ST-2	MH-1	45CSR§13 R13-1477B, A.3	5.1.3.b	**Limit on Amount of Bottom Ash Transported:** The combined amount of bottom ash transported to the landfill area (and then possibly sized and sent offsite) and the bottom ash transported directly offsite shall not exceed 192,000 TPY.	MHTRR-1 MHTRR-6
ST-2	MH-2	45CSR§13 R13-1477B, A.3	5.1.3.c	**Limit on Amount of Fly Ash Transported:** The amount of fly ash, as generated by the Harrison Power Station, to be transported to the landfill (FA_{LF}) shall not exceed the amount as calculated in the following equation: FA_{LF} (TPY) = 256,000 + ((250,000 - FA_{OS})*0.48) Where, FA_{OS} = Amount of Fly-Ash disposed of from off-site sources.	MHTRR-1 MHTRR-6
ST-2	MH-3	45CSR§13 R13-1477B, A.3	5.1.3.c	**Limit on Amount of Fly Ash Disposed in Landfill:** The maximum amount of fly ash to be disposed of in the landfill shall not exceed 376,000 TPY from the Harrison Power Station and 506,000 TPY total from both Harrison Power Station and offsite sources	MHTRR-1 MHTRR-6
ST-2	MH-4	45CSR§13 R13-1477B, A.3	5.1.3.d	**Limit on Amount of FGD Sludge Disposed:** The amount of flue gas desulfurization (FGD) sludge to be disposed of either in the landfill or offsite shall not exceed 3,000,000 TPY.	MHTRR-1 MHTRR-6
ST-2	MH-5	45CSR§13 R13-1477B, A.3	5.1.3.e	**Limit on Fly Ash Surface Bulldozing Operations:** Landfill fly ash surface bulldozing shall be limited to 160 hours per year.	MHTRR-1 MHTRR-6
ST-2	MH-6	45CSR§13 R13-1477B, A.5	5.1.5	**Minimum Stabilized Sludge Moisture Content:** Stabilized sludge shall be maintained at a minimum of 30% moisture, by weight, prior to final deposition at any landfill.	MHTRR-6

Source-Specific Applicable Requirements for Material Handling Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Unit ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Form E	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Requirement Summary	Monitoring / Testing / Recordkeeping / Reporting Requirement Links
CRU-03 C-11	MH-7	40CFR 60.252(c)	6.1.1	**Opacity Limit:** Opacity of any discharge gases to the atmosphere shall be less than 20%.	MHTRR-4 MHTRR-5 MHTRR-6
All Lime Handling, Lime Storage, Lime Slurry Handling, Absorber Sludge Handling, Solid Waste Handling, and Fly Ash Handling Equipment Listed In Table MH-8A	MH-8	45CSR13 R13-1477A & B	5.1.1	**Throughput Limits and Control Equipment Requirements**: In accordance with the information filed in Permit Application R13-1477A, R13-1477B and any amendments thereto, the maximum throughputs in Table MH-8A (attached) shall not be exceeded, and, at a minimum, the control equipment specified in Table MH-8A shall be installed, maintained, and operated so as to minimize particulate matter emissions.	MHTRR-1 MHTRR-3 MHTRR-7
All Control Devices Listed In Table MH-9A	MH-9	45CSR13 R13-1477 A & B	5.1.2	**Particulate Control Equipment Capacity Limits and Outlet Grain Loading Limits:** In accordance with the information filed in Permit Application R13-1477A, R13-1477B, and any amendments thereto, particulate matter (PM) emissions from the emission points listed in Table MH-9A shall not exceed the limitations given in Table MH-9A and the maximum exit gas flows from the control devices as listed in Table MH-9A shall not be exceeded.	MHTRR-3
LRCH, 11va, 12va	MH-10	45CSR13 R13-1477, Cond. A.3	5.1.3.a	**Limit on Annual Input to Lime Handling System**: The input of lime into the lime handling system shall not exceed 627,546 tons per year	MHTRR-1 MHTRR-7

Source-Specific Applicable Requirements for Material Handling Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Unit ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Form E	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Requirement Summary	Monitoring / Testing / Recordkeeping / Reporting Requirement Links
LRCH, 11va, 12va	MH-11	45CSR13 R13-1477, Cond. A.3	5.1.3.f	**Operating Hours Limit on Lime Unloading Operations:** Lime unloading operations shall be limited to 2,920 hours per year.	MHTRR-7
LRCH, 6si, 6sj, 8sa, 8sb, 8sg, 8sh, 13, 14, 11va, 12va, 37, 38, 9va, 10va, 24s, 25s, 26s, 27s, 24v, 25v, 26v, 27v 15va, 16va, 17va, 15vb, 16vb, 17vb, 33, 34, 35, 18va, 19va, 20va, 18vb, 19vb, 20vb, 21va, 22va, 23va, 21vb, 22vb, 23vb, 21vc, 22vc, 23vc, 21vd, 22vd, 23vd, 21s, 22s, 23s, 21. 22. 23, 37v, 38v, 37, 38	MH-12	45CSR13 R13-1477B, B.2 45CSR§7-3.1 45CSR§7-3.2	5.1.6	**Opacity Limit – Process Sources:** The emission of smoke and/or particulate matter into the open air having greater than twenty (20) percent opacity from any process source operation is prohibited, except as noted in Subsections 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 of 45CSR §7-3. This requirement does not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.	MHTRR-8
13, 14, 21, 22, 23, 33, 34, 35, 37, 38	MH-13	45CSR13 R13-1477B, B.2 45CSR§7-3.7	5.1.6	**Visible Emissions Limit – Storage Structures:** No visible emissions are permitted from any storage structures associated with any manufacturing processes that are required to have a full enclosure and be equipped with a particulate matter control device.	MHTRR-8

Source-Specific Applicable Requirements for Material Handling Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Unit ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Form E	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Requirement Summary	Monitoring / Testing / Recordkeeping / Reporting Requirement Links
LRCH, 6si, 6sj, 8sa, 8sb, 8sg, 8sh, 13, 14, 11va, 12va, 37, 38, 9va, 10va, 24s, 25s, 26s, 27s, 24v, 25v, 26v, 27v 15va, 16va, 17va, 15vb, 16vb, 17vb, 33, 34, 35, 18va, 19va, 20va, 18vb, 19vb, 20vb, 21va, 22va, 23va, 21vb, 22vb, 23vb, 21vc, 22vc, 23vc, 21vd, 22vd, 23vd, 21s, 22s, 23s, 21. 22. 23, 37v, 38v, 37, 38	MH-14	45CSR13 R13-1477B, B.2 45CSR§7-4.1	5.1.6	**Particulate Weight Emission Limits – Process Sources**: Particulate matter may not be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of the quantity specified under the appropriate source operation type in Table 45-7A of 45CSR§7.	MHTRR-3

Source-Specific Applicable Requirements for Material Handling Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Unit ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Form E	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Requirement Summary	Monitoring / Testing / Recordkeeping / Reporting Requirement Links
LRCH, 6si, 6sj, 8sa, 8sb, 8sg, 8sh, 13, 14, 11va, 12va, 37, 38, 9va, 10va, 24s, 25s, 26s, 27s, 24v, 25v, 26v, 27v 15va, 16va, 17va, 15vb, 16vb, 17vb, 33, 34, 35, 18va, 19va, 20va, 18vb, 19vb, 20vb, 21va, 22va, 23va, 21vb, 22vb, 23vb, 21vc, 22vc, 23vc, 21vd, 22vd, 23vd, 21s, 22s, 23s, 21. 22. 23, 37v, 38v, 37, 38	MH-15	45CSR13 R13-1477B, B.2 45CSR§7-5.1	5.1.6	**Process Fugitive Particulate Control Requirement**: Process or storage structures generating fugitive particulate matter may not operate unless equipped with a system, which may include, but not be limited to, process equipment design, control equipment design or operation and maintenance procedures, to minimize the emissions of fugitive particulate matter. To minimize means such system shall be installed, maintained and operated to ensure the lowest fugitive particulate matter emissions reasonably achievable.	MHTRR-8
N/A	N/A	R13-2988; Condition 4.1.1, 4.1.2, and 4.1.3; Condition 4.1.8.	New	Emissions from activities shall not exceed any of the short-term or long-term emissions limitations specified in the tables under 4.1.1, 4.1.2, and 4.1.3.	N/A
N/A	N/A	R13-2988; Condition 4.1.4	New	The facility's annual throughput of total coal shall not exceed 500,000 tons per year, based on a 12-month rolling total.	N/A
N/A	N/A	R13-2988; Condition 4.1.5; 45CSR§2-5.1.	New	Permittee shall no operate any source of fugitive particulate matter unless it is equipped with a fugitive dust control system, which is operated and maintained in such a manner as to minimize the emissions of fugitive particulate matter.	N/A

Source-Specific Applicable Requirements for Material Handling Sources – Harrison Power Station

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Emission Unit ID (Reference Attachment D "Emissions Units Table" For Key)	Link From Form E	Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Requirement Summary	Monitoring / Testing / Recordkeeping / Reporting Requirement Links
N/A	N/A	R13-2988; Condition 4.1.6; 40 CFR §60.254(b)	New	(1) Owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater; (2) Owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf); (3) equipment used in the loading, unloading and conveying operation of open storage piles are not subject to the 10% opacity limitations from Item 1 above.	N/A
N/A	N/A	R13-2988; Condition 4.1.7; 40 CFR §60.254(c)	New	Fugitive Coal Dust Emissions Control Plan for Subpart Y; owner or operator of an open storage pile, including the loading, unloading, and conveying operations of the affected facility, must prepare and operate the facility in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in R13-2988 Conditions 4.1.7(c)(1) through (6).	N/A
N/A	N/A	R13-2988; Condition 4.1.9; 40 CFR§13-5.11.	New	Operation and maintenance of air pollution control equipment. Install, maintain, and operate all pollution control equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth by any State rule, federal regulation, or alternative control plan approved by the Secretary.	N/A

Note: Conditions highlighted in blue font pertain to the Rapid Discharge Rail Unloader (RDRU) system that was approved under Permit R13-2988. At the date of this application, the system has not yet been operated or installed at the Harrison facility.

Table MH-TRR

MHTRR. Materials Handling Sources – Harrison Power Station – Emissions Unit Testing, Recordkeeping and Reporting Requirements

(Compilation of Monitoring, Testing, Reporting and Recordkeeping Requirements)

MHTRR. Materials Handling Sources – Harrison Power Station - Emissions Unit Testing, Recordkeeping and Reporting Requirements				
Link from Applicable Requirement	**Emission Unit ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Requirement Summary**
MHTRR-1	ST-2, All Lime Handling, Lime Storage, Lime Slurry Handling, Absorber Sludge Handling, Solid Waste Handling, and Fly Ash Handling Equipment Listed In Table MH-8A	45CSR13 R13-1477B, A3	5.1.3	Record material throughput and hours of operation. All annual limits are calculated using a rolling yearly total. A rolling yearly total shall mean the sum of the material throughput at any given time for the previous twelve (12) months.
	All facility emission units	45CSR§30-5.1.c	5.4.1	Maintain a record of each visible emission observation, including any data required by 40 CFR Part 60, Appendix A, Method 9, on site for at least five (5) years after the date of the observation. Each record shall include the date, time, name of observer, name of emission unit, applicable visible emission requirement, and the results of each observation. The records shall also include any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control systems are inoperable.

MHTRR. Materials Handling Sources – Harrison Power Station - Emissions Unit Testing, Recordkeeping and Reporting Requirements				
Link from Applicable Requirement	**Emission Unit ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Requirement Summary**
MHTRR-3	All Control Devices Listed In Table MH-9A servicing the following Emissions Units: LRCH, 6si, 6sj, 8sa, 8sb, 8sg, 8sh, 13, 14, 11va, 12va, 37, 38, 9va, 10va, 24s, 25s, 26s, 27s, 24v, 25v, 26v, 27v 15va, 16va, 17va, 15vb, 16vb, 17vb, 33, 34, 35, 18va, 19va, 20va, 18vb, 19vb, 20vb, 21va, 22va, 23va, 21vb, 22vb, 23vb, 21vc, 22vc, 23vc, 21vd, 22vd, 23vd, 21s, 22s, 23s, 21. 22. 23, 37v, 38v, 37, 38	45CSR13 R13-1477B, A.6 R13-1477B, B.5 R13-1477B, B.6	5.2.1 5.2.2	**Test Methods for PM Emissions:** Tests that are required by the Director to determine compliance with the emission limitations for this emissions unit shall be conducted in accordance with the methods as set forth in a.) and b.) below. The Director may require a different test method or approve an alternative method in light of any new technology advancements that may occur. Compliance testing shall be conducted at the maximum permitted operating conditions unless otherwise specified by the Director. a.) Tests to determine compliance with PM emission limits shall be conducted in accordance with 45CSR7A. b.) Submit to the Director of Air Quality a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place.

MHTRR. Materials Handling Sources – Harrison Power Station - Emissions Unit Testing, Recordkeeping and Reporting Requirements				
Link from Applicable Requirement	**Emission Unit ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Requirement Summary**
MHTRR-4	CRU-03	45CSR §30-5.1c 40 CFR 60.254	6.2.1	**Monitoring and Testing Requirements:** Emission unit CRU-03 shall be observed visually at least each calendar month during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions using 40 C.F.R. 60 Appendix A, Method 22. If visible emissions are observed during these monthly observations, or at any other time, that appear to exceed the allowable visible emission requirement in Section 8.1.1, visible emissions evaluations in accordance with 40 C.F.R. 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one month from the time of the observation. A visible emissions evaluation in accordance with 40 C.F.R. 60 Appendix A, Method 9 shall not be required under condition Section 8.2.1 if the visible emissions condition is corrected in a timely manner; the emission unit CRU-03 is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.
MHTRR-5	CRU-03	40 CFR 60.254	6.3.1	**Performance Test Methods:** In conducting the performance tests which may be required by 40 CFR §60.8, reference methods and procedures shall be based on the test methods in appendix A of 40 CFR 60, or other methods and procedures as specified in 40 CFR §60.8, except as provided in 40 CFR §60.8(b).
MHTRR-6	CRU-03	45CSR §30-5.1c	6.4.1	**Records Retention:** Retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date.

MHTRR. Materials Handling Sources – Harrison Power Station - Emissions Unit Testing, Recordkeeping and Reporting Requirements				
Link from Applicable Requirement	**Emission Unit ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Requirement Summary**
MHTRR-7	All Lime Handling, Lime Storage, Lime Slurry Handling, Absorber Sludge Handling, Solid Waste Handling, and Fly Ash Handling Equipment Listed In Table MH-8A plus ST-2	45CSR13 R13-1477B, B.7	5.4.2	**Throughput and Bulldozing Recordkeeping Requirements:** For the purposes of determining compliance with maximum throughput limits set forth in Section 5.1.3, the applicant shall maintain monthly records of the throughputs of the specified materials and the hours of operation of the bulldozing operations.

MHTRR. Materials Handling Sources – Harrison Power Station - Emissions Unit Testing, Recordkeeping and Reporting Requirements				
Link from Applicable Requirement	**Emission Unit ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Requirement Summary**
MHTRR-8	LRCH, 6si, 6sj, 8sa, 8sb, 8sg, 8sh, 13, 14, 11va, 12va, 37, 38, 9va, 10va, 24s, 25s, 26s, 27s, 24v, 25v, 26v, 27v 15va, 16va, 17va, 15vb, 16vb, 17vb, 33, 34, 35, 18va, 19va, 20va, 18vb, 19vb, 20vb, 21va, 22va, 23va, 21vb, 22vb, 23vb, 21vc, 22vc, 23vc, 21vd, 22vd, 23vd, 21s, 22s, 23s, 21. 22. 23, 37v, 38v, 37, 38.	45CSR§30-5.1.c.	3.4.4	**Fugitive Dust Control:** Maintain records indicating the use of dust suppressants or any other suitable dust control measures applied at the facility. Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs. Maintain records of all scheduled and unscheduled maintenance and state any maintenance or corrective actions taken as a result of the weekly and/or monthly inspections, the times the fugitive dust control systems were inoperable, and any corrective actions taken.
N/A		R13-2988, Condition 4.3.1	New	Records of Monitoring - permittee shall keep records of the following: (a) date, place and time of sampling; (b) date of analyses; (c) company performing analyses; (d) analytical method; (e) results of analyses; and (f) operating conditions at time of measurement/sampling.

MHTRR. Materials Handling Sources – Harrison Power Station - Emissions Unit Testing, Recordkeeping and Reporting Requirements				
Link from Applicable Requirement	**Emission Unit ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Requirement Summary**
N/A		R13-2988, Condition 4.3.2	New	Permittee shall maintain accurate records of all required pollution control equipment inspections and/or preventative maintenance procedures.
N/A		R13-2988, Condition 4.3.3	New	Permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of air pollution control equipment during which excess emissions occur. Records shall include the equipment involved, steps taken to minimize emissions, duration, and estimated increase of emissions resulting from incident.
N/A		R13-2988, Condition 4.3.4	New	Monitor and record the amount of coal processed through the facility on a monthly basis.
N/A		R13-2988, Condition 4.3.5	New	Records of any Method 22 or Method 9 testing in order to determine compliance with Conditions 4.2.1 and 4.2.2 of Permit R13-2988 shall be maintained on site for at least five (5) years; records shall be certified and made available to the WVDEP Director upon request.
N/A		R13-2988, Condition 4.4.1	New	Any violation of the allowable visible emission requirement for any emission source discovered during observation using 40 CFR 60, Appendix A, Method 9 must be reported in writing to the Director of DAQ as soon as practicable, but within ten (10) calendar days of the occurrence, and shall include, at a minimum, the following information: results of testing, cause or suspected cause, and corrective measures taken.

MHTRR. Materials Handling Sources – Harrison Power Station - Emissions Unit Testing, Recordkeeping and Reporting Requirements				
Link from Applicable Requirement	**Emission Unit ID (See Attachment D "Equipment Table" For Key)**	**Applicable Requirement Citation**	**Permit Condition Number from Permit R30-03300015-2009**	**Requirement Summary**
N/A		R13-2988, Condition 4.2.1; 40CFR§60.255(b), (b)(2), (b)(2)(i) and (b)(2)(ii)	New	Compliance with 40 CFR 60, Subpart Y: conduct performance testing in accordance with §60.8 and methods identified in §60.257; conduct initial performance testing and subsequent testing when any 6-minute average opacity in most recent performance test exceeds half the applicable opacity limit within 90 days of that test; if all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be completed within 12 calendar months of that previous test.
N/A		R13-2988, Condition 4.2.2; 40CFR§60.255(f) and (f)(1)	New	Alternative monitoring method for compliance with 40 CFR 60, Subpart Y: In accordance with §2.3 of Method 22 of Appendix A-7, conduct one daily 15-second observation each operating day for each affected process (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. If visible emissions are observed, adjust operations and demonstrated within 24 hours that no visible emissions are observed; if visible emissions are still observed, conduct Method 9 observation within 45 operating days. Conduct monthly visual observations of all processes and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible. Conduct Method 9 visible emissions testing once every five (5) calendar years for each affected facility.
N/A		R13-2988, Condition 4.2.2(2); 40CFR§60.255(f)(2)	New	Alternative monitoring method for compliance with 40 CFR 60, Subpart Y: prepare site-specific monitoring plan for a digital opacity compliance system for approval by the Administration or delegated authority as detailed in R13-2988, Condition 4.2.2(2).

Note: Conditions highlighted in blue font pertain to the Rapid Discharge Rail Unloader (RDRU) system that was approved under Permit R13-2988. At the date of this application, the system has not yet been operated or installed at the Harrison facility.

ATTACHMENT E
Miscellaneous Emissions Units

Cooling Towers
Paved Roads
Unpaved Roads
Gasoline UST
Wastewater Treatment
Insignificant Tanks

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
Cool-01	Cooling Towers (2)	N/A

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Natural Draft Cooling Towers (2), each rated at 585,000 gpm.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date: 1971	**Installation date:**	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
585,000 gpm circulating water rate (each)

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
585,000 gpm (each)	N/A	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	121.75	533.26
Particulate Matter (PM_{10})	121.75	533.26
Total Particulate Matter (TSP)	121.75	533.26
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.).

Emissions based upon design drift rate of 0.03%, and a TDS+TSS value of 1,639 ppm.
Assumed that TSP = PM_{10} = $PM_{2.5}$

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for Cool-01

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for Cool-01

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
PVR	Paved Roads	Water Truck

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
This unit consists of all paved roads at the facility including those serving deliveries and haulage to landfills. Approximately 12.52 miles of paved roads exist on-site.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A
Construction date:	**Installation date:**	**Modification date(s):**
N/A	N/A	N/A

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	N/A	8,760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	23.70	56.82
Particulate Matter (PM_{10})	156.18	378.98
Total Particulate Matter (TSP)	813.39	1,961.63
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.).

Emissions based upon Paved Road activity – AP-42 Section 13.2.1 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Requirement Summary
45CSR13 R13-1477B, Condition A.4	5.1.4	**Fugitive Dust Control – Haul Roads**: Fugitive dust control measures for haul roads shall be utilized and maintained in such a manner as to minimize dust generation and atmospheric entrainment. Those measures shall include a continuous program of watering haul road(s) and by wet-vacuum sweeping of paved haul roads at all times haulage trucks are in operation unless such haul roads are adequately wetted by natural rainfall. a. Water truck to be utilized shall be equipped with manufactured-type spray nozzles which are pressurized per manufacturer's recommended guidelines for controlling fugitive dust emissions. b Vacuum sweeper shall be of the type that utilizes wet vacuuming and filtration prior to exhausting air. c. A maximum speed limit of 15 miles per hour shall be maintained on all unpaved roads. A clear and visible sign shall be posted at the beginning of all unpaved roads clearly displaying this speed limit.
45CSR13 R13-1477B, Condition B.2 45CSR§7-5.2	5.1.6	**Particulate Matter Control of Roads:** Maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

__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.)

Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Requirement Summary
45CSR13 R13-1477B, Condition B.7	5.4.2	**Water Truck Recordkeeping Requirement:** For the purposes of determining compliance with the water truck requirement in Condition 5.1.4, maintain a certified daily and monthly record of water truck usage. Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or his/her duly authorized representative upon request.

Are you in compliance with all applicable requirements for this emission unit? __X_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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
UPVR	Unpaved Roads	Water Truck

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
This unit consists of emissions from all unpaved roads at the facility (limited to coal pile and disposal area vicinity). Approximately 0.2 miles of unpaved roads exist on-site.

Manufacturer:	**Model number:**	**Serial number:**
N/A	N/A	N/A

Construction date:	**Installation date:**	**Modification date(s):**
N/A	N/A	

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

Maximum Hourly Throughput	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
N/A	N/A	8760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	2.53	3.37
Particulate Matter (PM_{10})	25.33	33.69
Total Particulate Matter (TSP)	86.36	114.86
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.).

Emissions based upon Unpaved Road activity – AP-42 Section 13.2.2 (Revised 11/2006).

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Requirement
45CSR13 R13-1477B, Condition A.4	5.1.4	**Fugitive Dust Control – Haul Roads**: Fugitive dust control measures for haul roads shall be utilized and maintained in such a manner as to minimize dust generation and atmospheric entrainment. Those measures shall include a continuous program of watering haul road(s) and by wet-vacuum sweeping of paved haul roads at all times haulage trucks are in operation unless such haul roads are adequately wetted by natural rainfall. a. Water truck to be utilized shall be equipped with manufactured-type spray nozzles which are pressurized per manufacturer's recommended guidelines for controlling fugitive dust emissions. b Vacuum sweeper shall be of the type that utilizes wet vacuuming and filtration prior to exhausting air. c. A maximum speed limit of 15 miles per hour shall be maintained on all unpaved roads. A clear and visible sign shall be posted at the beginning of all unpaved roads clearly displaying this speed limit.
45CSR13 R13-1477B, Condition B.2 45CSR§7-5.2	5.1.6	**Particulate Matter Control of Roads:** Maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

__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.)

Applicable Requirement Citation	Permit Condition Number from Permit R30-03300015-2009	Emissions Unit-Specific Requirement Summary
45CSR13 R13-1477B, Condition B.7	5.4.2	**Water Truck Recordkeeping Requirement:** For the purposes of determining compliance with the water truck requirement in Condition 5.1.4, maintain a certified daily and monthly record of water truck usage. Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or his/her duly authorized representative upon request.

Are you in compliance with all applicable requirements for this emission unit? __X_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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
U2HN	Harrison Gasoline UST	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2,000 gallon underground storage tank used to store gasoline for site vehicles.

Manufacturer: N/A	**Model number:** N/A	**Serial number:** N/A
Construction date:	**Installation date:** 1990	**Modification date(s):**

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 2,000 gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:** 15,080 gallons	**Maximum Operating Schedule:** 8,760 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes __X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data

Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	0.014	0.064

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.).

EPA Tanks software (Version 4.0.9b)

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

Gasoline storage tank shall be loaded by submerged fill –
45CSR21-23.2.a.1

__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.)

Reports of excess emissions. -- Except as provided in section 9.3 ("variance") of 45CSR21, for each occurrence of excess emissions expected to last more than 7 days, within 1 business day of becoming aware of such occurrence, supply the Director by letter with the following information:

a. The name and location of the facility;
b. The subject sources that caused the excess emissions;
c. The time and date of first observation of the excess emissions; and
d. The cause and expected duration of the excess emissions.
f. The proposed corrective actions and schedule to correct the conditions causing the excess emissions.
45CSR21-5.2 (Not in current Title V operating permit)

Are you in compliance with all applicable requirements for this emission unit? __X__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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
WASTEWATER	Harrison Wastewater Operations	None

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Wastewater operations for Harrison station include two ≈ 19 MMgal capacity lagoons.

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

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
Lagoon 1 - 18.9 MM gallons;
Lagoon 2 – 19.4 MM gallons

Maximum Hourly Throughput:	**Maximum Annual Throughput:** 6,084.55 MMgal/yr	**Maximum Operating Schedule:** 8,760 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes __X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data

Criteria Pollutants	Potential Emissions	
	PPH	**TPY**
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	7.04	30.84

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.).

EPA WATER9 software.

Supporting emission calculation information is provided in Appendix A.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific applicable requirements for WASTEWATER

__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.)

There are no emissions unit-specific applicable requirements for WASTEWATER

Are you in compliance with all applicable requirements for this emission unit? __X__ 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:	**Emission unit name:**	**List any control devices associated with this emission unit.**
Insig Tanks	Insignificant Storage Tanks	

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Storage tanks that store volatile organic (or non-volatile/ non-organic) liquids that are not subject to any applicable state or federal requirements. Emissions from these tanks are negligible based on the products stored, tank capacity and annual throughputs.

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

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): See attached table for list of tank capacities and product stored.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:** 8760 hours per year

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes __X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data

Criteria Pollutants	**Potential Emissions**	
	PPH	**TPY**
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)	Negligible	

Hazardous Air Pollutants	**Potential Emissions**	
	PPH	**TPY**
	Negligible	

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.).

Applicable Requirements
List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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. There are no applicable requirements for the tanks grouped in this emissions unit
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.) There are no monitoring, testing, recordkeeping or reporting requirements for the tanks grouped in this emissions unit.
Are you in compliance with all applicable requirements for this emission unit? X Yes ___No If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Harrison Power Station
Storage Tank Inventory for Emission Unit: Insig Tanks

Tank ID#	Year Installed	Tank Capacity (gal)	Stored Substance
A3HN	1991	10,000	Sulfuric Acid Tank 2
A4HN	1978	10,000	Sulfuric Acid Tank 1
A6HN	1980	12,000	Coal Flow Additive
A7HN	1980	12,000	Coal Flow Additive
A8HN	1980	12,000	Coal Flow Additive
A9HN	1971	1200	Propylene glycol
A10HN	1971	1200	Propylene glycol
A11HN	1971	1200	Propylene glycol
A12HN	2002	500	Propylene glycol
A14HN	2000	4,000	Phosphonate
A15HN	1971	750,000	Chemical Cleaning Waste
A16HN	1971	300	No. 2 Fuel Oil
A17HN	1971	300	No. 2 Fuel Oil
A18HN	1971	200	No. 2 Fuel Oil
A19HN	1978	125,000	Diesel Fuel
A20HN	1990	4000	Kerosene
A21HN	1974	800	Turb. Oil Reservoir
A22HN	1974	800	Turb. Oil Reservoir
A23HN	1974	800	Turb. Oil Reservoir
A24HN	1974	800	Turb. Oil Reservoir
A25HN	1974	800	Turb. Oil Reservoir
A26HN	1974	800	Turb. Oil Reservoir
A27HN	1971	800	Oil Reservoir
A28HN	1971	800	Oil Reservoir
A29HN	1971	800	Oil Reservoir
A30HN	1971	12,200	Turbine Oil Reservoir
A31HN	1971	12,200	Turbine Oil Reservoir
A32HN	1971	12,200	Turbine Oil Reservoir
A33HN	1971	932	Turbine Oil Filter
A34HN	1971	932	Turbine Oil Filter
A35HN	1971	932	Turbine Oil Filter
A36HN	1971	300	Hydraulic Oil
A37HN	1971	300	Hydraulic Oil
A38HN	1971	300	Hydraulic Oil
A39HN	1971	1,000	Waste Oil
A51HN	1989	1,200	Waste Oil
A52HN	1984	100	Hazardous Waste Oil
A53HN	1990	12,000	Dozer Fuel Oil
A80HN	1995	2000	Polymer
A95HN	1995	275	No. 2 Fuel Oil
A97HN	1971	1500	Biocide DGH
A98HN	1971	1500	Biocide QUAT
A301HN	1971	250	Loop Seal Oil
A302HN	1971	250	Loop Seal Oil
A303HN	1971	250	Loop Seal Oil
A163HN	App 1980	10	Part Cleaner Tank
A164HN	App 1980	50	Part Cleaner Tank
A173HN	App 1980	50	Part Cleaner Tank
A166HN	App 1980	50	Parts Cleaner Tank
A167HN	App 1980	50	Parts Cleaner Tank
A299HN	1972	15,000	Clean Turbine Oil

Tank ID#	Year Installed	Tank Capacity (gal)	Stored Substance
A300HN	1972	15,000	Waste Turbine Oil
A96HN	1985	330	Ammonium Hydroxide
A101HN	1985	600	Polymer (Nalco 2706)
A102HN	1985	100	Coagulant (Nalco7735)
A103HN	1995	50	Sodium Sulfite
A104HN	1968	600	(Nalco LCS 3800)
A107HN	1995	340	Biocide (Nalco H-135)
A109HN	1995	340	Biocide (Nalco H-135)
A110HN	1995	300	Sodium Hypochlorite (15%)
A116HN	1968	75	Ammonium Hydroxide
A117HN	1968	75	Ammonium Hydroxide
A118HN	1968	75	Ammonium Hydroxide
A120HN	1968	50	Trisodium Phosphate
A121HN	1968	50	Ammonium Hydroxide-
A122HN	1968	75	Calgon C-5
A123HN	1968	100	Sodium Hypochlorite (15%) (Potable Water)
A125 HN	2000	3135	Polypropylene Glycol
A126HN	2000	3135	Polypropylene Glycol
A164HN	2001	13450	Urea Solution (40%)
A165HN	2001	13450	Urea Solution (40%)
A166HN	2001	40000	Urea Solution (40%)
A167HN	2002	2000	Biocide (Nalco 7320)
A175HN	2001	200	Hydraulic Oil
A176HN	2001	200	Hydraulic Oil
A177HN	2001	200	Hydraulic Oil
A178HN	1991	65	Lube Oil
A179HN	1991	65	Lube Oil
A180HN	1991	65	Lube Oil
A181HN	1991	65	Lube Oil
A182HN	2001	65	Hydraulic Oil
A183HN	2001	65	Hydraulic Oil
A184HN	2001	65	Hydraulic Oil
A281HN	2001	110	Lube Oil
A282HN	2001	110	Lube Oil
A283HN	2001	110	Lube Oil
A284HN	2001	110	Lube Oil
A285HN	2001	110	Lube Oil
A286HN	2001	110	Lube Oil
A287HN	1991	110	Lube Oil
A288HN	1991	110	Lube Oil
A289HN	1991	110	Lube Oil
A290HN	1991	110	Lube Oil
A291HN	1991	110	Lube Oil
A292HN	1991	110	Lube Oil
A294HN	2002	500	Propylene Glycol
A295HN	2002	500	Propylene Glycol
A296HN	2002	100	Propylene Glycol
A297HN	2002	2500	Biocide (Nalco 7320)

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
UR-1	UR-1	Dust Collectors 28c, 29c, 30c, 31c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Four (4) Urea Storage Silos (each with 9,000-cubic foot capacity), each venting to a dust collector.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1994	1994	n/a

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
9,000 cubic feet.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
25 tons urea	219,000 tons urea	8760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)	0.22	0.98
Particulate Matter (PM_{10})	0.22	0.98
Total Particulate Matter (TSP)	0.22	0.98
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.).

Emissions based upon (4) separate collectors, each with outlet grain loading of 0.01 gr/cf, flow rate of 655 cfm, and 8760 hours of operation.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for UR-1

__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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for UR-1

Are you in compliance with all applicable requirements for this emission unit? _X__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:	**Emission unit name:**	**List any control devices associated with this emission unit:**
UR-2	UR-2	Dust Collectors 32c, 33c

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Two (2) Urea Hoppers (handling 16 TPH each of dry pelletized urea), each venting to a dust collector.

Manufacturer:	**Model number:**	**Serial number:**

Construction date:	**Installation date:**	**Modification date(s):**
1994	1994	n/a

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
9,000 cubic feet.

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
16 tons urea (each)	140,160 tons urea (each)	8760 hours

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___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

Emissions Data			
Criteria Pollutants	Potential Emissions		
	PPH	TPY	
Carbon Monoxide (CO)			
Nitrogen Oxides (NO_X)			
Lead (Pb)			
Particulate Matter ($PM_{2.5}$)	0.11	0.49	
Particulate Matter (PM_{10})	0.11	0.49	
Total Particulate Matter (TSP)	0.11	0.49	
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.).

Emissions based upon (2) separate collectors, each with outlet grain loading of 0.01 gr/cf, flow rate of 655 cfm, and 8760 hours of operation.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). 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.

There are no emissions unit-specific requirements for UR-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.)

There are no emissions unit-specific testing, recordkeeping, reporting requirements for UR-2

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

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

Attachment G
Air Pollution Control Device Forms

ATTACHMENT G - Air Pollution Control Device Form

Control device ID numbers: 6ca, 6cb, 6cc	**List all emission units associated with this control device.** LRCH, 6si, 6sj	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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+%

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

This baghouse is a 175,000 CFM fabric filter baghouse designed with a grain loading of 0.003 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 6cd	**List all emission units associated with this control device.** LRCH	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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%	85%

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

This dust collector is a 947 CFM vacuum system designed with a grain loading of 0.18 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 8c	**List all emission units associated with this control device.** 8sa, 8sb, 8sg, 8sh	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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+%

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

This baghouse is a 28,000 CFM fabric filter baghouse designed with a grain loading of 0.003 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID numbers: 9c, 10c	**List all emission units associated with this control device.** 13, 14, 9va, 10va	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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+%

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

These are 10,000 CFM fabric filters designed as part of a pneumatic conveyor system with an outlet grain loading of 0.003 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** The fabric filter is an inherent part of the pneumatic conveying process equipment.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID numbers: 11c, 12c	**List all emission units associated with this control device.** 37, 38, 11va, 12va	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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+%

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

These are 2,100 CFM fabric filters designed as part of a pneumatic conveyor system with an outlet grain loading of 0.003 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** The fabric filter is an inherent part of the pneumatic conveying process equipment.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID numbers: 13c, 14c	**List all emission units associated with this control device.** 13s, 14s, 13v, 14v	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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+%

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

These control devices are 600 CFM fabric filters designed with an outlet grain loading of 0.003 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID numbers: 15c, 16c, 17c	**List all emission units associated with this control device.** 15va, 16va, 17va, 15vb, 16vb, 17vb, 33, 34, 35	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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+%

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

These are 2,700 CFM fabric filters designed as part of a pneumatic conveyor system with an outlet grain loading of 0.003 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** The fabric filter is an inherent part of the pneumatic conveying process equipment.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID numbers: 18c, 19c, 20c	**List all emission units associated with this control device.** 18va, 19va, 20va, 18vb, 19vb, 20vb, 21, 22, 23	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	___ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator		___ 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+%

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

These are 6,400 CFM fabric filters designed as part of a pneumatic conveyor system with an outlet grain loading of 0.003 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** The fabric filter is an inherent part of the pneumatic conveying process equipment.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID numbers: 21c, 22c, 23c	**List all emission units associated with this control device.** 21va, 22va, 23va, 21vb, 22vb, 23vb, 21vc, 22vc, 23vc, 21vd, 22vd, 23vd, 21s, 22s, 23s	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) _X_ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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%	90%

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

These wet scrubbers are designed with a 2,000 CFM outlet with a grain loading of 0.03 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID numbers: 24c, 25c, 26c, 27c	**List all emission units associated with this control device.** 24v, 25v, 26v, 27v, 24s, 25s, 26s, 27s	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) _X_ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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%	90%

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

These wet scrubbers are designed with a 1,000 CFM outlet with a grain loading of 0.009 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FGD-1	**List all emission units associated with this control device.** STACK1	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) _X_ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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
SO_2	100%	95%

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

The FGD Wet Scrubbing System has a scrubbing agent flow rate of 105,000 gpm at 2.26×10^6 ACFM.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification. Device is exempt from 40 CFR 64 CAM requirements because it is utilized to comply with the Acid Rain Program Requirements. In addition, a certified CEM is used to measure SO_2 emissions in the exhaust flow and demonstrate continuous compliance.**

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

The monitoring of SO_2 emission in the exhaust stream with the certified CEM is the primary method used to indicate the control device is operating properly.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FGD-2	**List all emission units associated with this control device.** STACK2	
Manufacturer:	**Model number:**	**Installation date:** 1995

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) _X_ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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
SO_2	100%	95%

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

The FGD Wet Scrubbing System has a scrubbing agent flow rate of 105,000 gpm at 2.26×10^6 ACFM.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification. Device is exempt from 40 CFR 64 CAM requirements because it is utilized to comply with the Acid Rain Program Requirements. In addition, a certified CEM is used to measure SO_2 emissions in the exhaust flow and demonstrate continuous compliance.**

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

The monitoring of SO_2 emission in the exhaust stream with the certified CEM is the primary method used to indicate the control device is operating properly.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: FGD-3	**List all emission units associated with this control device.** STACK3	
Manufacturer:	**Model number:**	**Installation date:** 1995

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) _X_ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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
SO_2	100%	95%

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

The FGD Wet Scrubbing System has a scrubbing agent flow rate of 105,000 gpm at 2.26×10^6 ACFM.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification. Device is exempt from 40 CFR 64 CAM requirements because it is utilized to comply with the Acid Rain Program Requirements. In addition, a certified CEM is used to measure SO_2 emissions in the exhaust flow and demonstrate continuous compliance.**

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

The monitoring of SO_2 emission in the exhaust stream with the certified CEM is the primary method used to indicate the control device is operating properly.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: ESP-1	**List all emission units associated with this control device.** STACK1	
Manufacturer: American Standard	**Model number:** S.O.7-61475	**Installation date:** 1972

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter
___ Carbon Bed Adsorber
___ Carbon Drum(s)
___ Catalytic Incinerator
___ Thermal Incinerator
___ Wet Plate Electrostatic Precipitator
___ Venturi Scrubber
___ Packed Tower Scrubber
___ Other Wet Scrubber
___ Condenser
___ Flare
___ Multiclone
___ Single Cyclone
___ Cyclone Bank
___ Other (describe) _____
_X_ 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%	93%

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

This Electrostatic Precipitator has a collection plate area of 374,400 square feet, designed for flow capacity of 2.079×10^6 ACFM.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

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

Primary and secondary voltage and current, secondary power and spark rate for each of the fields is monitored and logged in an electronic data acquisition system. In addition, total secondary power level for the entire ESP is also calculated and logged.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: ESP-2	**List all emission units associated with this control device.** STACK2	
Manufacturer: American Standard	**Model number:** S.O.7-61475	**Installation date:** 1973

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) __ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare __ Other (describe) _____

___ Wet Plate Electrostatic Precipitator _X_ 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%	93%

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

This Electrostatic Precipitator has a collection plate area of 374,400 square feet, designed for flow capacity of 2.079×10^6 ACFM.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

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

Primary and secondary voltage and current, secondary power and spark rate for each of the fields is monitored and logged in an electronic data acquisition system. In addition, total secondary power level for the entire ESP is also calculated and logged.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: ESP-3	**List all emission units associated with this control device.** STACK3	
Manufacturer: American Standard	**Model number:** S.O.7-61475	**Installation date:** 1974

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) ________

___ Wet Plate Electrostatic Precipitator _X_ 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%	93%

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

This Electrostatic Precipitator has a collection plate area of 374,400 square feet, designed for flow capacity of 2.079×10^6 ACFM.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.**

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

Primary and secondary voltage and current, secondary power and spark rate for each of the fields is monitored and logged in an electronic data acquisition system. In addition, total secondary power level for the entire ESP is also calculated and logged.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SCR-1	**List all emission units associated with this control device.** STACK1	
Manufacturer: Haldor Topsoe	**Model number:**	**Installation date:** 2003

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter
___ Carbon Bed Adsorber
___ Carbon Drum(s)
___ Catalytic Incinerator
___ Thermal Incinerator
___ Wet Plate Electrostatic Precipitator
___ Venturi Scrubber
___ Packed Tower Scrubber
_ _ Other Wet Scrubber
___ Condenser
___ Flare
___ Multiclone
___ Single Cyclone
___ Cyclone Bank
___ Settling Chamber
_X_ Other (describe) _Selective Catalytic Reduction (SCR)_
_ _ 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
NOx	100%	82%

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

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Device is exempt from 40 CFR 64 CAM requirements because it is utilized to comply with the Acid Rain Program Requirements. In addition, a certified CEM is used to measure SO_2 emissions in the exhaust flow and demonstrate continuous compliance.

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

The monitoring of NOx emissions in the exhaust stream with the certified CEM is the primary method used to indicate the control device is operating properly.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SCR-2	**List all emission units associated with this control device.** STACK2	
Manufacturer: Haldor Topsoe	**Model number:**	**Installation date:** 2003

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	__ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	_X_ Other (describe) _Selective Catalytic Reduction (SCR)__
___ Wet Plate Electrostatic Precipitator		__ 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
NOx	100%	82%

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

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Device is exempt from 40 CFR 64 CAM requirements because it is utilized to comply with the Acid Rain Program Requirements. In addition, a certified CEM is used to measure SO_2 emissions in the exhaust flow and demonstrate continuous compliance.

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

The monitoring of NOx emissions in the exhaust stream with the certified CEM is the primary method used to indicate the control device is operating properly.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: SCR-3	**List all emission units associated with this control device.** STACK3	
Manufacturer: Haldor Topsoe	**Model number:**	**Installation date:** 2003

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter	___ Venturi Scrubber	___ Multiclone
___ Carbon Bed Adsorber	___ Packed Tower Scrubber	___ Single Cyclone
___ Carbon Drum(s)	_ _ Other Wet Scrubber	___ Cyclone Bank
___ Catalytic Incinerator	___ Condenser	___ Settling Chamber
___ Thermal Incinerator	___ Flare	_X_ Other (describe) _Selective Catalytic Reduction (SCR)_ ___
___ Wet Plate Electrostatic Precipitator		_ _ 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
NOx	100%	82%

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

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Device is exempt from 40 CFR 64 CAM requirements because it is utilized to comply with the Acid Rain Program Requirements. In addition, a certified CEM is used to measure NOx emissions in the exhaust flow and demonstrate continuous compliance.

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

The monitoring of NOx emissions in the exhaust stream with the certified CEM is the primary method used to indicate the control device is operating properly.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 28c, 29c, 30c, 31c	**List all emission units associated with this control device.** UR-1	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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%

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

These dusts collector are 655 CFM bin vents designed with a grain loading of 0.01 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 32c, 33c	**List all emission units associated with this control device.** UR-2	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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%

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

These dusts collector are 655 CFM bin vents designed with a grain loading of 0.01 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 28c, 29c, 30c, 31c	**List all emission units associated with this control device.** UR-1	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other: Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator ___ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ 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%

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

These dusts collector are 655 CFM bin vents designed with a grain loading of 0.01 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: 32c, 33c	**List all emission units associated with this control device.** UR-2	
Manufacturer:	**Model number:**	**Installation date:** 1994

Type of Air Pollution Control Device:

_X_ Baghouse/Fabric Filter
___ Venturi Scrubber
___ Multiclone
___ Carbon Bed Adsorber
___ Packed Tower Scrubber
___ Single Cyclone
___ Carbon Drum(s)
___ Other: Wet Scrubber
___ Cyclone Bank
___ Catalytic Incinerator
___ Condenser
___ Settling Chamber
___ Thermal Incinerator
___ Flare
___ Other (describe) _____
___ Wet Plate Electrostatic Precipitator
___ 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%

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

These dusts collector are 655 CFM bin vents designed with a grain loading of 0.01 gr/scf.

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

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** Pre-control emissions do not exceed Title V major source threshold.

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

Emission Inspection: Inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs.