

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install **06-07792**

A. Source Description

Cardinal Power Plant has submitted a PTI application in order to install a flue gas desulfurization (FGD) systems on Units 1 and 2 of the Cardinal Power Plant. The FGD system uses chemical and mechanical processes to remove SO₂ from flue gas. The processes uses limestone as a reagent and produces gypsum (saleable byproduct). The PTI application is for the installation of limestone and gypsum handling systems, wet ball mills, and an emergency generator. The PTI application also includes a new handling system for SO₃ mitigation material. The system will consist of one of following three reagent injection systems:

1. Magnesium hydroxide injection into the steam generator, w/ ammonia injection into the ductwork upstream of the existing electrostatic precipitator.
2. Magnesium hydroxide injection into the steam generator, w/ hydrated lime injection into the ductwork upstream of the existing electrostatic precipitator.
3. Injection of trona into the ductwork upstream of the existing electrostatic precipitator.

The facility has requested that all three SO₃ mitigation injection systems to be included in the PTI in order to provide flexibility. The emission limit for the SO₃ mitigation system were based on option #2 (hydrated lime) because of this option having the highest fugitive emission limit.

B. Facility Emissions and Attainment Status

Cardinal Power Plant is a major source located in Jefferson County which is in non-attainment for O₃ and PE.

The maximum potential to emit for the FGD material handling & storage, roadway, and the SO₃ mitigation system (F005 - F008) is 682 tons per year of PE before emissions controls and 259 tons per year of PM₁₀ before emissions controls.

C. Source Emissions

The facility will limit it's use of limestone to 780,100 tons of limestone per year. Combined PE emissions from emissions units F005-8 will be restricted to 19.53 tons/year and combined PM₁₀ emissions units will be restricted to 6.46 tons/year.

The following control measures will be taken: watering and/or sweeping of roadways, use of telescoping chutes, partial and complete enclosure of material handling, supression of dust by dry fog system, baghouse/fabric filters on silos, maintaining adequate moisture of storage piles, and other precautionary measures.

D. Conclusion

The project will not result in any new or modified emissions sources that constitute a major modification or new major stationary source, and therefore is not subject to PSD.

The monitoring, record keeping, and reporting requirements are sufficient to provide federally enforceable limitations.



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

RE: DRAFT PERMIT TO INSTALL

JEFFERSON COUNTY

Application No: 06-07792

Fac ID: 0641050002

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
Subpart 000	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 7/14/2005

American Electric Power Cardinal
Patrick Dal Porto
1 Riverside Plaza
Columbus, OH 43215

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of **\$2400** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

JEFFERSON COUNTY

PUBLIC NOTICE

**ISSUANCE OF DRAFT PERMIT TO INSTALL 06-07792 FOR AN AIR CONTAMINANT SOURCE FOR
American Electric Power Cardinal**

On 7/14/2005 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **American Electric Power Cardinal**, located at **306 County Road 7E, Brilliant, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 06-07792:

Barge loader and unloader receiving hopper belt conveyors reclaim hopper material feeders storage silos ball mills front end loader dump trucks.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Bruce Weinberg, Ohio EPA, Southeast District Office, 2195 Front Street, Logan, OH 43138 [(740)385-8501]

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 06-07792

Application Number: 06-07792

Facility ID: 0641050002

Permit Fee: **To be entered upon final issuance**

Name of Facility: American Electric Power Cardinal

Person to Contact: Patrick Dal Porto

Address: 1 Riverside Plaza
Columbus, OH 43215

Location of proposed air contaminant source(s) [emissions unit(s)]:

306 County Road 7E

Brilliant, Ohio

Description of proposed emissions unit(s):

**Barge loader and unloader receiving hopper belt conveyors reclaim hopper material feeders
storage silos ball mills front end loader dump trucks.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.8 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable

American Electric Power Cardinal

PTI Application: 06-07792

Issued: To be entered upon final issuance

Facility ID: 064105000

permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

- ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

12. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

6. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) that the facility has been constructed in accordance with the permit-to-install application and the terms and conditions of the permit-to-install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly (i.e., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. Permit-To-Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	19.6
PM ₁₀	6.5

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F005 - flue gas desulfurization (FGD) material handling, transfer, conveying, silos, and wet ball mills - Limestone and gypsum handling system	OAC rule 3745-31-05 (A)(3)	<p>PE from the FGD material handling system, transfer, conveying, silos and wet ball mills shall not exceed 12.94 pounds per hour.</p> <p>PM₁₀ from the FGD material handling system, transfer, conveying, silos and wet ball mill shall not exceed 6.12 pounds per hour.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.b through A.I.2.d).</p> <p>See Sections A.I.2.a. through A.I.2.e.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(B), OAC rule 3745-31-05(C), and 40 CFR 60.672.</p>
	40 CFR 60.672 (NSPS Subpart OOO)	No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emission which contains particulate matter in excess of 0.022 gr/dscf.

	<p>No owner or operator shall 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.</p> <p>No owner or operator shall 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.</p>
<p>OAC 3745-31-05(C)</p>	<p>See Section A.I.2.f. and A.I.2.g.</p>
	<p>PE from the FGD material handling system, transfer, conveying, silos and wet ball mills shall not exceed 5.82 tons per year, as a 12-month rolling summation.</p>
<p>OAC rule 3745-17-07 (B)(1)</p>	<p>PM₁₀ from the FGD material handling system, transfer, conveying, silos and wet ball mill shall not exceed 2.77 tons per year, as a 12-month rolling summation.</p>
<p>OAC rule 3745-17-08 (B)</p>	<p>Visible particulate emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as specified by rule.</p> <p>The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

Limestone handling system, from the barge unloading through the handling process, limestone silos, and wet ball mills, exclusive of the limestone storage piles, as described in the PTI 06-07792 application received on April 1, 2005.

Gypsum handling system, from the vacuum filter belts, handling process, to the barge loading process, the gypsum storage piles, as described in the PTI 06-07792 application received on April 1, 2005.

- 2.b** The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
Limestone handling system	a combination of precautionary measures, dry fog dust suppression system, partial enclosure of conveyor, telescoping chute, and fabric filter
Gypsum handling system	a combination of precautionary measures, full enclosure of discharge to conveyor, maintaining appropriate moisture content, and telescoping chute

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.c** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.
- 2.d** Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.e** The hourly emission limitations outlined in term A.I.1. for PE and PM₁₀ are based on the emissions unit's Potential to Emit. Therefore, no hourly records are required to demonstrate compliance with these limits.

- 2.f** The following equipment associated with F005 is subject to 40 CFR 60.672 subpart OOO: limestone reclaim feeder, limestone reclaim conveyor, silo feed conveyors, limestone storage silo bin vent filters, limestone feeders, and wet ball mills.
- 2.g** If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affect facility must comply with the emission limits in 60.672(a), (b), and (c), or the building enclosing the affected facility or facilities must comply with the following emission limits:
 - a No owner or operator shall 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 60.671.
 - b. No owner or operator shall 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 60.672(a).

II. Operational Restrictions

- 1. The maximum annual throughput for the emissions unit shall not exceed 780,100 tons of limestone, based upon a rolling, 12-month summation of the throughput rates.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the limestone throughput specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Limestone Throughput, Tons</u>
1	130,016
1-2	195,024
1-3	260,032
1-4	325,040
1-5	390,048
1-6	455,056
1-7	520,064
1-8	585,072
1-9	650,080
1-10	715,088
1-11	765,088
1-12	780,100

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual throughput limitation shall be based upon a rolling, 12-month summation of the limestone throughput.

III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
Limestone handling system	weekly
Gypsum handling system	weekly

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

4. The permittee shall maintain monthly records of the following information for this emissions unit in order to monitor compliance with the applicable material throughput restriction:
 - a. the material throughput for each month; and
 - b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the material throughput.

Also during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative material throughput for each calendar month.

5. The permittee shall maintain monthly records of the following information for this emissions unit in order to demonstrate compliance with the rolling, 12-month summation emission limitations:
 - a. the total emissions, in tons, for PE and PM₁₀ for each month; and
 - b. the updated rolling, 12-month summation emissions total, in tons, for PE and PM₁₀ (the total amount of emissions for the current month plus the total amount of emissions for previous eleven calendar months).

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the following:
 - a. an identification of all exceedances of the rolling, 12-month material throughput restriction, and for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative throughput levels; and
 - b. an identification of all exceedances of the rolling, 12-month emission limitations for PE and PM₁₀.
3. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
4. The permittee shall submit annual reports that specify the total PE and PM₁₀ emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.
5. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a. construction date (no later than 30 days after such date);
 - b. anticipated start-up date (not more than 60 days or less than 30 days prior to such date);

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- c. actual start-up date (within 15 days after such date); and
- d. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 163669
Columbus, Ohio 43216-3669

and

Southeast District Office of the Ohio EPA
Division of Air Pollution Control
2195 Front Street
Logan, Ohio 43138.

V. Testing Requirements

- 1. Compliance with the limitations contained in Section A.I. and II of these terms and conditions shall be determined in accordance with the following methods:

- a. Emissions Limitations:

PE from the FGD material handling system, transfer, conveying, silos and wet ball mills shall not exceed 12.94 pounds per hour.

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and the emissions data found in PTI 06-07792 submitted April 1, 2005.

- b. Emission Limitation:

PM₁₀ from the FGD material handling system, transfer, conveying, silos and wet ball mill shall not exceed 6.12 pounds per hour.

Applicable Compliance Method:

The hourly emission limitations are based upon the emission unit's potential to emit and the emissions data found in PTI 06-07792 submitted April 1, 2005.

- c. Emission Limitation:

PE from the FGD material handling system, transfer, conveying, silos and wet ball mills shall not exceed 5.82 tons per year, as a 12-month rolling summation.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 06-07792, received April 1, 2005 and the record keeping in Section A.III.5.

d. Emission Limitation:

PM₁₀ from the FGD material handling system, transfer, conveying, silos and wet ball mill shall not exceed 2.77 tons per year, as a 12-month rolling summation.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 06-07792, received April 1, 2005 and the record keeping in Section A.III.5.

e. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 20% opacity, as a three-minute average, except as specified by rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002, with the modifications found in OAC 3745-17-03(B)(3)(a) and (b).

f. Emission Limitation:

No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emission which contains particulate matter in excess of 0.022 g/dscf.

Applicable Compliance Method:

In determining compliance with section 60.672(a) the owner or operator shall use Method 5 or Method 17 to determine the particulate matter concentration. The sample volume shall be at least 60 dscf. If Method 5 is used, the gas stream being sampled must be at ambient temperature, the sampling probe and filter may be

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operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at temperature high enough, but no higher than 250 degree F to prevent water condensation on filter.

g. Emission Limitation:

No owner or operator shall 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

Applicable Compliance Method:

In determining compliance with section 60.672(f) the owner or operator shall use procedures in 60.11 and Method 9. The duration of observations shall be 1 hour (ten 6-minute averages).

h. Emission Limitation:

No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affect facility any fugitive emissions which exhibit greater than 10 percent opacity.

Applicable Compliance Method:

In determining compliance with section 60.672(b) the owner or operator shall use procedures in 60.11 and Method 9. The duration of observations shall be 3 hours (thirty 6-minute averages). Observations may be reduced to 1 hour (ten 6-minute averages) only if there are no individual readings greater than 10 percent opacity and there are no more than 3 readings of 10 percent for the 1-hour period. The minimum distance between the observer and the emission source shall be 15 feet. The observer shall minimize interference from other fugitive emission sources. When a water mist from dust supression is in use, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

2. Compliance with the emission limitation in Section A.I.2.g.a. of these terms and conditions shall be determined by using 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.
3. Compliance with the operational limitation in Section A.II of these terms and conditions shall be determined in accordance with the following method:

Material throughput Restriction:

780,100 tons of limestone throughput, per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month material throughput restriction specified above shall be determined by the record keeping requirements specified in Section A.III.4.

4. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 180 days after the initial startup date.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 through 4, 5 or 17, and 9 for particulates.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Southeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Southeast District Office.

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F005 - FGD material handling, transfer and conveying - Limestone and gypsum handling system	None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F006 - Limestone and gypsum storage piles- load-in and load-out of storage piles and wind erosion from storage piles (see Section A.I.2.a for identification of storage piles)	OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions except for one minute during any 60-minute period. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.b through A.I.2.f). The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).
	OAC rule 3745-17-07 (B)(6)	The emission limitations specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08 (B), (B)(6)	The emission limitations specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(C)	PE from the limestone and gypsum storage piles- load-in and load-out of storage piles and wind erosion from storage piles shall not exceed 2.85 tons per year.

	PM ₁₀ from the limestone and gypsum storage piles- load-in and load-out of storage piles and wind erosion from storage piles shall not exceed 1.24 tons per year. See Section A.I.2.g.
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2. Additional Terms and Conditions

2.a The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

All limestone and gypsum storage piles

2.b The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to the use of a telescoping chute, maintaining material moisture content, and precautionary measures (reduce drop heights) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

2.d The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to precautionary measures including pile height control, reducing disturbed area, and maintaining moisture content to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.e The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred

that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.
- 2.g** The annual emissions limitations for PE and PM₁₀ outlined are based upon the maximum production limitations established for the FGD material handling, transfer and conveying - Limestone and gypsum handling system.

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

- 1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-in inspection frequency</u>
All limestone storage piles	weekly
All gypsum storage piles	weekly

- 2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out inspection frequency</u>
All limestone storage piles	weekly
All gypsum storage piles	weekly

- 3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum wind erosion inspection frequency</u>
All limestone storage piles	weekly
All gypsum storage piles	weekly

- 4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 6.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that specify the total PE and PM₁₀ emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

American Electric Power Cardinal

PTI Application: 06-07792

Issued: To be entered upon final issuance

Facility ID: 064105000

Emissions Unit ID: F006

1. Compliance with the emissions limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

American Electric Power Cardinal
PTI Application: 06-07792
Issued: To be entered upon final issuance

Facility ID: 064105000
Emissions Unit ID: F006

a. Emission Limitations:

There shall be no visible particulate emissions except for one minute during any 60-minute period.

Applicable Compliance Method:

If required, compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

b. Emission Limitations:

PE from the limestone and gypsum storage piles- load-in and load-out of storage piles and wind erosion from storage piles shall not exceed 2.85 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 06-07792, received April 1, 2005.

c. Emission Limitations:

PM₁₀ from the limestone and gypsum storage piles- load-in and load-out of storage piles and wind erosion from storage piles shall not exceed 1.24 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 06-07792, received April 1, 2005.

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F006 - Limestone and gypsum storage piles - load-in and load-out of storage piles and wind erosion from storage piles	None	None

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F007 - FGD material handling system, wastewater solids, and SO ₃ mitigation roadways - paved roadways and parking areas (see Section A.I.2.a)	OAC rule 3745-31-05(A)(3)	There shall be no visible particulate emissions except for one minute during any 60-minute period. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.c, A.I.2.d, and A.I.2.f through A.I.2.j). The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).
	OAC rule 3745-31-05(C)	PE from the FGD material handling system, wastewater solids, and SO ₃ mitigation roadways -paved roadways and parking areas shall not exceed 7.39 tons per year. PM ₁₀ from the FGD material handling system, wastewater solids, and SO ₃ mitigation roadways -paved roadways and parking areas shall not exceed 1.44 tons per year. See Section A.I.2.k.
	OAC rule 3745-17-07 (B)(4)	The emission limitations specified by this rule is less stringent than the

unpaved roadways and parking areas (see Section A.I.2.b)

OAC rule 3745-17-08 (B), (B)(8), (B)(9)	<p>emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p> <p>The emission limitations specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-31-05(A)(3)	<p>There shall be no visible particulate emissions except for three minutes during any 60-minute period.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.e. and A.I.2.f, A.I.2.g., A.I.2.i., and A.I.2.j).</p>
OAC rule 3745-31-05(C)	<p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).</p> <p>PE from the FGD material handling system and SO₃ mitigation roadways -unpaved roadways and parking areas shall not exceed 3.36 tons per year.</p> <p>PM₁₀ from the FGD material handling system and SO₃ mitigation roadways -unpaved roadways and parking areas shall not exceed 0.90 tons per year.</p>
OAC rule 3745-17-07 (B)(4)	<p>See Section A.I.2.k.</p> <p>The emission limitations specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).</p>
OAC rule 3745-17-08 (B), (B)(8), (B)(9)	<p>The emission limitations specified by this rule is less stringent than the</p>

emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways:

Road from waste gypsum pile to landfill
Road from wastewater solids to landfill
Road from plant entrance to SO₃ mitigation reagent storage tanks

paved parking areas:

All paved parking areas used by the FGD material handling system, wastewater solid removal, and SO₃ mitigation

- 2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the above mentioned requirements are listed below:

unpaved roadways:

All unpaved roadways associated with front end loader traffic for gypsum disposal and limestone handling.

unpaved parking areas:

All unpaved parking areas associated with front end loader traffic for gypsum disposal and limestone handling.

- 2.c** The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by flushing with water, sweeping, and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.d** The permittee shall employ best available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with watering at sufficient treatment frequencies to ensure

compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

- 2.e** The permittee shall employ best available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas with watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- 2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved roadway, paved parking area, unpaved roadway, or unpaved parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.g** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measures(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.h** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.i** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.j** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.
- 2.k** The annual emissions limitations for PE and PM₁₀ outlined are based upon the maximum production limitations established for the FGD material handling, transfer and conveying - Limestone and gypsum handling system (F005).

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the roadways in accordance with the following frequencies:

<u>paved roadways</u>	<u>minimum inspection frequency</u>
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Road from waste gypsum pile to landfill	weekly
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Road from plant entrance to SO ₃ mitigation reagent storage tanks	weekly
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Road from wastewater solids to landfill	weekly
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<u>paved parking areas</u>	<u>minimum inspection frequency</u>
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All paved parking areas used by the FGD material handling system, wastewater solid removal, and SO ₃ mitigation	weekly
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<u>unpaved roadways</u>	<u>minimum inspection frequency</u>
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All unpaved roadways associated with front end loader traffic for gypsum disposal and limestone handling	weekly
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<u>unpaved parking areas</u>	<u>minimum inspection frequency</u>
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All unpaved parking areas associated with front end loader traffic for gypsum disposal and limestone handling	weekly
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2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee shall maintain records of the following information:

- a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

- b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
- c. the dates the control measures were implemented; and
- d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 3.d. shall be updated for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

4. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. the actual or estimated monthly vehicle miles traveled; and
 - b. the total emissions, in tons, for PE and PM₁₀ for each month.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that specify the total PE and PM₁₀ emissions from this emissions unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirements may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

American Electric Power Cardinal

PTI Application: 06-07792

Issued: To be entered upon final issuance

Facility ID: 064105000

Emissions Unit ID: F007

There shall be no visible particulate emissions except for one minute during any 60-minute period (paved roadways and parking areas).

Applicable Compliance Method:

If required, compliance with the emission limitation for the paved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

b. Emission Limitation:

PE from the FGD material handling system, wastewater solids roadway, and SO₃ mitigation roadways -paved roadways and parking areas shall not exceed 7.39 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 06-07792, received April 1, 2005 and the record keeping in Section A.III.4.

c. Emission Limitation:

PM₁₀ from the FGD material handling system, wastewater solids roadway and SO₃ mitigation roadways -paved roadways and parking areas shall not exceed 1.44 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 06-07792, received April 1, 2005 and the record keeping in Section A.III.4.

d. Emission Limitation:

There shall be no visible particulate emissions except for three minutes during any 60-minute period (unpaved roadways and parking areas).

Applicable Compliance Method:

Compliance with the emission limitation for the unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources," as such Appendix existed on July 1,

2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

e. Emission Limitation:

PE from the FGD material handling system and SO₃ mitigation roadways - unpaved roadways and parking areas shall not exceed 3.36 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 06-07792, received April 1, 2005 and the record keeping in Section A.III.4.

f. Emission Limitation:

PM₁₀ from the FGD material handling system and SO₃ mitigation roadways - unpaved roadways and parking areas shall not exceed 0.90 tons per year.

Applicable Compliance Method:

Compliance with the annual limitations shall be demonstrated by the emission factors, control efficiencies (if applicable) and the operational parameters as submitted in PTI application 06-07792, received April 1, 2005 and the record keeping in Section A.III.4.

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F007 - FGD material handling system, wastewater solids removal, and SO ₃ mitigation roadways	None	None

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F008 - SO ₃ Mitigation System Material Handling and Storage (see Section A.I.2.a.)	OAC rule 3745-31-05(A)(3)	<p>PE from the SO₃ mitigation system material handling and storage shall not exceed 0.15 pounds per hour; 0.11 tons per year.</p> <p>PM₁₀ from the SO₃ mitigation system material handling and storage shall not exceed 0.15 pounds per hour; 0.11 tons per year.</p> <p>Visible particulate emissions of fugitive dust shall not exceed 10% opacity, as a three-minute average, except as specified by rule.</p> <p>The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see Sections A.I.2.b through A.I.2.d).</p>
	OAC rule 3745-17-07 (B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08 (B)	The emission limitation specified by this rule is less stringent than the emission limitation established

| pursuant to OAC rule 3745-31-
| 05(A)(3).

2. Additional Terms and Conditions

2.a The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

All SO₃ Mitigation System Material Handling and Storage

2.b The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee’s permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
All SO ₃ mitigation system material handling and storage	a combination of precautionary measures, partial enclosure of hoppers, enclosed material storage, pulse-jet baghouse on silos, and bin vent filter to filter venting of truck blow-off air.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

2.d Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
All SO ₃ mitigation system material handling and storage	weekly

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
 - c. the dates the control measure(s) was (were) implemented; and
 - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 3.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit annual reports that specify the total PE and PM₁₀ emissions from this emission unit for the calendar year. These reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and

identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitations:

PE from the SO₃ mitigation system material handling and storage shall not exceed 0.15 pounds per hour; 0.11 tons per year

Applicable Compliance Method:

Compliance with the hourly limitations shall be demonstrated by multiplying the maximum manufacturer guaranteed emission rate at the maximum flow rate and maximum SO₃ reagent usage.

$$(0.022 \text{ grain/dscf})(800 \text{ cf/min.})(60 \text{ min./hr})(1\text{lb}/7,000 \text{ grain})= 0.15 \text{ lb/hr}$$

Compliance with the annual limitation shall be demonstrated by multiplying the annual limitation by the truck loads per year at the truck unloading time:

$$(0.15 \text{ lb/hr})(1473 \text{ truck loads/yr})(1 \text{ hr/truck load})(0.0005 \text{ ton}/1\text{lb})= 0.11 \text{ ton/yr}$$

- b. Emission Limitation:

PM₁₀ from the SO₃ mitigation system material handling and storage shall not exceed 0.15 pounds per hour; 0.11 tons per year.

Applicable Compliance Method:

Compliance with the hourly limitations shall be demonstrated by multiplying the maximum manufacturer guaranteed emission rate by the maximum flow rate and converting to pounds per hour.

$$(0.022 \text{ grain/dscf})(800 \text{ cf/min.})(60 \text{ min./hr})(1\text{lb}/7,000 \text{ grain})= 0.15 \text{ lb/hr}$$

Compliance with the annual limitation shall be demonstrated by multiplying the hourly limitation by the truck loads per year at the truck unloading time:

$$(0.15 \text{ lb/hr})(1473 \text{ truck loads/yr})(1 \text{ hr/truck load})(0.0005 \text{ ton}/1\text{lb})= 0.11 \text{ ton/yr}$$

- c. Emission Limitation:

Visible particulate emissions of fugitive dust shall not exceed 10% opacity, as a three-minute average, except as specified by rule.

American Electric Power Cardinal

PTI Application: 06-07792

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Facility ID: 064105000

Emissions Unit ID: F008

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Facility ID: 064105000

Emissions Unit ID: F008

Applicable compliance method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002, with the modifications found in OAC 3745-17-03(B)(3)(a) and (b).

VI. Miscellaneous Requirements

None.

B. State Only Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
F008 - SO ₃ Mitigation System Material Handling and Storage	None	None

2. **Additional Terms and Conditions**

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

None.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.