OhioEPA

State of Ohio Environmental Protection Agency

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P.O. Box 1049
Columbus, OH 43216-1049

RE: FINAL PERMIT TO INSTALL MODIFICATION
ASHTABULA COUNTY
Application No: 02-08565

CERTIFIED MAIL

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

DATE: 9/5/2002

Millennium Inorganic Chemicals Plant 1
Dianna Henslee
PO Box 310
Ashtabula, OH 44004

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,
Michael W. Ahern
Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA NEDO

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OHIO EPA NEDO

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install **Issue Date: 9/5/2002**
Terms and Conditions **Effective Date: 9/5/2002**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 02-08565

Application Number: 02-08565

APS Premise Number: 0204010200

Permit Fee: **$800**

Name of Facility: Millennium Inorganic Chemicals Plant 1

Person to Contact: Dianna Henslee
Address: PO Box 310
Ashtabula, OH 44004

Location of proposed air contaminant source(s) [emissions unit(s)]:
2900 Middle Road
Ashtabula, Ohio

Description of proposed emissions unit(s):
Administrative modification to PTI No. 02-08565, issued in 1994, to change allowable emission rates.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification 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 source(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 included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

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 Record keeping 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 record keeping 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 record keeping 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 quarterly, i.e., by January 31, April 30, July 31, and

October 31 of each year and shall cover the previous calendar quarters. See B.10 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., 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. 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.

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 reissuance, or modification, or for denial of a permit renewal application.

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, reopened, 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, reopening 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 Permit To Install fees within 30 days after the issuance of this Permit To Install.

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 of 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, the State, and citizens 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 To Install 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 thirty (30) 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.

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

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Record keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping 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 record keeping 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 quarterly, i.e., 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. Termination of Permit To Install

This permit to install shall terminate within eighteen months of the effective date of the permit to install 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)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. 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 the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install 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

The applicant shall provide Ohio EPA with a written certification (see enclosed form) 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., 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

Pollutant	Tons Per Year	Tons Per Year Increase
PE/PM_{10}	6.34	1.63
CO	10.1	10.1
NO_X	3.59	1.44

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P008 - Lime neutralization of acidic wastewater: two slakers with spray tower scrubbers (SBR-8321a and SBR-8321b) and a lime storage silo with fabric filter (COL-8331) to control particulate emissions. MODIFICATION OF PTI 02-8565, ISSUED OCTOBER 26, 1994	OAC rule 3745-31-05(A)(3)	The visible particulate emissions (PE) shall be limited to a 10% opacity at all times. The PE rate shall not exceed 0.015 grain/dscf from any exhaust point: venturi scrubbers (SBR-8321a and SBR-8321b) egresses and fabric filter (COL-8331) egresses. The PE rate shall not exceed 0.46 lb/hr and 2.0 tons/year from all exhaust points.
	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-11(A)	See section A.I.2.a.

2. **Additional Terms and Conditions**

   2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall employ the spray tower scrubbers (SBR-8321a and SBR-8321b) whenever the emissions unit is in operation.

2. The permittee shall employ the fabric filter (COL-8331) whenever the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall maintain daily records that document any time periods when the spray tower scrubber(s) (SBR-8321a or SBR-8321b) was not in service when the emissions unit was in operation.

2. The permittee shall maintain daily records that document any time periods when the fabric filter (COL-8331) was not in service when the emissions unit was in operation.

3. The permittee shall maintain daily records of the number of hours the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall notify the Northeast District Office in writing of any daily record showing that any of the following equipment was not in service when the emissions unit was in operation:

   a. Spray tower scrubber (SBR-8321a),

   b. Spray tower scrubber (SBR-8321b), and

   c. Fabric filter (COL-8331).

   The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.

2. The permittee shall submit annual reports which specify the particulate emissions, from this emissions unit for the previous calendar year, in tons per year. These reports shall be submitted by April 15 of each year.

V. Testing Requirements

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

   a. Emission Limitation: 10% opacity of visible particulate emissions (PE).

      Applicable Compliance Method: Compliance shall be determined based upon OAC rule 3745-17-03(B)(1), if required by Ohio EPA.

   b. Emission Limitations: 0.015 grain PE/dscf from any exhaust point: spray tower scrubbers (SBR-8321a and SBR-8321b) egresses and fabric filter (COL-8331) egresses.

      Applicable Compliance Method(s): Compliance may be based upon the following methods:

      PEconc.(SBR-8321a) = PEconc.(SBR-8321b) = PEconc.(COL-8331)
      = the particulate concentration in the exhaust, which is 0.015 grain PE/dscf per manufacturer specifications noted in the application for PTI 02-8565.

   c. Emission Limitation: 0.46 lb/hr PE from all egress points.

Applicable Compliance Method(s): Compliance may be based upon the following method:

PE (TOTAL) = $[Q_{SBR8321a \text{ or } SBR8321b} \times 2$ (SBR-8321a & SBR-8321b) $+ Q_{COL8331}]$
x 0.015 grain PE/dscf x 1 lb PE/7000 grains PE x 60 min/hr.

where:

PE (TOTAL) = the total PE rate from all three dust control devices, in lbs/hr.

$Q_{SBR8321a \text{ or } SBR8321b}$ = maximum exhaust rate of each scrubber (SBR8321a or SBR8321b), which is 820.564 dscf/min, determined from actual exhaust gas flow rate of 1200 acfm, at 150°F, with a 21%, by volume moisture content as presented in the application for PTI 02-8565.

$Q_{COL8331}$ = maximum exhaust rate of the fabric filter (C0L8331), which is 926.316 dscf/min, determined from actual exhaust gas flow rate of 1000 acfm, at 110°F, with a 0%, by volume moisture content as presented in the application for PTI 02-8565.

0.015 grain PE/dscf = the particulate concentration in the exhaust for each control device per manufacturer specifications.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 or equivalent, alternative method(s) (as approved by Ohio EPA).

d. Emission Limitation: 2.0 TPY PE.

Applicable Compliance Method: To determine the annual rate for PE, the actual, hourly, emission rate as determined in section A.V.1.c. shall be multiplied by the actual hours of operation, which is the sum of the daily operating hours for the calendar year, as required in the record keeping in section A.III.3., and divided by 2000 lbs/ton.

VI. Miscellaneous Requirements

1. The following terms and conditions shall supersede all of the air pollution control requirements for this emissions unit contained in permit to install 02-8565, as issued on October 26, 1994: A.I., A.II., A.III., A.IV., A.V., B.I., B.II., B.III., B.IV., and B.V.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P008 - Lime neutralization of acidic wastewater: two slakers with spray tower scrubbers (SBR-8321a and SBR-8321b) and a lime storage silo with fabric filter (COL-8331) to control particulate emissions. MODIFICATION OF PTI 02-8565, ISSUED OCTOBER 26, 1994		Compliance with Air Toxic Policy as specified in section B.III.1.

2. **Additional Terms and Conditions**

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because air toxic compounds were below the Ohio modeling significant emission rates. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant above the Ohio modeling significant emission rate may require the permittee to apply for and obtain a new permit to install.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P009 - Recovery of ore and coke system: belt wash, belt filter, 7.0 mmBtu/hr natural gas-fired burner (BNR-5073) with dryer (DRY-5073) and storage silo (SIL-5081) with a bin vent dust collector (COL-5081), venturi scrubber (SBR-5085) and absorber/separator (SEP-5085) to control particulate emissions - MODIFICATION OF PTI 02-8565, ISSUED OCTOBER 26, 1994	OAC rule 3745-31-05(A)(3)	The visible particulate emissions (PE) shall be limited to a 10% opacity, as a six - minute average. The PE rate shall not exceed 0.99 lb/hr and 4.34 tons/year. The carbon monoxide (CO) emissions shall not exceed 2.30 lbs/hr and 10.1 tons/year. The nitrogen oxide (NO_X) emissions shall not exceed 0.82 lb/hr and 3.59 tons/year.
	OAC rule 3745-17-07(A)	See section A.I.2.a.
	OAC rule 3745-17-11(A)	See section A.I.2.a.

2. **Additional Terms and Conditions**

   2.a The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

II. Operational Restrictions

1. The permittee shall employ the bin vent dust collector (COL-5081) whenever material is transferred to the storage silo (SIL-5081).

2. The pressure drop across the venturi scrubber (SBR-5085) shall be maintained within a range of 10 - 20 inches of water, except during startup, shutdown or calibration periods.

3. The permittee shall employ the absorber/separator (SEP-5085) whenever the emissions unit is in operation.

III. Monitoring and/or Record keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the bin vent dust collector (COL-5081) egress. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. The location of the emissions;

   b. The color of the emissions;

   c. Whether the emissions are representative of normal operations;

   d. If the emissions are not representative of normal operations, the cause of the abnormal emissions;

   e. The total duration of any visible emission incident; and

   f. Any corrective actions taken to eliminate the visible emissions.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the venturi scrubber (SBR-5085) while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the venturi scrubber on a once per twelve-hour shift basis.

3. The permittee shall maintain daily records that document any time periods when the absorber/separator (SEP-5085) was not in service when the emissions unit was in operation.

4. The permittee shall maintain daily records of the number of hours the emissions unit was in operation.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the bin vent dust collector (COL-5081); and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation (excursion) reports that include an identification of the recorded reading during which the pressure drop across the venturi scrubber (SBR-5085) did not comply with the allowable range specified in Section A.II.2.

3. The permittee shall notify the Northeast District Office in writing of any daily record showing that the absorber/separator (SEP-5085) was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Northeast District Office within 30 days after the event occurs.

4. The permittee shall submit annual reports which specify the emissions of particulates, CO, and NO_X from this emissions unit for the previous calendar year, in tons/year. These reports shall be submitted by April 15 of each year. The fee emissions report submittal, required by OAC rule 3745-77-07(A)(8) and OAC rule 3745-78, will fulfill the requirements of this permit term.

V. Testing Requirements

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

   a. Emission Limitation: 10% opacity of visible particulate emissions (PE), as a six-minute average.

      Applicable Compliance Method: Compliance shall be determined based upon OAC rule 3745-17-03(B)(1), if required by Ohio EPA.

   b. Emission Limitation: 0.99 lb/hr PE from all egress points.

      Applicable Compliance Method(s): Compliance may be based upon the following methods:

      i. Determination of the PE rate from the bin vent dust collector (COL-5081) may be based on the following calculation:

         PE (COL-5081) = Q x PEconc. x 1 lb PE/7000 grains PE x 60 min/hr.

         where:

         PE (COL-5081) = the PE rate from the bin vent dust collector (COL-5081), in lbs/hr.

         Q = maximum exhaust rate, which is 1400 dscf/min from the manufacturer specifications.

         PEconc. = the particulate concentration in the exhaust, which is 0.008 grain PE/dscf per manufacturer specifications.

      ii. The measured PE rate, PE(SEP-5085), from the absorber/separator (SEP-5085) egress was determined to be 0.66 lb/hr via U.S. EPA Methods 1-5 tests conducted on February 25, 2002. The measured PE rate from this test shall be used to determine compliance with the above emission limitation until such time that additional testing is required.

iii. Determination of total PE rate:
E(T) = E(COL-5081) + E(SEP-5085).

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 or equivalent, alternative method(s) (as approved by Ohio EPA).

c. Emission Limitation: 4.34 TPY PE.

Applicable Compliance Method: To determine the annual rate for PE, the actual, hourly, emission rate as determined in section A.V.1.b. shall be multiplied by the actual hours of operation, which is the sum of the daily operating hours for the calendar year, as required in the record keeping in section A.III.4., and divided by 2000 lbs/ton.

d. Emission Limitation: 2.30 lbs/hr CO from the absorber/separator (SEP-5085) egress.

Applicable Compliance Method: The measured CO rate from the absorber/separator (SEP-5085) egress was determined to be 0.15 lb/hr via U.S. EPA Methods 1-4 and U.S. EPA Method 10 tests conducted on February 25, 2002. The measured CO emissions rate from this test shall be used to determine compliance with the above emission limitation until such time that additional testing is required. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and U.S. EPA Method 10 or equivalent, alternative method(s) (as approved by Ohio EPA).

e. Emission Limitation: 10.1 TPY CO.

Applicable Compliance Method: To determine the annual rate for CO, the actual, hourly, emission rate as determined in section A.V.1.d. shall be multiplied by the actual hours of operation, which is the sum of the daily operating hours for the calendar year, as required in the record keeping in section A.III.4., and divided by 2000 lbs/ton.

f. Emission Limitation: 0.82 lb/hr NO_X from the absorber/separator (SEP-5085) egress.

Applicable Compliance Method: The measured NO_X rate from the absorber/separator (SEP-5085) egress was determined to be 0.45 lb/hr via U.S. EPA Methods 1-4 and U.S. EPA Method 7E tests conducted on February 25, 2002. The measured NO_X emissions rate from this test shall be used to determine compliance with the above emission limitation until such time that additional testing is required. If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and U.S. EPA Method 7E or equivalent, alternative method(s) (as approved by Ohio EPA).

g. Emission Limitation: 3.59 TPY NO_X

Applicable Compliance Method: To determine the annual rate for NO_X, the actual, hourly, emission rate as determined in section A.V.1.f. shall be multiplied by the actual hours of operation, which is the sum of the daily operating hours for the calendar year, as required in the record keeping in section A.III.4., and divided by 2000 lbs/ton.

VI. Miscellaneous Requirements

1. The following terms and conditions shall supersede all of the air pollution control requirements for this emissions unit contained in permit to install 02-8565, as issued on October 26, 1994: A.I., A.II., A.III., A.IV., A.V., B.I., B.II., B.III., B.IV., and B.V.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P009 - Recovery of ore and coke system: belt wash, belt filter, 7.0 mmBtu/hr natural gas-fired burner (BNR-5073) with dryer (DRY-5073) and storage silo (SIL-5081) with a bin vent dust collector (COL-5081), venturi scrubber (SBR-5085) and absorber/separator (SEP-5085) to control particulate emissions - MODIFICATION OF PTI 02-8565, ISSUED OCTOBER 26, 1994		Compliance with the Air Toxic Policy as specified in section B.III.1.

2. **Additional Terms and Conditions**

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Record keeping Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because air toxic compounds were below the Ohio modeling significant emission rates. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant above the Ohio modeling significant emission rate may require the permittee to apply for and obtain a new permit to install.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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