ALLEGHENY COUNTY
ACHD
HEALTH DEPARTMENT

AIR QUALITY PROGRAM

301 Thirty-ninth Street, Bldg. #7
Pittsburgh, PA 15201-1891

Major Source/Major Modification
INSTALLATION PERMIT

Issued To: **Orion Power Midwest, L.P.**
Cheswick Power Station
Pittsburgh & Porter Streets
Springdale, PA 15144

ACHD Permit#: **0054-I004a**

Date of Issuance: April 2, 2007

Date Amended: April 20, 2010

Expiration Date: (See Section III.12)

Issued By: Sandra Etzel
Sandra L. Etzel
Air Pollution Control Mgr.

Prepared By: **David Good**
Air Quality Engineer

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AMENDMENTS (provided for information only):

DATE	*SECTION*
4/20/10	Section II: Revised the last sentence of the installation description and revised the new stack designation to S001a. Section IV: Condition IV.8.d.- corrected the reference to Condition IV.8a and b. Section V: Revised all instances of "main boiler" to "stack 001a."Conditions V.A.1.a, 1.b, and 1.c – clarified that those particulate matter, PM10 and PM2.5 emission rates apply during coal combustion only and not when coal and natural gas are simultaneously combusted. Conditions V.A.1.f, h, and i - corrected the citation from §2103.05 to §2105.03. Condition V.A.1.g – clarified that the emissions from the stack are after controls (FGD System); removed "Coal" from the heading of the second column of Table V-A-1; corrected the footnotes and revised the allowable lead emission rate from 0.072 lb/hr and 0.315 TPY. Condition V.A.1.g; Condition V.A.1.i – deleted the requirement to submit a CAM plan and added the wording to allow for the revision of the PM10, PM2.5 and H2SO4 emission limits to be revised based on stack test data; Condition V.A.1.j – clarifies that the PM10 and PM2.5 emission limits do not include H2SO4 until the final permit limits are established. Condition V.A.2.a. – added a sentence consistent with §2108.02 allowing for the extension of the test date; Condition V.A.2.a.1)b) revising the PM2.5 testing procedure; Condition V.A.2.b.- added lead; Condition V.A.2.c – deleted lead; Condition V.A.3.c – monitoring according to a CAM plan was deleted and replaced with specific monitoring for the FGD; Condition V.A.3.d. – clarified that the COM data will not be suitable for compliance with §2104.01. Condition V.A.3.e was added; Condition V.A.4.a.10) – deleted CAM plan recordkeeping and added the requirement to record the data monitored in Condition V.A.3.c.; Condition V.A.4.a.13) was added; Condition V.A.5.c.1) – added lead content reporting; Condition V.A.5.c.5) and c.6) were deleted; Condition V.A.5.c.8) deleted reporting of the CAM plan data and was revised to require time periods when the FGD is operated below 3 spray levels. Conditions were renumbered as appropriate. Section V.II – the Emissions Summary Table has been updated consistent with the permit and to indicate it is a summary of the emission limits in this permit.

I. CONTACT INFORMATION

All inquiries concerning this permit should be directed to:

Facility Location:	**Cheswick Power Station** Pittsburgh & Porter Streets Springdale, PA 15144
Permittee/Owner:	**Orion Power Midwest, L.P.** 121 Champion Way, Suite 200 Canonsburg, PA 15317
Responsible Official:	**Matt Greek**
Title:	Vice President
Company:	**RRI Energy, Orion Power Midwest, L.P.**
Address:	1000 Main St., Office 1662 Houston, TX 77002
Telephone Number:	713-497-7560
Fax Number:	724-597-8879
Facility Contact:	**Stephanie A. Yauger**
Title:	Environmental Safety/Health Coordinator
Telephone Number:	724-275-1409
Fax Number:	724-275-1540
E-mail Address:	**syauger@rrienergy.com**

AGENCY ADDRESSES:

ACHD Contact:	**Chief Engineer** Allegheny County Health Department Air Quality Program 301 39th Street, Building #7 Pittsburgh, PA 15201-1891
EPA Contact:	**Enforcement Programs Section (3AP12)** USEPA Region III 1650 Arch Street Philadelphia, PA 19103-2029

II. FACILITY AND INSTALLATION DESCRIPTION

FACILITY DESCRIPTION

The Cheswick Power Station is an electric generating facility located on Pittsburgh and Porter Streets in Springdale, PA. The plant is composed of one main boiler exhausting to one stack, which fires coal (including synfuel) as the primary fuel and natural gas as an auxiliary fuel for startup, shutdown, and during upset conditions. Pollution control equipment for the main boiler includes low NOx burners, electrostatic precipitation with flue gas conditioning, and selective catalytic reduction. The plant also has a No. 2 oil-fired auxiliary boiler which exhausts to a separate stack. The facility is a major source of sulfur dioxide (SO_2), nitrogen oxides (NO_X), particulate matter (PM), particulate matter < 10 microns in diameter (PM-10), particulate matter < 2.5 microns in diameter (PM-2.5), carbon monoxide emissions (CO), and hazardous air pollutants (HAPs); and is a minor source of volatile organic compounds (VOCs), as defined in section 2101.20 of Article XXI.

INSTALLATION DESCRIPTION

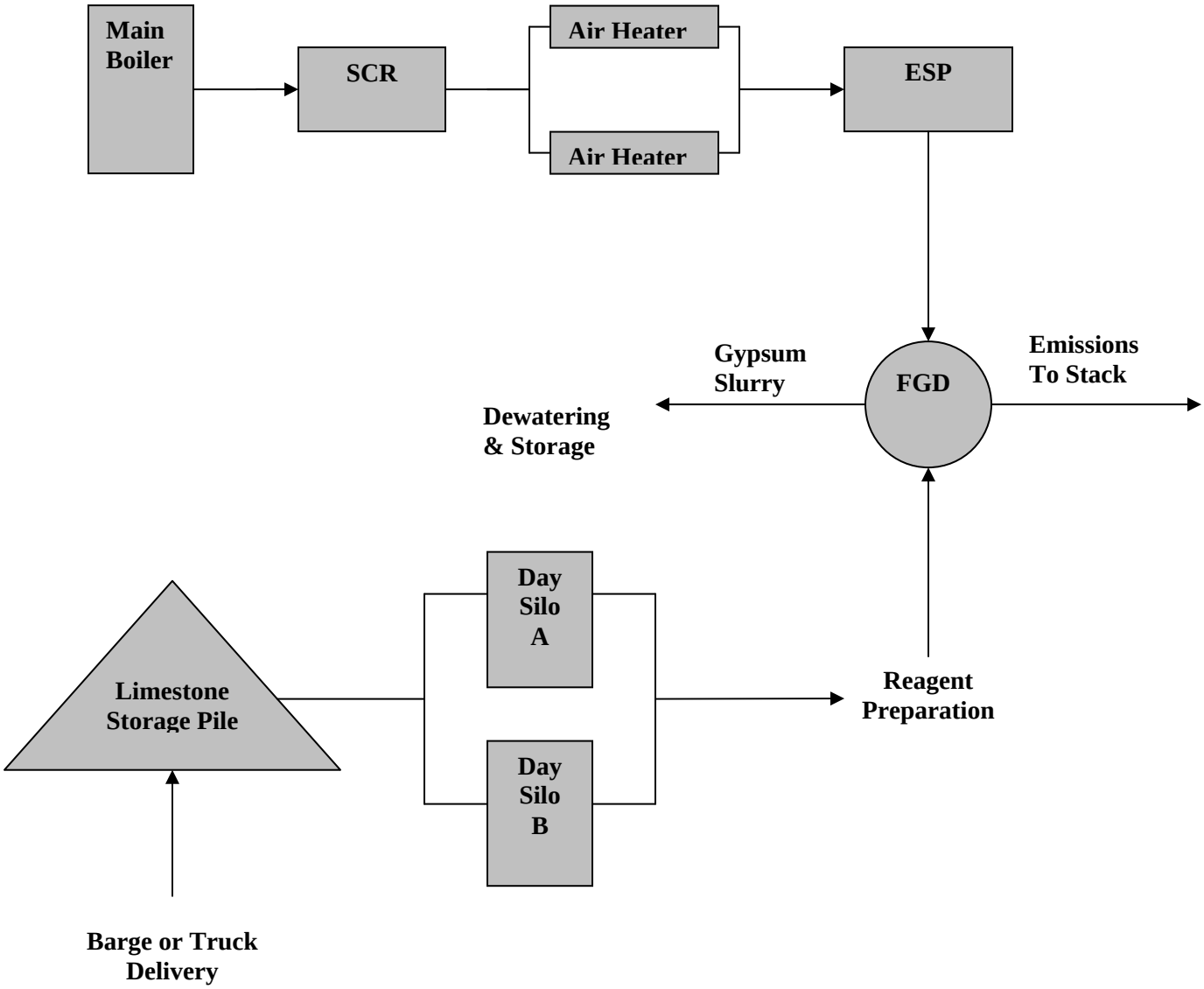
This permit is for the installation of a Flue Gas Desulfurization (FGD) unit on the main boiler at the Cheswick Power Station to reduce sulfur dioxide (SO_2) emissions and allowance consumption for current and anticipated future emission trading program under CAIR. The FGD unit will be a wet limestone scrubber with forced oxidation. The unit will produce wallboard quality synthetic gypsum for commercial use. The installation will include limestone and gypsum handling systems, a gypsum dewatering system, an absorber system, FGD reagent preparation system, FGD wastewater treatment, a 1 MW emergency diesel generator, additional cooling tower capacity and associated equipment and control instrumentation. The estimated SO_2 removal efficiency is 98%. A new reinforced concrete chimney with a single flue will be constructed at the GEP height of 552.5 feet. The FGD and associated materials handling equipment, including the gypsum dewatering and absorber systems, and the emergency diesel generator, are considered new sources with respect to Article XXI §2102.04.

Installation Emission Unit Summary:

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
S-001a	Main Boiler No.1, Fossil-fuel Tangentially-Fired	Flue Gas Desufurization Unit, ESP & SCR	5,500 MMBtu/Hr Rated 6,000 MMBtu/Hr Maximum	Bituminous Coal/ Synfuel/Natural Gas	S-001a
NA	Limestone Handling	Fugitive Dust Controls, Minimum Moisture Content & Maximum Silt Content	392,214 Tons Limestone/yr	Limestone	Fugitive
NA	Gypsum Handling	Fugitive Dust Controls	576,351 Tons Gypsum/yr	Gypsum	Fugitive
A & B	Limestone Day Silos A and B	Baghouse – Each Silo	1 Day FGD Limestone Throughput	Limestone	A & B

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
CT-1	Cooling Tower Additional Cell	Drift Eliminators	6,500 gpm	NA	NA
NA	Emergency Generator	None	1 MW	Diesel	S-003
NA	Paved Roads	Fugitive Dust Controls	Approximately 26,900 VMT	NA	NA

Process Flow Diagram:



DECLARATION OF POLICY

Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.

The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of *Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control*. The subject equipment has been conditionally approved for installation. The equipment shall be installed and operated in conformity with the plans, specifications, conditions, and instructions that are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable federal, State and local laws and regulations.

III. GENERAL CONDITIONS -- MAJOR MODIFICATION

1. Prohibition of Air Pollution (§2101.11)

It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit or Article XXI, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:

a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
b. Cause an exceedance of the ambient air quality standards established by §2101.10 of Article XXI; or
c. May reasonably be anticipated to endanger the public health, safety, or welfare.

2. Nuisances (§2101.13)

Any violation of any requirement of this Permit shall constitute a nuisance.

3. Definitions (§2101.20)

a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.

b. Unless specified otherwise in this permit or an applicable regulation, a “year” shall be defined as any 12 consecutive months.

c. **PM-10** means particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured by an applicable reference method, or equivalent

or alternative method, specified by the EPA or by a method specified in Article XXI or this permit.

d. **PM-2.5** means particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers as measured by an applicable reference method, or equivalent or alternative method, specified by the EPA or by a method specified in Article XXI or this permit.

4. Certification (§2102.01)

Any report, or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or Article XXI, and all equivalent compliance techniques that have been approved by the Department, shall be properly installed, maintained, and operated consistent with good air pollution control practice.

6. Conditions (§2102.03.c)

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02 for any person to fail to comply with any terms or conditions set forth in this permit.

7. Transfers (§2102.03.e)

This permit shall not be transferable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b.

8. Effect (§2102.03.g)

Issuance of this permit shall not in any manner relieve any person of the duty to fully comply with the requirements of Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of Article XXI or this Permit, whether occurring before or after the issuance of such permit. Further, the issuance of this permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of Article XXI or this Permit.

9. General Requirements (§2102.04.a)

It shall be a violation of this Permit giving rise to the remedies set forth in Article XXI §2109 for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment to which this Permit applies unless either:

a. The Department has first issued an Installation Permit for such source or equipment; or

b. Such action is solely a reactivation of a source with a current Operating Permit, which is approved under §2103.13 of Article XXI.

10. Conditions (§2102.04.e)

Further, the initiation of installation, modification, replacement, reconstruction, or reactivation under this Installation Permit and any reactivation plan shall be deemed acceptance by the source of all terms and conditions specified by the Department in this permit and plan.

11. Revocation (§2102.04.f)

a. The Department may, at any time, revoke this Installation Permit if it finds that:
   1) Any statement made in the permit application is not true, or that material information has not been disclosed in the application;
   2) The source is not being installed, modified, replaced, reconstructed, or reactivated in the manner indicated by this permit or applicable reactivation plan;
   3) Air contaminants will not be controlled to the degree indicated by this permit;
   4) Any term or condition of this permit has not been complied with;
   5) The Department has been denied lawful access to the premises or records, charts, instruments and the like as authorized by this Permit; or

b. Prior to the date on which construction of the proposed source has commenced the Department may, revoke this Installation Permit if a significantly better air pollution control technology has become available for such source, a more stringent regulation applicable to such source has been adopted, or any other change has occurred which requires a more stringent degree of control of air contaminants.

12. Term (§2102.04.g)

This Installation Permit shall expire in 18 months if construction has not commenced within such period or shall expire one (1) year after such construction has been suspended, if construction is not resumed within such period. In any event, this Installation Permit shall expire upon completion of construction, except that this Installation Permit shall authorize temporary operation to facilitate shakedown of sources and air cleaning devices, to permit operations pending issuance of a related subsequent Operating Permit, or to permit the evaluation of the air contamination aspects of the source. Such temporary operation period shall be valid for a limited time, not to exceed 180 days, but may be extended for additional limited periods, each not to exceed 120 days, except that no temporary operation shall be authorized or extended which may circumvent the requirements of this Permit.

13. Annual Installation Permit Administrative Fee (§2102.10.c & e)

No later than 30 days after the date of issuance of this Installation Permit and on or before the last day of the month in which this permit was issued in each year thereafter, during the term of this permit until a subsequent corresponding Operating Permit or amended Operating Permit is properly applied for, the owner or operator of such source shall pay to the Department, in addition to all other applicable emission and administration fees, an Annual Installation Permit Administration Fee in an amount of $750.

14. Severability Requirement (§2103.12.l)

The provisions of this permit are severable, and if any provision of this permit is determined to by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

15. Reporting Requirements (§2103.12.k)

a. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.

b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

c. All reports submitted to the Department shall comply with the certification requirements of General Condition 4 above.

d. Semiannual reports required by this permit shall be submitted to the Department within 30 days of the end of the calendar half.

e. Quarterly reports required by this permit shall be submitted to the Department within 30 days of the end of the calendar quarter.

16. Minor Installation Permit Modifications (§2102.10.d)

Modifications to this Installation Permit may be applied for but only upon submission of an application with a fee in the amount of $300 and where:

a. No reassessment of any control technology determination is required; and
b. No reassessment of any ambient air quality impact is required.

17. Violations (§2104.06)

The violation of any emission standard established by this Permit shall be a violation of this Permit giving rise to the remedies provided by Article §2109.02.

18. Other Requirements Not Affected (§2105.02)

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable federal, state, or county statute, rule, regulation, or the like, including, but not limited to, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology standards now or hereafter established by the EPA, and any applicable requirement of BACT or LAER as provided by Article XXI, any condition contained in this Installation Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Part I of Article XXI.

19. Other Rights and Remedies Preserved (§2109.02.b)

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit

20. Penalties, Fines, and Interest (§2109.07.a)

A source that fails to pay any fee required under this Permit or article XXI when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with of Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have its permit revoked.

21. Appeals (§2109.10)

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

IV. SITE LEVEL TERMS AND CONDITIONS

1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

2. Visible Emissions (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

a. Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
b. Equal or exceed an opacity of 60% at any time.

3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line.

4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

7. Shutdown of Control Equipment (§2108.01.b)

a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s)

served by such air pollution control equipment is also shut down at all times that such equipment is shut down.

b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.

c. The prior report required by Site Level Condition IV.7.a above shall include:

1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
2) The reasons for the shutdown;
3) The expected length of time that the equipment will be out of service;
4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
7) Such other information as may be required by the Department.

8. Breakdowns (§2108.01.c)

a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.

b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:

1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
2) The nature and probable cause of the breakdown.
3) The expected length of time that the equipment will be inoperable or that the emissions will continue.
4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
5) The estimated quantity of each material being or likely to be emitted.
6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.

7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.

c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.

d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Conditions IV.8.a above and IV.8.b above.

e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.

f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.

9. Cold Start (§2108.01.d)

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant.

10. Monitoring of Malodorous Matter Beyond Facility Boundaries (§2104.04)

The permittee shall take all reasonable action as may be necessary to prevent malodorous matter from becoming perceptible beyond facility boundaries. Further, the permittee shall perform such observations as may be deemed necessary along facility boundaries to insure that malodorous matter beyond the facility boundary in accordance with Article XXI §2107.13 are not perceptible and record all findings and corrective action measures taken.

11. Emissions Inventory Statements (§2108.01.e)

a. Emissions inventory statements in accordance with §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are

required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.

b. The failure to submit any report or update within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

12. Orders (§2108.01.f)

In addition to meeting the requirements Site Level Conditions IV.7 through IV.11, inclusive, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

13. Violations (§2108.01.g)

The failure to submit any report or update thereof required by Site Level Conditions IV.7 through IV.12 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

14. Emissions Testing (§2108.02)

a. **Orders:** No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the permittee shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with the applicable requirements of this permit and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 after startup but shall not extend the time beyond 60 days after achieving full production. Emissions testing shall comply with all applicable requirements of Article XXI, §2108.02.e.

b. **Tests by the Department**: Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.

c. **Testing Requirements.** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.

d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.

e. **Violations**: The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

15. Abrasive Blasting (§2105.51)

a. Except where such blasting is a part of a process requiring an operating permit , no person shall conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.

b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

16. Asbestos Abatement (§2105.62, §2105.63)

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63.

17. Volatile Organic Compound Storage Tanks (§2105.12.a)

No person shall place or store, or allow to be placed or stored, a volatile organic compound having a vapor pressure of 1.5 psia or greater under actual storage conditions in any aboveground stationary storage tank having a capacity equal to or greater than 2,000 gallons but less than or equal to 40,000 gallons, unless there is in operation on such tank pressure relief valves which are set to release at the higher of 0.7 psig of pressure or 0.3 psig of vacuum or at the highest possible pressure and vacuum in accordance with State or local fire codes, National Fire Prevention Association guidelines, or other national consensus standard approved in writing by the Department. Petroleum liquid storage vessels that are used to store produced crude oil and condensate prior to lease custody transfer are exempt from these requirements.

18. Fugitive Emissions (§2105.49)

The person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

a. The use of asphalt, oil, water, or suitable chemicals for dust control;
b. The paving and maintenance of roadways, parking lots and the like;

c. The prompt removal of earth or other material which has been deposited by leaks from transport, erosion or other means;
d. The adoption of work or other practices to minimize emissions;
e. Enclosure of the source; and
f. The proper hooding, venting, and collection of fugitive emissions.

19. Episode Plans (§2106.02)

The permittee shall upon written request of the Department, submit a source curtailment plan, consistent with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02.

20. New Source Performance Standards (§2105.05)

a. It shall be a violation of this permit giving rise to the remedies provided by §2109.02 of Article XXI for any person to operate, or allow to be operated, any source in a manner that does not comply with all requirements of any applicable NSPS now or hereafter established by the EPA, except if such person has obtained from EPA a waiver pursuant to Section 111 or Section 129 of the Clean Air Act or is otherwise lawfully temporarily relieved of the duty to comply with such requirements.

b. Any person who operates, or allows to be operated, any source subject to any NSPS shall conduct, or cause to be conducted, such tests, measurements, monitoring and the like as is required by such standard. All notices, reports, test results and the like as are required by such standard shall be submitted to the Department in the manner and time specified by such standard. All information, data and the like which is required to be maintained by such standard shall be made available to the Department upon request for inspection and copying.

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Flue Gas Desulfurization System:

Process Description:	Main boiler flue gas desulfurization system (FGD)
Max. Design Rate/Units:	1,259,467 dscfm at absorber inlet
Scrubbing Liquid:	Limestone slurry
Byproducts:	Synthetic gypsum

The permittee is also subject to the following conditions:

1. Restrictions

a. Except as specified in condition V.A.1.d below, Particulate matter (PM) emissions exiting Stack-001a shall not exceed 0.080 lb/MMBtu. (§2104.02.a.2.C.)

b. Except as specified in condition V.A.1.d below, PM-10 emissions exiting Stack-001a shall not exceed 0.080 lb/MMBtu. (§2102.07, §2102.04.b.6)

c. Except as specified in condition V.A.1.d below, PM-2.5 emissions exiting Stack-001a shall not exceed 0.080 lb/MMBtu. (§2105.03, §2102.04.b.6)

d. Particulate matter (PM) emissions from Stack-001a when combusting coal and natural gas concurrently in the Main Boiler shall not exceed the allowable emissions (lb/MMBTU) calculated by the formula in §2104.02.a.3. (§2104.02.a.3)

e. Sulfur oxides (SO_X) emissions, expressed as sulfur dioxide, from Stack-001a shall not exceed 1.43 lb/MMBtu on a 12-month rolling average basis. (§2105.03, §2102.04.b.6)

f. The permittee shall operate and maintain the flue gas desulfurization system such that a minimum of three spray levels are operating and maintained at all times while the main boiler is combusting coal or synfuel. (§2105.03; §2102.04)

g. Emissions from Stack-001a shall not exceed the limitations in Table V-A-1: (§2103.12, RACT Order No. 217, §2105.03, §2102.04.b.6, IP No. 0054-I002)

TABLE V-A-1: Stack-001a Emissions

POLLUTANT	lb/hr	Annual Emission Limit tons/year(1)
PARTICULATE MATTER	224.3	982
PM-10	180.0	788
PM-2.5	180.0	788
SULFUR DIOXIDE	10,080(2) 9669(3) 7700(4)	33726
HYDROGEN CHLORIDE	78.0	341.6
HYDROGEN FLUORIDE	9.75	42.7
SULFURIC ACID MIST	357.0	1563.7
LEAD	0.207	0.313

(1) A year is defined as any 12 consecutive months.
(2) Rolling 3 hour average.
(3) Daily (24-hr) average
(4) 12-month rolling average

h. In order to comply with V.A.1.a, V.A.1.b, V.A.1.c and V.A.1.d above, the electrostatic precipitator (ESP) shall be properly operated and maintained. (§2103.12.a.2.B; §2105.03)

i. The PM10, PM2.5 and sulfuric acid mist emission limits in Table V-A-1 shall be re-established using the results obtained from the emissions testing program after startup. Such testing shall be performed in accordance with a Department approved protocol. The revised permit limits will be established incorporating an adequate margin for compliance. (§2103.12.a.2.B; §2105.03)

j. The PM10 and PM2.5 emission limits do not include sulfuric acid mist until the final permit limits are established as specified in V.A.1.i..

2. Testing Requirements

a. The permittee shall perform PM, PM2.5, NO_X, SO_2, SO_3, H_2SO_4, HCl, Hg, lead, and HF emissions testing in Stack-001a within 180 days of commencement of operation of the FGD system in order to determine compliance with the emission limitations specified in condition V.A.1.g above. Emissions testing shall be performed with only 3 FGD spray levels in operation and maximum routine operation of the boiler to establish compliance with this permit. Such testing shall be conducted in accordance with applicable U.S. EPA approved test methods, Article XXI §2108.02, and as approved by the Department. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup, but shall not extend the time beyond 60 days after achieving full production. (§2108.02, §2102.04.b.6, §2105.03)

1) Emissions testing shall be conducted in Stack-001a as follows:

   a) Particulate Matter shall be determined by EPA Method 5,
   b) PM2.5 shall be determined in accordance with an EPA and Department approved test method for PM2.5. In the absence of any EPA approved test method for PM2.5, results of EPA Reference Method 202 or an alternative testing method approved by the Department shall be used to determine PM2.5 emissions.
   c) Nitrogen oxides shall be determined by any of the EPA Methods 7 through 7E,
   d) SO_2 shall be determined by recently calibrated CEMs required in section V.A.3 below,
   e) SO_3 and H_2SO_4 shall be determined by EPA Method 8,
   f) HCl and HF shall be determined by EPA Method 26A,
   g) Lead shall be determined by EPA Method 12;
   h) Mercury emissions shall be determined by a Department-approved test method, and
   i) NOx, SO_2 and Hg emissions may be determined by recently calibrated CEMs required in section V.A.3 below in lieu of reference test methods.

2) Emissions testing on the inlet shall be conducted upon request by the Department as follows:

   a) Inlet HCl shall be determined by EPA Method 26A, and
   b) Inlet SO_2 shall be determined by any of EPA Methods 6 through 6C.

3) All emissions tests required by condition V.A.2.a above shall be conducted with the SCR system in maximum routine operation. (§2108.02, §2102.04.b.6, §2105.03)

4) COM and Method 9 opacity observation data shall be recorded during the emissions testing and provided as part of the test report. (§2108.02, §2102.04.b.6, §2105.03)

5) Analyses of representative samples of the coal combusted during the test shall be provided as part of the test report. Each analysis shall include but not be limited to proximate and ultimate analyses, chlorine, fluorine, mercury, and lead content; percent sulfur; heating value; ash content; moisture content. (§2108.02, §2102.04.b.6, §2105.03)

6) The permittee shall monitor and record the following parameters at the electrostatic precipitator (ESP) during the stack test continuously (or a minimum of once every fifteen minutes) and provide the data as part of the test report: (§2108.02, §2102.04.b.6, §2105.03)

   a) The primary voltage (in volts) and current (in amps) at each transformer on the ESP.
   b) The secondary voltage (in volts) and current (in amps) at each transformer on the ESP, and
   c) The spark rate (in sparks per minute) in each section of the ESP.

7) The permittee shall monitor the following parameters for the selective catalytic reduction (SCR) system during the stack test continuously (or a minimum of once every fifteen minutes) and provide the data as part of the test report: (§2108.02, §2102.04.b.6, §2105.03)

   a) Catalytic bed inlet gas temperature,
   b) Ammonia solution injection rate, and
   c) Ammonia solution concentration.

8) The permittee shall monitor continuously (or a minimum of once every fifteen minutes) the following parameters for the flue gas desulfurization equipment during the stack test and provide the data as part of the test report: (§2108.02, §2102.04.b.6, §2105.03)

a) Absorber liquid flowrate ;
b) Percent limestone in absorber liquid (once during each test run);
c) Differential pressure drop across the absorber ;
d) Flue gas pressure drop across mist eliminators ;
e) Absorber inlet and outlet temperature ;
f) Absorber reaction tank pH ; and
g) Absorber reaction tank gypsum slurry density

9) NO_X, SO_2, volumetric gas flowrate and O_2 or CO_2 shall be determined by CEMs at the outlet stack for the period of testing and minute and hourly average data shall be included in the test report. (§2108.02, §2102.04.b.6, §2105.03)

10) Inlet test ports shall be installed prior to the the FGD unit but after the ESP and SCR. (§2108.02, §2102.04.b.6, §2105.03)

11) All relevant operating parameters (e.g., boiler steam flow, exhaust gas, gross megawatts, heat input and stack flue gas volumetric flow rate; flue gas conditioning system operating parameters, SO_3 treatment system operating parameters, ESP, SCR and FGD operating parameters specified in conditions V.A.2.a.6), V.A.2.a.7) and V.A.2.a.8) above) shall be recorded at appropriate intervals throughout the duration of stack test. Operating data recorded shall be sufficient to establish that the units and the air cleaning devices are being operated at maximum routine operating conditions. A discussion of the recorded operating parameters and values shall be included in the test report. (§2108.02, §2102.04.b.6, §2105.03)

b. The permittee shall conduct emission testing as specified in condition V.A.2.a above initially and at least once every two years after the most recent test for, PM, PM2.5, lead and Hg.

c. Emission testing as specified in condition V.A.2.a above shall be conducted initially and at least once every five years after the most recent test for HCL, SO_3 and H_2SO_4. (§2108.02, §2102.04.b.6, §2105.03)

d. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Article XXI §2108.02. (§2103.12.h.1)

3. Monitoring Requirements

a. The permittee shall install, operate and maintain continuous emission monitoring (CEM) equipment on the new main boiler stack for, NO_X, SO_2 and O_2 or CO_2 in accordance with 40 CFR §51 Appendix P, PADEP Continuous Source Monitoring Manual and Department approval. (§2108.03.a)

1) Continuous monitoring systems for measuring nitrogen oxides shall comply with Performance Specification 2. (40 CFR 51.3.1.2)

2) Continuous monitoring systems for measuring sulfur dioxide shall comply with Performance Specification 2. (40 CFR 51.3.1.3)

3) Continuous monitoring systems for measuring oxygen shall comply with Performance Specification 3. (40 CFR 51.3.1.4)

4) Continuous monitoring systems for measuring carbon dioxide shall comply with Performance Specification 3. (40 CFR 51.3.1.5)

5) The permittee shall install, calibrate, maintain, and operate a continuous monitoring system (CEMS) for the subject boiler, and record the output of the system, for measuring nitrogen oxide emissions discharged to the atmosphere from the new main boiler stack. The CEMS data recorder shall convert the data to the required reporting units in compliance with 25 PA Code §§139.101-139.111 relating to requirements for continuous in-stack monitoring for stationary sources. (§2108.03.b.2, RACT Order No. 217, Condition 1.2)

6) The permittee shall submit the results of the continuous nitrogen oxides monitoring systems on a regular schedule and in a format acceptable to the Department and in compliance with 25 Pa. Code 139.101 – 139.111. (§2108.03.b.3)

7) Continuous NO_X, SO_2 and O_2 or CO_2 monitoring systems shall meet the minimum data availability requirements in 25 Pa. Code 139, Subchapter C. (§2108.03.b.4, §2102.04.b.6)

b. The permittee shall install, certify, operate, and maintain continuous emission monitors in accordance with 40 CFR Part 75 or approved alternative for SO_2, volumetric gas flowrate, NO_x, and CO_2 emissions from the new main boiler stack. (40 CFR 75, Article XXI §2103.22.j, §2103.50)

1) Continuous monitoring systems shall comply with the Installation and Performance Specifications of appendix A of Part 75. (40 CFR 75.10(b))

2) The permittee shall determine and record the heat input for every hour or part of an hour of any fuel that is combusted per Appendix F of Part 75. (40 CFR 75.10(b))

3) Continuous monitoring systems shall meet the minimum data availability requirements in 40 CFR part 75. (40 CFR 75)

4) The NOx and SO_2 CEMs shall record emissions in terms of lb/MMBtu and lb/hr for each pollutant. (§2108.03.b.4, §2102.04.b.6)

c. The permittee shall conduct monitoring of the FGD system as follows (§2102.04.b.6, §2105.03):

a) Pressure drop across the mist eliminators;
b) Pressure drop across the scrubber;
c) Absorber liquid pH; and
d) Number of pumps in operation.

d. The permittee shall install, operate and maintain continuous opacity monitoring (COM) equipment, in accordance with Department approval. The equipment shall be located in the ductwork before the FGD and after the ESP and SCR control devices. The COM shall be calibrated and may be used as an indicator of ESP performance. The COM opacity data will not be suitable for enforcement of §2104.01 visible emissions requirements. (§2108.03.a; §2105.03)

e. On a monthly basis, the permittee shall record the lead content of coal combusted. (The lead content may be provided through vendor analyses or site specific analyses.) (§2102.04.b.6, §2105.03)

4. Record Keeping Requirements

a. The permittee shall keep and maintain the following data for Main Boiler No. 1: (§2102.04.b.6, §2103.12.j)

1) Type and amount of fuel used (tons of coal/day, MMscf of natural gas/day);
2) Amount of synfuel used each month (tons);
3) Records of the type of synfuel binder used each month and the material safety data sheets for each binder used;
4) Steam load (lbs/hr, lbs/day; average daily steam load for each month);
5) Cold starts (date, time and duration of each occurrence);
6) Total operating hours, (hours/day, monthly and 12-month);
7) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment;
8) Stack test protocols and reports;
9) Opacity data recorded by the COM (hourly averages);
10) Data specified to be monitored in condition V.A.3.c above;
11) Sufficient data to demonstrate compliance with condition V.A.1.f above;
12) Data required by 40 CFR Part 75 Subpart F and condition V.A.3.b above for continuous monitors. (40 CFR Part 75, Subpart F) and
13) Monthly average coal sulfur content, chlorine content, ash content and lead content.

b. The permittee shall maintain records of all air pollution control system performance evaluations and all records of calibration checks, adjustments, and maintenance performed on the FGD system and CEMs (including the COM). (§2102.04.b.6, §2103.12.j)

c. The permittee shall maintain a copy of the manufacturer's specifications for the FGD system on-site at all times. (§2102.04.b.6, §2103.12.j)

d. The permittee shall keep a record of the date, time, and cause of the malfunction of the FGD system, and the action taken to correct the malfunction. (§2102.04.b.6, §2103.12.j)

e. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2102.04.b.6, §2103.12.j)

f. The permittee shall keep on-site for a period of five years copies of all reports, certifications, and other submissions and records required under the Acid Rain Program, and all documents used to complete an Acid Rain permit application or to demonstrate compliance with the requirements of the Acid Rain Program and all required monitoring data and support information. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. These records shall be made available to the Department upon request for inspection and/or copying (40 CFR §72.9(f), Article XXI §2103.22.j, §2103.50, §2103.12.j.2)

g. The permittee shall prepare and maintain on-site a QA/QC Plan as described in 40 CFR Part 75 Appendix B. (40 CFR §75.50(a)(4)) The permittee shall also maintain a file of all measurements, data, reports, and other required information for at least five years. (40 CFR §75.54)

5. Reporting Requirements

a. The permittee shall report non-compliance information required to be recorded by V.A.4.e above to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1, §2102.04.b.6)

b. The permittee shall report all cold starts of Main Boiler No. 1 to the Department in accordance with Site Level Condition IV.9 above. (§2108.01.d)

c. Within 30 days of the end of each calendar quarter, the following shall be reported to the Department: (Permit No. 1065009-003-00100, issued December 8, 1981; IP No. 0054-I002, Condition V.A.5.a, issued June 13, 2001; §2103.12.k.1)

1) Monthly average coal sulfur content, chlorine content, ash content and lead content; (The lead content can be provided through vendor analyses or site-specific analyses. In the event that fuel from more than one source is burned in a month, the permittee will provide an estimate of lead content of the blended fuel.)
2) Amount of coal fired each month (tons);
3) Maximum measured sulfur, chlorine and ash content of coal for any sample in each month (mixed coal as fired);
4) Rolling 30-day average SO_2 emissions in lbs/MMBtu and lbs/hr and cumulative 12-month tpy SO_2 emissions;
5) The hourly average and hourly maximum opacities recorded by the COM for each month; and
6) Any time the FGD was operated with less than 3 spray levels in service or the number of pumps necessary to supply sufficient scrubber liquid to operate at 3 spray levels were not in operation.

d. The Designated Representative for the purposes of the Acid Rain Program shall submit to the Department a Compliance Certification Report for each calendar year. (40 CFR §72.90, Article XXI §2103.22.j, §2103.50)

e. The permittee shall provide the Department written notice 30 days prior to dates of periodic relative accuracy testing audits per 40 CFR 75.61(a)(5). (40 CFR §75.21(d), Article XXI §2103.22.j, §2103.50, §2108.02)

f. The Designated Representative shall provide the Department with electronic quarterly emission and heat input reports within 30 days after the end of each calendar quarter. (40 CFR §75.64, Article XXI §2103.22.j, §2103.50)

g. The permittee shall report excess visible emissions at the outlet of the stack to the Department on a semiannual basis. (40 CFR §75.65, Article XXI §2103.22.j, §2103.50).

h. Reporting instances of non-compliance in accordance with condition V.A.5.a above, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. (§2103.12.k.1)

6. Work Practice Standard

a. The permittee shall calibrate, maintain, and operate all instrumentation, process equipment, and control equipment according to manufacturer's recommendations and good engineering practices. (§2105.03)

b. The permittee shall take corrective action if an out of control period occurs to a monitoring system (e.g., continuous emission monitor). (40 CFR §75.24, Article XXI §2103.22.j, §2103.50)

c. The failure to install and operate any continuous emissions monitoring system required by §2108.03 within the time specified, the failure to retain any data or submit any report so required, or the knowing retention or reporting of false date shall be a violation of this permit giving rise to the remedies provided by §2109.02. (§2108.03.f)

7. Additional Requirements

The permittee shall notify the Department in writing ten (10) days prior to start-up of the FGD system. The installation of the equipment included in this permit shall be inspected and approved by the Department before being placed into normal operation. (§2102.04.b.6)

B. FGD Limestone Handling System:

Process Description:	FGD limestone handling system
Throughput:	314,633 tons limestone/yr
System Components	Barge/truck unloading, short term limestone storage pile, back-up limestone stockpile, conveyors, transfer towers, day silos and limestone preparation
Controls:	Fugitive dust controls, baghouses on day silos A & B

The permittee is also subject to the following conditions:

1. Restrictions

a. The permittee shall conduct limestone handling operations in a manner such that emissions from these operations are not visible at or beyond the facility property line at any time. (§2104.05)

b. Particulate matter emissions from limestone crushing, grinding, or screening shall not at any time exceed the rate determined by the following formula (§2104.02.c):

$$A\ (lb/hr) = 0.76E^{0.42}$$

where A = allowable emissions in pounds per hour
E = emission index = (F) x (W) in pounds per hour
F = -process factor for crushing, grinding or screening 20 lbs/ton of feed
W = production or charging rate (tons/hr)

c. Limestone day silos A & B shall each be equipped with exhaust vent dust collectors that shall not cause to be discharged into the atmosphere from either of the two (2) limestone day silo baghouse vents, particulate matter emissions in excess of 0.01 grains/dscf at any time. (§2102.04.b.6, §2105.03)

d. Limestone day silos dust collectors A & B shall be operated at all times within the minimum and maximum differential pressure drop across the collectors as specified in the manufacturer's or vendor's specifications. (§2102.04.b.6, §2105.03)

e. The permittee shall ensure that the limestone handling operations are properly operated to minimize fugitive emissions and control particulate emissions as follows: (§2102.04.b.6, §2105.49)

1) Barge Unloader:
   a) The permittee shall ensure that the barge unloader is properly operated in order to minimize material spillage. The permittee shall ensure prompt clean-up of any spillage at the barge unloading operations upon occurrence.
   b) The permittee shall repair any leaks in chutes and hoppers as necessary.
   c) Material transfer points shall be enclosed to the extent possible.
   d) Transfer points hydraulic crane to receiving hopper, receiving hopper to belt feeder LBF-2, and belt feeder LBF-2 to the stackout conveyor shall be equipped with dust suppression systems and shall be employed as needed to minimize fugitive dust emissions. (note: Phase II labels not available)

2) Short term and Stockpile Storage Piles:
   a) Plant personnel shall instruct limestone trucks to dump as close as practical to the limestone storage area.
   b) Plant personnel shall restrict the number of vehicles on the pile to those engaged only in essential plant operations. Such pile management operations shall be conducted to minimize the disturbance of the piles.
   c) Plant personnel shall ensure that all trucks entering the plant are tarped, free of debris and not leaking. Trucks shall be restricted to drive on designated thoroughfares and shall not drive on road shoulders or other restricted plant areas.
   d) The permittee shall control fugitive particulate emissions from the limestone piles through the use of water, surfactants or water and chemical suppression, as needed.
   e) Storage pile reclaim shall have a dust suppression system installed and operated as required to minimize fugitive emissions.
   f) Pile management shall be conducted with wheeled front-end loaders using techniques and vehicle speeds as required to minimize fugitive dust emissions.

3) Material Conveyors:
   a) Except during maintenance, the permittee shall ensure that all conveyors are covered. Upon cover removal for maintenance, such covers shall be replaced as soon as possible, and prior to routine conveyor operation.
   b) The permittee shall ensure that scrapers on conveyors are maintained in good operating condition.
   c) The permittee shall inspect all belts and ensure that such are in good operating condition to achieve proper tracking and loading.
   d) The permittee shall minimize the operation of unloaded conveyors.
   e) Material transfer points shall be enclosed to the extent possible.
   f) The Stackout conveyor shall discharge material to the short-term storage pile through a telescopic chute employed to minimize fugitive dust emissions from the pile in-loading.
   g) Stamler type feeders ST1, (ST1B Phase II) shall be equipped with dust suppression equipment employed to minimize fugitive dust emissions from the transfer of material to reclaim conveyor (Phase II) and receiving conveyor 3-LF-CNV-9005.

4) Transfer Towers
   a) The permittee shall enclose the transfer towers to minimize the emissions of fugitive dust to the environment.
   b) The permittee shall ensure prompt clean-up of any spillage at or near the transfer towers upon occurrence.
   c) The permittee shall repair any leaks in chutes, hoppers, covers, enclosures or seals.
   d) The permittee shall minimize the operation of unloaded equipment in order to minimize disturbance of loose material.
   e) Transfer points in the transfer towers shall be equipped with dust suppression systems and shall be employed as needed to minimize fugitive dust emissions.

5) Limestone Prep Building:
   a) The permittee shall enclose the prep building to minimize the emissions of fugitive dust to the environment.
   b) The permittee shall ensure prompt clean-up of any spillage at the prep building upon occurrence.
   c) The permittee shall repair any leaks in chutes, hoppers, covers, enclosures or seals.

d) The permittee shall minimize the operation of unloaded equipment in order to minimize disturbance of loose material.
e) Dust suppression equipment shall be employed as needed at the transfer of material from the prep feed conveyor 3-LF-CNV-9007 to conveyor 3-LF-CNV-9010 and at the entrance to the limestone day silos, to minimize fugitive dust emissions.

f. Particulate emissions from the limestone handling operations shall not exceed the limitations in Table V.B.1. below at any time: (§2102.04.b.6)

TABLE V.B.1 Limestone Handling Operations Emission Limitations

Pollutant	Annual Emission Limit tons/year*
Particulate Matter	28.08
PM-10	8.11
PM-2.5	2.3

* A year is defined as any consecutive 12-month period.

g. Particulate emissions from each limestone day silo A and B shall not exceed the limitations in Table V.B.2. below at any time: (§2102.04.b.6)

TABLE V.B.2 Limestone Day Silos A & B Emission Limitations

Pollutant	Annual Emission Limit tons/year* Each
Particulate Matter	1.50
PM-10	1.50
PM-2.5	1.50

* A year is defined as any consecutive 12-month period.

h. The provisions of 40 CFR subpart OOO are applicable to the following affected facilities in fixed nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. (§60.670(a)(1))

i. On and after the date on which the performance test required to be conducted by condition V.B.2.a below is completed, the permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which: (§60.672(a))

1) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
2) Exhibit greater than 7 percent opacity.

j. On and after the sixtieth day after achieving the maximum production rate at which the limestone handling system will be operated, but not later than 180 days after initial startup as required under condition V.B.2.f below, the permittee shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in conditions V.B.1.k below and (e). (§60.672(b))

k. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of conditions V.B.1.i. and V.B.1.j above. (§60.672(d))

l. If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in conditions V.B.1.i. and V.B.1.j above, or the building enclosing the affected facility or facilities must comply with the following emission limits: (§60.672(e))

1) The permittee shall not cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in 40 CFR §60.671.

2) The permittee shall not cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in condition V.B.1.i above.

m. On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under condition V.B.2.f below, the permittee shall not cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity. (§60.672(f))

n. The opacity standards set forth above shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in this permit. (§60.11(c))

o. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. (§60.11(d))

2. Testing Requirements

a. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Department, the permittee of such facility shall conduct performance test(s) and furnish the Department a written report of the results of such performance test(s). (§60.8(a))

b. Performance tests shall be conducted under such conditions as the Department shall specify to the permittee based on representative performance of the affected facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the

performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. (§60.8(c))

c. Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable condition. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the permittee's control, compliance may, upon the Department's approval, be determined using the arithmetic mean of the results of the two other runs. (§60.8(f))

d. In conducting the performance tests required in condition V.B.2.a above, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in this section. Acceptable alternative methods and procedures are given in condition V.B.2.m below. (§60.675(a))

e. Compliance with opacity standards in V.B.2 shall be determined by conducting observations in accordance with Method 9 in appendix A of 40 CFR part 60 or any alternative method that is approved by the Department. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard). (§60.11(b))

f. For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in condition V.B.2.a above unless one of the following conditions apply. If no performance test under condition V.B.2.a above is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under condition V.B.2.a above, the permittee shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Department of the rescheduled date. In these cases, the notification to the Department is as required in condition V.B.2.n below. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under condition V.B.2.a above. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of 40 CFR Part 60. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determing compliance with opacity standards. The permittee of an affected facility shall make available, upon request by the Department, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. (§60.11(e)(1))

g. The permittee of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with condition V.B.2.e above, shall record the

opacity of emissions, and shall report to the Department the opacity results along with the results of the initial performance test required under condition V.B.2.a above. The inability of a permittee to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test. (§60.11(e)(2))

h. The permittee shall determine compliance with the particulate matter standards in condition V.B.1.i above as follows: (§60.675(b))

1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

2) Method 9 and the procedures in conditions V.B.2.e, V.B.2.f and V.B.2.g above shall be used to determine opacity.

i. In determining compliance with the particulate matter standards in condition V.B.1.j above, the owner or operator shall use Method 9 and the procedures in §60.11, with the following additions: (§60.675(c)(1))

1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

3) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

j. In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under condition V.B.1.m above, using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages). (§60.675(c)(2))

k. When determining compliance with the fugitive emissions standard for any affected facility described under condition V.B.1.j above, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply: (§60.675(c)(3))

1) There are no individual readings greater than 10 percent opacity; and

2) There are no more than 3 readings of 10 percent for the 1-hour period.

l. In determining compliance with condition V.B.1.l above, the permittee shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities

inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes. (§60.675(d))

m. The permittee may use the following as alternatives to the reference methods and procedures specified conditions V.B.2.i, V.B.2.j and V.B.2.k above if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used: (§60.675(e))

1)

2) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

3) Separate the emissions so that the opacity of emissions from each affected facility can be read.

n. If, after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Department at least 7 days prior to any rescheduled performance test. (§60.675(g))

o. The permittee of an affected facility shall provide, or cause to be provided, performance testing facilities as follows: (§60.8(e))

1) Sampling ports adequate for test methods applicable to such facility. This includes constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

2) Safe sampling platform(s).

3) Safe access to sampling platform(s).

4) Utilities for sampling and testing equipment.

p. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing, if required, shall be performed in accordance with Article XXI §2108.02 and Site Level Condition IV.14 above, entitled "Emissions Testing." (§2103.12.h.1)

3. Monitoring Requirements

a. Observations of visible emissions from barge unloading, limestone conveying, limestone pile maintenance and storage, transfer towers, and limestone prep building vent exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether any emissions are observed and whether these emissions extend beyond the facility property line. (§2104.05, §2102.04.b.6)

b. A trained employee is an employee who has worked at the plant at least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

Method 9 certification is not a requirement for compliance with condition V.B.3.a above. (§2104.05, §2102.04.b.6)

c. Instrumentation shall be installed to measure the differential pressure drop across the limestone day silo baghouses to within ½" w.c. of actual. (§2102.04.b.6, §2105.03)

d. The permittee shall record the differential pressure drop across the day silo baghouses weekly while the baghouses are treating exhaust flow from the silos. (§2102.04.b.6, §2105.03)

e. The limestone handling system and day silos shall be visibly inspected weekly to determine compliance with condition V.B.1.e above. (§2102.04.b.6, §2105.03)

4. Record Keeping Requirements

a. The permittee shall keep and maintain the following data for the limestone handling and storage equipment (§2102.04.b.6):

1) Limestone throughput (tons/day);
2) A log of time and location of treated pile areas, identification of dust suppressants if applied, dilution ratios of the dust suppressants and diluent used if chemical suppressants are used, and purchase records of the chemical suppressants, if used.
3) Records of the visible emission notations as required by V.B.3.a above;
4) Differential pressure drop across day silos A & B (weekly); and
5) Records of operation, maintenance, inspection, calibration and/or replacement of limestone handling and storage equipment.

b. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a monitoring device is inoperative. (§60.7(b))

c. The permittee shall maintain a file of all measurements, including monitoring device, and performance testing measurements; all monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this 40 CFR 60, subpart OOO recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records. (§60.7(f))

d. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2102.04.b.6)

e. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2102.04.b.6)

5. Reporting Requirements (§2102.04.b.6, §2102.04.e., §2103.12.k

a. The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in conditions V.B.1.i, V.B.1.j, V.B.1.k, V.B.1.l and V.B.1.m above, including reports of opacity observations made using Method 9 to demonstrate compliance with conditions V.B.1.j, and V.B.1.m above and reports of observations using Method 22 to demonstrate compliance with condition V.B.1.l above. (§60.675(f))

b. The subpart A requirement under 40 CFR §60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under this subpart. (§60.675(h))

c. A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator. (§60.675(h)(i))

d. For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the permittee to the Department. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available. (§60.675(h)(i)(1))

e. Any owner or operator subject to the provisions of this part shall furnish the Department written notification or, if acceptable to both the Department and the owner or operator of a source, electronic notification, as follows: (§60.7(a))

1) A notification of the date construction of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. (§60.7(a)(1))

2) A notification of the anticipated date for conducting the opacity observations required by condition V.B.2.f above. The notification shall also include, if appropriate, a request for the Department to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date. (§60.7(a)(6))

f. The permittee shall report the following information to the Department quarterly in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1, §2102.04.b.6)

1) Limestone throughput data required to be recorded by condition V.B.4.a above; and
2) Non-compliance information required to be recorded by V.B.4.d above.

g. Reporting instances of non-compliance in accordance with condition V.B.5.f.2) above does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. (§2103.12.k.1, §2102.04.b.6)

6. Work Practice Standards

a. The permittee shall not, at any time, conduct limestone handling and storage operations unless all equipment is properly operated and maintained according to good engineering and air pollution control practices. (§2105.03, §2102.04.b.6)

b. If any visible emissions from limestone handling and storage operations are observed to extend beyond the facility property line, the permittee shall take reasonable response steps to eliminate the emissions. Failure to take corrective steps shall be considered a deviation from this permit. (§2105.03, §2102.04.b.6)

7. Additional Requirements

a. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR Part 60, subpart OOO, nothing in 40 CFR Part 60, subpart A shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. (§60.11(g))

b. No permittee shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§60.12)

C. FGD Gypsum Handling System:

Process Description:	FGD gypsum handling system
Throughput:	576,351 tons gypsum/yr
System Components	Barge truck loading, gypsum off spec storage pile, conveyors, gypsum dewatering building and on-spec pile storage building
Controls:	Fugitive dust controls, baghouses on day silos A & B

The permittee is also subject to the following conditions:

1. Restrictions

a. The permittee shall conduct gypsum handling operations in a manner such that emissions from these operations are not visible at or beyond the facility property line at any time. (§2104.05)

b. The permittee shall ensure that the gypsum handling operations are properly operated to minimize fugitive emissions and control particulate emissions as follows: (§2102.04.b.6, §2105.49)

1) Gypsum Dewatering Building and On-Spec Pile Storage Building:
   a) The permittee shall cover the gypsum dewatering building and On-Spec Pile Storage Building to minimize the emissions of fugitive dust to the environment.
   b) The permittee shall ensure prompt clean-up of any spillage at the dewatering building and On-Spec Pile Storage Building upon occurrence.
   c) The permittee shall repair any leaks in chutes, hoppers, covers, enclosures or seals.
   d) The permittee shall minimize the operation of unloaded equipment in order to minimize disturbance of loose material.

2) Material Conveyors:
   a) Except during maintenance, the permittee shall ensure that all conveyors are covered. Upon cover removal for maintenance, such covers shall be replaced as soon as possible, and prior to routine conveyor operation.
   b) The permittee shall ensure that scrapers on conveyors are maintained in good operating condition.
   c) The permittee shall inspect all belts and ensure that such are in good operating condition to achieve proper tracking and loading.
   d) The permittee shall minimize the operation of unloaded conveyors.
   e) Material transfer points shall be enclosed to the extent possible.

3) Gypsum Off-Spec Storage Pile:
   a) Plant personnel shall instruct trucks to load as close as practical to the off-spec storage area.
   b) Plant personnel shall restrict the number of vehicles on the pile to those engaged only in essential plant operations.
   c) Plant personnel shall ensure that all trucks exiting the plant are tarped, free of debris and not leaking. Trucks shall be restricted to drive on designated thoroughfares and shall not drive on road shoulders or other restricted plant areas.

4) Barge Loader:
   a) The permittee shall ensure that the barge loading operation is properly operated in order to minimize material spillage. The permittee shall ensure prompt clean-up of any spillage at the barge loading operations upon occurrence.
   b) The permittee shall repair any leaks in chutes and hoppers as necessary.
   c) Material transfer points shall be enclosed to the extent possible.

c. Particulate emissions from the gypsum handling operations shall not exceed the limitations in Table V.C.1. below at any time: (§2102.04.b.6)

TABLE V.C.1 Gypsum Handling Operations Emission Limitations

Pollutant	Annual Emission Limit tons/year*
Particulate Matter	12.81
PM-10	2.77
PM-2.5	0.89

* A year is defined as any consecutive 12-month period.

2. Testing Requirements

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing, if required, shall be performed in accordance with Article XXI §2108.02 and Site Level Condition IV.14 above, entitled "Emissions Testing." (§2103.12.h.1)

3. Monitoring Requirements

The gypsum handling system shall be visibly inspected weekly to determine compliance with condition V.C.1.b above. (§2102.04.b.6, §2105.03)

4. Record Keeping Requirements

a. The permittee shall keep and maintain the following data for the gypsum handling and storage equipment (§2102.04.b.6):

   1) Gypsum throughput (tons/day);
   2) A log of time and location of treated pile areas, identification of dust suppressants if applied, dilution ratios of the dust suppressants and diluent used if chemical suppressants are used, and purchase records of the chemical suppressants, if used.
   3) Records of operation, maintenance, inspection, calibration and/or replacement of gypsum handling and storage equipment.

b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2102.04.b.6)

c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2102.04.b.6)

5. Reporting Requirements

a. The permittee shall report the following information to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1, §2102.04.b.6)

1) Gypsum throughput data required to be recorded by condition V.C.4.a above; and
2) Non-compliance information required to be recorded by V.C.4.b above.

b. Reporting instances of non-compliance in accordance with condition V.C.5.a.2) above does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. (§2103.12.k.1, §2102.04.b.6)

6. Work Practice Standards

If any visible emissions from gypsum handling and storage operations are observed to extend beyond the facility property line, the permittee shall take reasonable response steps to eliminate the emissions. Failure to take corrective steps shall be considered a deviation from this permit. (§2105.03, §2102.04.b.6)

D. Station Cooling, Water Cooling Tower:

Process Description: One cooling tower of cross flow forced draft design, consisting of three (3) identical cells
Capacity: 19,500 gallons recirculating water per minute
Raw Material(s)/Fuel(s): River make-up water
Control Device: Mist eliminators

The permittee is also subject to the following conditions:

1. Restrictions

a. The permittee shall properly maintain and operate the subject cooling towers at all times according to the following conditions: (§2102.04.b.6)

1) The subject unit shall use treated river water at all times.
2) The cooling tower shall be equipped with a mist eliminator which shall operate at all times of unit operation and shall achieve a drift factor of 0.0011% of the circulating water flow or better, as established by the manufacturer.
3) The cooling tower shall be operated and maintained in accordance with the manufacturer's specifications and instructions.

b. Particulate emissions from each cooling tower cell shall not exceed the limitations in Table V.D.1. below at any time: (§2102.04.b.6)

TABLE V.D.1 Cooling Tower Emission Limitations

Pollutant	Hourly Emission Limit lb/hr EACH	Annual Emission Limit tons/year* EACH
Particulate Matter	0.04	0.17
PM-10	0.04	0.17
PM-2.5	0.04	0.17

* A year is defined as any consecutive 12-month period.

2. Testing Requirements:

The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing, if required, shall be performed in accordance with Article XXI §2108.02 and Site Level Condition IV.14 above, entitled "Emissions Testing." (§2103.12.h.1)

3. Monitoring Requirements

The permittee shall monitor the total dissolved solids (TDS) of the make-up water at least once per month. (§2103.12.i, §2102.04.b.6)

4. Record Keeping Requirements

a. The permittee shall keep and maintain the records of TDS required to be monitored by condition V.D.3 above and present such records upon request by the Department. (§2102.04.b.6)

b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2102.04.b.6)

c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2102.04.b.6)

5. Reporting Requirements:

a. The permittee shall report non-compliance information required to be recorded by the Department in V.D.4.b above accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1, §2102.04.b.6)

b. Reporting instances of non-compliance in accordance with condition V.D.5.a above does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. (§2103.12.k.1, §2102.04.b.6)

6. Work Practice Standards:

None unless provided elsewhere.

E. Emergency Generator:

Process Description: Emergency generator
Rating: 21 MMBtu/hr
Raw Material(s)/Fuel(s): Diesel, maximum sulfur content of 0.2% by weight
Control Device: None

The permittee is also subject to the following conditions:

1. Restrictions

a. The emergency generator shall combust only diesel fuel. All diesel fuel combusted shall have a maximum allowable sulfur content of 0.2%, by weight. (§2102.04.b.6)

b. Operation of the diesel generator shall be limited to 500 hours during any 12 consecutive months. (§2102.04.b.6)

c. The diesel generator shall only be operated during emergency conditions or testing. (§2102.04.b.6)

d. Emissions from the subject generator shall not exceed the limitations in Table V.E.1. below at any time: (§2102.04.b.6)

TABLE V.E.1 Emergency Generator Emission Limitations

Pollutant	Hourly Emission Limit lb/hr	Annual Emission Limit tons/year*
PARTICULATE MATTER	0.36	0.09
PM-10	0.36	0.09
PM-2.5	0.36	0.09
NITROGEN OXIDES	55.2	13.80
SULFUR OXIDES	4.40	1.10
CARBON MONOXIDE	6.00	1.50
VOLATILE ORGANIC COMPOUNDS	0.72	0.18

* A year is defined as any 12 consecutive months.

2. Testing Requirements

None except as provided elsewhere.

3. Monitoring Requirements

None except as provided elsewhere.

4. Record Keeping Requirements

a. The permittee shall keep and maintain the following data for the subject generator. (§2102.04.b.6)

1) Fuel consumption (daily, monthly, and 12-month), type of fuel consumed and suppliers' certification of sulfur content, and heating value;
2) Cold starts (date, time and duration of each occurrence);
3) Total operating hours, (hours/day, monthly and 12-month); and
4) Records of operation, maintenance, inspection, calibration and/or replacement of combustion equipment.

b. Records of diesel fuel certifications from fuel suppliers shall be maintained per shipment. Certifications shall include the name of the supplier and a statement from the supplier that the fuel complies with ASTM D975 "Standard Specifications for Diesel Fuel Oils." (§2102.04.b.6)

c. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2102.04.b.6)

d. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2102.04.b.6)

5. Reporting Requirements

a. The permittee shall report the following information to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1, §2102.04.b.6)

1) Monthly and 12-month data required to be recorded by condition V.E.4.a above;
2) Cold start information; and
3) Non-compliance information required to be recorded by V.E.4.c above.

b. Until terminated by written notice from the Department, the requirement for the permittee to report cold starts 24 hours in advance in accordance with §2108.01.d is waived and the permittee may report all cold starts in accordance with Condition V.E.5.a above. (§2103.12.k.1, §2102.04.b.6)

c. Reporting instances of non-compliance in accordance with condition V.E.5.a above does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. (§2103.12.k.1, §2102.04.b.6)

6. Work Practice Standards:

None unless provided elsewhere.

F. Plant Roads

Process Description: Vehicular traffic on plant paved and unpaved roads
Annual Vehicle Miles: 37,313 (paved roads); 15,100 (unpaved roads)
Control Methods: Wet suppression, chemical treatment, road cleaning, and traffic speed enforcement primarily used for fugitive dust control

1. Restrictions:

a. The permittee shall take actions to minimize the potential for fugitive emissions from vehicular traffic, including but not limited to, the following: (§2105.49, §2102.04.b.6)

1) The periodic scraping of fine dust from haul roads;
2) The use of water sprays and dust suppressants;
3) Periodic street sweeping of paved roads, including Pittsburgh Street in front of the plant; and
4) Post and maintain vehicle speed below ten (10) miles per hour.

b. Prior to periods of limestone truck receiving all roads used by the limestone trucks for limestone delivery and subsequent departure shall be water flushed to remove silt loading of the roadways. Continued flushing of the roadways during receiving periods shall be conducted as needed to minimize fugitive dust emissions. (§2102.04.b.6)

2. Testing Requirements (§2103.12.h.1):

None except as specified elsewhere.

3. Monitoring Requirements (§2103.12.i):

The permittee shall maintain a log of the time, location, type and amount of roadway surface treatment required in conditions V.F.1.a and V.F.1.b above. (§2102.04.b.6)

4. Record Keeping Requirements (§2103.12.j):

a. The permittee shall maintain records describing the time, location, type and amount of roadway surface treatment required at condition V.F.3 above. Records shall be maintained on-site for at least five years and provided to the Department upon request. Such records shall include the following: (§2103.12.j, §2102.04.b.6)

1) For paved roads and parking areas:

a) Daily log of time and location of any vacuum sweeping conducted, including daily engine run time or odometer readings;
b) Identification, time and location of any maintenance, repairs, patching, treatment, or repaving of roads; and
c) Maintenance of a log explaining the reasons any required vacuum sweeping was not performed.

2) For unpaved roads and shoulders of paved roads:

a) Daily log of time and location of treated areas;
b) Identification of dust suppressants if applied;

c) Daily log of meter readings of spray bar and/or pump or odometer reading of trucks used to apply water and/or dust suppressants;
d) Daily log of the dilution ratios of the dust suppressants and diluent used if chemical suppressants are used; and,

e) Purchase records of the chemical suppressants, if used.

b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2103.12.h.1, §2102.04.b.6)

c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2103.12.j.2, §2102.04.b.6)

5. Reporting Requirements

a. The permittee shall report non-compliance information required to be recorded by the Department in condition V.F.4.b above in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report. (§2103.12.k.1, §2102.04.b.6)

b. Reporting instances of non-compliance in accordance with condition V.F.5.a above does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. (§2103.12.k.1, §2102.04.b.6)

6. Work Practice Standards

a. In addition to the requirements of condition V.F.1.a above, the permittee shall comply with the operation and control emissions as specified in the Fugitive Dust Emissions Control Plan submitted to the Department as follows:

1) Plant personnel shall ensure that all trucks entering the plant are tarped, free of debris and not leaking, and shall prohibit trucks not complying with such requirements from entering the plant.
2) Trucks shall be restricted to driving on designated thoroughfares and shall not drive on unpaved road shoulders or other restricted plant areas.
3) The permittee shall ensure prompt clean-up of any roadway spillage upon occurrence.

G. Waste Water Treatment Plant Lime Silo

Process Description: Lime silo
Raw Material: Lime
Control Device: Bin vent dust collector

The permittee is also subject to the following conditions:

1. Restrictions

a. The permittee shall conduct lime handling operations in a manner such that emissions from these operations are not visible at or beyond the facility property line at any time. (§2104.05)

b. The WWT limes silo shall be equipped with an exhaust vent dust collector that shall not cause to be discharged into the atmosphere from the silo baghouse vents, particulate matter emissions in excess of 0.01 grains/dscf at any time. (§2102.04.b.6, §2105.03)

c. The WWT lime silo dust collector shall be operated at all times within the minimum and maximum differential pressure drop across the collector as specified in the manufacturer's or vendor's specifications. (§2102.04.b.6, §2105.03)

2. Testing Requirements

a. The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing, if required, shall be performed in accordance with Article XXI §2108.02 and Site Level Condition IV.14 above, entitled "Emissions Testing." (§2103.12.h.1)

3. Monitoring Requirements

a. Instrumentation shall be installed to measure the differential pressure drop across the limes silo baghouse to within ½" w.c. of actual. (§2102.04.b.6, §2105.03)

b. The permittee shall record the differential pressure drop across the silo baghouse weekly while the baghouse is treating exhaust flow from the silo. (§2102.04.b.6, §2105.03)

c. The lime silo shall be visibly inspected weekly to determine compliance with conditions V.G.1.a, V.G.1.b and V.G.1.c above. (§2102.04.b.6, §2105.03)

4. Record Keeping Requirements

a. The permittee shall keep and maintain the following data for the WWT lime silo (§2102.04.b.6):

1) Lime throughput (tons/day); and
2) Records of operation, maintenance, inspection, calibration and/or replacement of control equipment.

b. The permittee shall record all instances of non-compliance with the conditions of this permit upon occurrence along with corrective action taken to restore compliance. (§2102.04.b.6)

c. All records shall be retained by the facility for at least five (5) years. These records shall be made available to the Department upon request for inspection and/or copying. (§2102.04.b.6)

5. Reporting Requirements

a. The permittee shall report the following information to the Department in accordance with General Condition III.15 above. The reports shall contain all required information for the time period of the report: (§2103.12.k.1, §2102.04.b.6)

1) Lime throughput data required to be recorded by condition V.G.4.a.1) above; and
2) Non-compliance information required to be recorded by V.G.4.b above.

b. Reporting instances of non-compliance in accordance with condition V.G.5.b does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8 above, if appropriate. (§2103.12.k.1, §2102.04.b.6)

6. Work Practice Standards

If any visible emissions from the WWT lime silo are observed to extend beyond the facility property line, the permittee shall take reasonable response steps to eliminate the emissions. Failure to take corrective steps shall be considered a deviation from this permit. (§2105.03, §2102.04.b.6)

VI. ALTERNATIVE OPERATING SCENARIOS

No alternative operating scenarios exist for this Installation.

VII. EMISSION LIMITATIONS SUMMARY

[The following Table is provided for information only and is not intended to be an applicable requirement.]

The following is a summary of the combined annual emissions (including fugitives) from the installed equipment contained in this Installation Permit:

POLLUTANT	Tons/year
Particulate Matter	1026.49
PM10	802.48
PM2.5	794.79
Sulfur Oxides	33727.1
Nitrogen Oxides	13.80
Volatile Organic Compounds	0.18
Carbon Monoxide	1.50
HCl	341.6
HF	42.7
H_2SO4	1563.7
Lead	0.313