Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

6/6/2011

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Timothy Schlosser
Marsulex, Inc. -
1400 Otter Creek Road
Oregon, OH 43616

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0448020014
Permit Number: P0107428
Permit Type: Administrative Modification
County: Lucas

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of 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 permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Toledo Blade. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page,www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Toledo Department of Environmental Services
348 South Erie Street
Toledo, OH 43604

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Toledo Department of Environmental Services at (419)936-3015.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *-Via E-Mail Notification*
TDES; Michigan; Indiana; Canada

Permit Strategy Write-Up

1. Check all that apply:

   Synthetic Minor Determination

   Netting Determination

2. Source Description:

   This PTI is for an administrative modification of PTI P0106518 issued on December 13, 2010. Marsulex submitted the PTI application to comply with the Consent Decree (Case 3:09-cv-00067, filed 01/12/2009). Emissions will be maintained at equal or less than current levels. Appendix G of the Consent Decree (Ammended 02/10/2010) will be used as a basis for monitoring, reporting and recordkeeping requirements. The changes in the permit need to be synchronized with the start-up of the scrubber on A-Plant and B-Plant, but no later than July 1, 2011.

   On March 8, 1995, a PTI was issued (04- 923) to Coulton Chemical Company L.P. to increase the throughput of the sulfuric acid plant at 1400 Otter Creek Road in Oregon, Ohio. Coulton Company was later purchased by, and is now owned and operated by Marsulex, Inc. The facility intended to increase production by using a process called oxygen enrichment to facilitate faster oxidation of sulfur dioxide to sulfur trioxide thus allowing for more sulfuric acid to be produced. The permit was first issued with CO limits of 0.35 pound per hour and 1.53 tons per year for the each emissions unit (P001 and P002). The permit was modified on November 20, 2001 to reflect the AP-42 Emission Factors and heating value revision in July 1998. The modified CO limits were 0.82 lb/hr and 3.59 tpy. According to the inter-office communication from TES to DAPC dated July 16, 2001 for the Administrative Permit Modification, the CO limits were based on 10 mmBTU heat input for the each plant Plant A and Plant B). Marsulex states in the permit application that the heat input used in the calculation was incorrect. This resulted in the emission limits that cannot be complied with. The actual maximum heat input of the A plant is 90 mmBTU and the heat input of B Plant is 50 mmBTU. This error was discovered in April, 2010 and a disclosure was submitted to the U.S. EPA under the Audit Policy. The PTI P0106518 was issued on December 13, 2010 to correct the CO limits based on the actual heat inputs of the plants.

3. Facility Emissions and Attainment Status:

Significant Net Pollutant	Emission Increase Levels	Attainment Status
PM10	25 TPY	Unclassifiable
SO2	40 TPY	Attainment
VOC	40 TPY	Attainment
NOx	40 TPY	Unclassifiable/attainment
CO	100 TPY	Attainment

4. Source Emissions:

	Plant A		Plant B	
SO_2	90.5 lbs/hr	271.8 tons per rolling 365-day period	55.5 lbs/hr	173.6 tons per rolling 365-day period
H_2SO_4 Mist	3.60 lbs/hr	15.8 tpy	2.10 lbs/hr	9.20 tpy
CO	7.41 lbs/hr	32.46 tpy	4.12 lbs/hr	18.04 tpy
NO_x	3.85 lbs/hr	16.5 tpy	2.42 lbs/hr	10.60 tpy

5. Conclusion:

   The net emission increase associated with this Permit to Install will not result in a significant net emissions increase, and is, therefore, not subject to PSD review.

6. Please provide additional notes or comments as necessary:

   None.

7. Total Permit Allowable Emissions Summary (for informational purposes only):

Pollutant	Tons Per Year
SO_2	445.4 (no increase)
NO_x	27.1 (no increase)
CO	50.5 (43.32 increase)
H_2SO_4	25 (no increase)

Lucas County

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install
Marsulex, Inc. -

Issue Date: 6/6/2011
Permit Number: P0107428
Permit Type: Administrative Modification
Permit Description: Administrative modification to align with the Consent Decree (Case 3:09-cv-00067, filed 01/12/2009).
Facility ID: 0448020014
Facility Location: Marsulex, Inc. -
1400 Otter Creek Road,
Oregon, OH 43616-1232
Facility Description: All Other Basic Inorganic Chemical Manufacturing

The Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Peter Park at Toledo Department of Environmental Services, 348 South Erie Street, Toledo, OH 43604 or (419)936-3015. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio | Environmental Protection Agency

DRAFT

Division of Air Pollution Control
Permit-to-Install
for
Marsulex, Inc. -

Facility ID:	0448020014
Permit Number:	P0107428
Permit Type:	Administrative Modification
Issued:	6/6/2011
Effective:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Marsulex, Inc. -

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. Federally Enforceable Standard Terms and Conditions 4
2. Severability Clause 4
3. General Requirements 4
4. Monitoring and Related Record Keeping and Reporting Requirements 5
5. Scheduled Maintenance/Malfunction Reporting 6
6. Compliance Requirements 6
7. Best Available Technology 7
8. Air Pollution Nuisance 7
9. Reporting Requirements 7
10. Applicability 8
11. Construction of New Sources(s) and Authorization to Install 8
12. Permit-To-Operate Application 9
13. Construction Compliance Certification 9
14. Public Disclosure 9
15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 10
16. Fees 10
17. Permit Transfers 10
18. Risk Management Plans 10
19. Title IV Provisions 10
B. Facility-Wide Terms and Conditions 11
C. Emissions Unit Terms and Conditions 13
1. P001, A-Plant 14
2. P002, B-Plant 29

Authorization

Facility ID: 0448020014
Facility Description: sulfuric acid plant
Application Number(s): M0001081
Permit Number: P0107428
Permit Description: Administrative modification to align with the Consent Decree (Case 3:09-cv-00067, filed 01/12/2009).
Permit Type: Administrative Modification
Permit Fee: $800.00*DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 6/6/2011
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

Marsulex, Inc. -
1400 Otter Creek Road
Oregon, OH 43616-1232

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Toledo Department of Environmental Services
348 South Erie Street
Toledo, OH 43604
(419)936-3015

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section 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 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

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0107428
Permit Description: Administrative modification to align with the Consent Decree (Case 3:09-cv-00067, filed 01/12/2009).

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**P001**
Company Equipment ID:	A-Plant
Superseded Permit Number:	P0106518
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	B-Plant
Superseded Permit Number:	P0106518
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) 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.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. 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.

4. 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:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) 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:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Toledo Department of Environmental Services.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, 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 Toledo Department of Environmental Services. 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 A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, andreportingrequirements contained in this permit shall be submitted (i.e., postmarked) to the Toledo Department of Environmental Services 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.

(4) This permit is for an emissions unit located at a Title V facility. 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.

5. 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 Toledo Department of Environmental Services 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).

6. Compliance Requirements

a) 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.

b) 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.

c) 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:

(1) 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.

(2) 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.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) 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.

d) The permittee shall submit progress reports to the Toledo Department of Environmental Services 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:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) 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.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. 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.

9. 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 Toledo Department of Environmental Services.

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 Toledo Department of Environmental Services. 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.)

10. 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).

11. Construction of New Sources(s) and Authorization to Install

a) 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.

b) If applicable, authorization to install any new 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 has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. 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.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” along with the date the emissions unit(s) was permanently

removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

No emissions unit certified by the authorized official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

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).

13. Construction Compliance Certification

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be enteredupon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. 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.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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.

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

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the “Owner/Contact Change” functionality in Air Services once the transfer is legally completed.The change must be submitted through Air Services within thirty days of the ownership transfer date.

18. 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.

19. 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.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. The following emissions units contained in this permit are subject to 40 CFR Part 60 Subpart H: P001 and P002. The complete NSPS and MACT requirements, including the MACT General Provisions may be accessed via the internet from the electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA district or local air agency.

C. Emissions Unit Terms and Conditions

1. P001, A-Plant

Operations, Property and/or Equipment Description:

Sulfuric Acid regeneration: Double absorption and oxygen enrichment Sulfuric Acid regeneration A Plant with scrubber

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Sulfuric acid mist emissions shall not exceed 3.60 lbs/hr and 15.8 tpy. Carbon monoxide (CO) emissions shall not exceed 7.41 lbs/hr and 32.46 tpy. Nitrogen oxides (NOx) emissions shall not exceed 3.85 lbs/hr and 16.5 tpy. See b)(2)b., b)(2)c., and b)(2)f.
b.	OAC rule 3745-31-05(D) This permit incorporates the requirements of the Consent Decree case 3:09-cv-00067-JGC filed 04/02/2009.	The permittee shall comply with the following SO_2 emission limitations. SO_2 emissions shall not exceed: a rolling, 3-hour average of 3.5 pounds per ton of 100% sulfuric acid produced (Short-Term Limit); a rolling, 365 day average of 2.40 lb per ton of 100% sulfuric acid produced (Long-Term Limit); and a rolling, 365 day average of 271.8 tons per year. See b)(2)d., b)(2)e. and b)(2)i.
c.	OAC rule 3745-18-54(X)	See b)(2)a.

d.	40 CFR Part 60, Subpart H (40 CFR 60.80-85) [In accordance with 40 CFR 60.82(a) and 60.83(a), this emissions unit is a sulfuric acid production facility subject to the emission limitation/control measures specified in this section.]	See b)(2)g.
e.	OAC rule 3745-17-07(A)	See b)(2)a.
f.	OAC rule 3745-17-11(B)	See b)(2)h.

(2) Additional Terms and Conditions

a. The emission limitation specified by this rule is less stringent than the emission limitation specified by 40 CFR Part 60, Subpart H.

b. Sulfur dioxide (SO_2) emissions shall not exceed 102.7 lbs/hr, 2,465 lbs/day, and 450 tons per rolling, 365-day period.

The SO_2 emission limitations specified by b)(2)b. shall become void on July 1, 2011.

c. SO_2 emissions shall not exceed a rolling, 3-hour average of 90.5 lbs/hr.

The SO_2 emission limitation specified by b)(2)c. shall become effective on July 1, 2011.

d. The Short-Term Limit does not apply during periods of Startup, Shutdown, or Malfunction.

e. The Long-Term Limit applies at all times, including during periods of Startup, Shutdown, or Malfunction. The permittee shall commence monitoring for this emission limitation by July 1, 2011, but shall have until June 30, 2012, to demonstrate compliance with this Long-Term limit.

f. The hourly and annual emission limitations for CO and NOx are based on the potential to emit for this emissions unit at maximum capacity for 8,760 hours per year; therefore, monitoring, record keeping and reporting are not necessary to demonstrate compliance with these limits.

g. [40 CFR 60.8(c), 60.11(c), 60.82, and 60.83]

At all times except for periods of startup, shutdown, and malfunction, the permittee shall not cause to be discharged into the atmosphere any gases which:

i. contain sulfur dioxide in excess of 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H2SO4;

Beginning on July 1, 2011, the sulfur dioxide emission limitation specified by this rule will be less stringent than the emission limitation established by OAC rule 3745-31-05(D);

ii. contain acid mist, expressed as H2SO4, in excess of 0.075 kg per metric ton of acid produced (0.15 lb/ton), the production being expressed as 100 percent H2SO4; and

iii. exhibit 10 percent opacity or greater.

[40 CFR 60.8(c)]

Emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit.

[40 CFR 60.11(d)]

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

h. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Particulate emissions from this emissions unit are emitted in the form of sulfuric acid mist.

i. The following definitions shall apply to the terms and conditions of this emissions unit.

i. "Startup" means the period of time beginning when the feed of Sulfur-Bearing Compounds to the furnace commences and lasting for no more than 24 hours.

“Sulfur-Bearing Compounds” means elemental sulfur, alkylation or other spent sulfuric acids, hydrogen sulfide, organic sulfides, mercaptans, or acid sludge, but they exclude hydrocarbon and conventional fossil fuels such as natural gas or fuel oil.

ii. "Shutdown" means the cessation of operation of a Sulfuric Acid Plant for any reason. Shutdown begins at the time the feed of Sulfur-Bearing Compounds to the furnace ceases and ends at the earlier of three hours later or when the flow rate on the stack volumetric flow rate analyzer falls below 10% span.

iii. "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused by poor maintenance or careless operation are not malfunctions.

If the permittee contends that emissions during a Malfunction(s) resulted in a calculated 3-hour rolling average emission rate(s) in excess of the applicable pound SO_2 per ton emission limitation after the period of the Malfunction(s) end(s), the permittee shall recalculate the emissions (lb per ton) to exclude measurements recorded during the period(s) of the claimed Malfunction(s).

j. Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

The stack SO_2 analyzer shall meet all the applicable requirements of 40 CFR 60.11, 60.13, 40 CFR Part 60, Appendix B, Performance Specification 2, and the Quality Assurance and Quality Control Procedures in 40 CFR Part 60, Appendix F, Procedure 1.

The converter Inlet SO_2 analyzer likewise shall meet all applicable requirements of 40 CFR Part 60, Appendix B, Performance specification 2, and 40 CFR Part 60, Appendix F, Procedure 1, except as follows:

(a) The permittee shall select the optimum location to obtain representative SO_2 readings. Turbulence near the blower exit and/or elevated temperature at the converter inlet may require an analyzer measurement location that differs from the requirements of Performance Specification 2.

(b) In lieu of annual relative Accuracy Test Audits ("RATA"), as described in section5.1.1. of Appendix F, the permittee shall conduct quarterly cylinder gas audits)i.e., four per year) on the Converter Inlet SO_2 Analyzer.

The volumetric flow rate analyzer will meet 40 CFR Part 60, Appendix B, Performance specification 6 and the Quality Assurance and Quality Control Procedures in 40 CFR Part 60, Appendix F, Procedure 1.

[40 CFR 60.13] and [40 CFR Part 60, Appendix F]

k. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A flow monitor shall be maintained and operated for this emissions unit to allow for monitoring SO_2 emissions in units of pounds per hour, pounds per day, and tons per year. This continuous flow monitoring equipment shall comply with the requirements specified in 40 CFR Part 60.

(2) The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

(3) [PTI 04-00923]

The continuous monitoring system shall also include a flow monitor. The combination of the SO_2 continuous monitoring system and flow monitor will be identified in this permit as the SO_2 Continuous Emission Rate Monitoring System (CERMS). The CERMS shall monitor SO_2 emissions in units of pounds per ton of 100% acid produced, pounds per hour, pounds per day, and tons per rolling, 365-day period.

(4) The permittee shall operate and maintain the SO_2 CERMS to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s):

a. pounds per ton of 100% acid produced as a rolling, 3-hour average, pounds per hour as a 3-hour average, pounds per day, and tons per rolling, 365-day period. On July 1, 2011, d)(4)a. shall become void.

b. beginning on July 1, 2011, pounds per ton of 100% sulfuric acid produced as a rolling, 3-hour average (Short-Term Limit), pounds per ton of 100% sulfuric acid produced as a rolling, 365 day average (Long-Term Limit), pounds per hour as a rolling, 3-hour average, tons per year as a rolling, 365 day average.

(5) The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60. The permittee shall maintain records of all data obtained by the SO_2 CERMS including, but not limited to:

a. emissions of SO_2 in parts per million SO_2 on an instantaneous (1-minute) basis. Beginning on July 1, 2011, emissions of SO_2 in parts per million SO_2 on an instantaneous (1-minute and 5-minute) basis;

b. emissions of SO_2 in units of the applicable standard in the appropriate averaging period (pounds per ton of 100% acid produced as a rolling 3-hour average, pounds per hour as a 3-hour average, pounds per day, and tons per rolling, 365-day period); d)(5)b. shall become void on July 1, 2011

c. beginning July 1, 2011, emissions of SO_2 in pounds per hour and in all units of the applicable standard in the appropriate averaging period (pounds per ton of 100% acid produced as a rolling 3-hour average, as a rolling, 365 day average, pounds per hour as a rolling, 3-hour average, and tons per year as a rolling, 365-day average);

d. results of quarterly cylinder gas audits;

e. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

f. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

g. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

h. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

i. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; as well as,

j. the reason (if known) and the corrective actions taken (if any) for each such event in (h) and (i).

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

(6) [40 CFR 60.84(a)]

The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be SO_2. Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the SO_2 portion of the Method 8 results shall be used. The span value shall be set at a dual range of 0 – 500 ppm and 0 - 3,600 ppm of SO_2.

(7) The permittee shall maintain on-site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous SO_2 monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. The letter(s)/document(s) of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

(8) The permittee shall maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system which meets the requirements of 40 CFR Part 60.13 and has been certified by the U.S. EPA or the Ohio EPA, Central Office, designed to ensure continuous valid and representative readings of SO_2 emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

(9) 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 stack serving this emissions unit. 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 color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

(10) [40 CFR 60.7(b)]

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected emissions unit, any malfunction of the air pollution control equipment, or any periods during which a continuous monitoring system or monitoring device is inoperative.

(11) See 40 CFR Part 60, Subpart H (40 CFR 60.80-85)

(12) Prior to the installation of the continuous SO_2 monitoring system specified under d)(13), the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

(13) Beginning on July 1, 2011, the permittee shall comply with the CEMS Plan identified as Appendix G in the Request Administrative Modification Number M0001081 submitted by the permittee on January 10, 2011 and the below requirements.

a. SO_2 emissions will be monitored using an SO_2 analyzer at the converter inlet, and SO_2 analyzer at the exit stack, and a stack flow rate analyzer. Except for any analyzer malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), Thepermittee will conduct monitoring during all Operating Periods and during Shutdown. The combination of SO_2 emission monitors and flow monitor will be identified in this permit as the SO_2 Continuous Emission Rate Monitoring System (CERMS).

b. Once every five (5) minutes and one (1) minute, the analyzers will measure the stack SO_2 concentration (fraction, dry basis), the converter inlet SO_2 concentration (fraction, dry basis) and the volumetric flow rate (dry standard cubic feet per minute).

c. During routine calibration checks and adjustments of any of the analyzers, the pre-calibration will be used to fill in any analyzer gaps that occur pending completion of the calibration checks and adjustments.

d. If any one or more than one analyzer is/are not operating for a period of 24 hours or greater, data gaps in the array involving the non-operational analyzer(s) will be filled in as follows:

i. Exit stack gas will be sampled and analyzed for SO_2 at least once per hour, during all Operating Periods. Sampling will be conducted by Reich test or other established method (e.g. portable analyzer). The most recent hourly reading will be substituted for the twelve (12) five-minute

readings that would otherwise have been taken if the analyzer had been operating normally.

ii. Converter inlet gas either will be sampled and analyzed for SO_2 using a Reich test or other established method, or the concentration will be estimated using engineering judgment, at least once every four (4) hours during all Operating Periods. The most recent four-hour measurement/estimate will be substituted for the 48 five-minute readings that would otherwise have been taken if the system had been operating normally.

iii. Stack volumetric flow rate will be estimated using engineering judgment.

e. If any one or more than one analyzer is/are not operating for a period of less than 24 hours, one of the following must be done: (i) the requirements set forth for a 24-hour or greater period of downtime must be used to fill in the data gaps; or (ii) the data recorded for the five minute reading immediately preceding the affected analyzer's(s') stoppage must be used to fill in the data gap.

f. In order to secure data on a "dry basis", The permittee may either:

i. assume the moisture content is the greater of 3% or the highest measured moisture content in any Relative Accuracy Test Audit ("RATA"); or

ii. for saturated gas streams only, measure the stack temperature using a stack temperature sensor at the time of each SO_2 measurement and determine the moisture content using a psychometric chart or standard text water vapor pressure correlation.

e) Reporting Requirements

(1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[40 CFR 60.7]

(2) The permittee shall submit quarterly Data Assessment Reports containing the information outlined in Section 7 of 40 CFR Part 60, Appendix F. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

(3) The permittee shall submit semi-annual written reports that:

a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted by January 31, and July 31 of each year and shall address the data obtained during the previous 6-month period.

(4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the emission limitations in b) shall be determined in accordance with the following methods:

a. Emission Limitation:

3.5 pounds of SO_2 per ton of 100% sulfuric acid produced as a 3-hour rolling average; 4.0 pounds of SO_2 per ton of 100% sulfuric acid produced as a 3-hour rolling average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in d). If required, compliance shall be demonstrated by Methods 1 through 4 and Method 8 of 40 CFR Part 60 Appendix A and the procedures specified in 40 CFR 60.85(b). Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

b. Emission Limitation:

102.7 lbs/hr of SO_2 and 90.5 lbs/hr of SO_2 as a rolling, 3-hour average

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in d). If required, compliance shall bedemonstrated by Methods 1 though 4 and 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

c. Emission Limitation:

2,465 lbs/day of SO2; 450 tons of SO_2 per rolling, 365-day period; 2.40 lb of SO_2 per ton of 100% sulfuric acid produced as a rolling 365 day average; 271.8 tons per year of SO_2 as a rolling, 365-day average;

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in d).

d. Emission Limitation:

3.60 lbs/hr of sulfuric acid mist

Applicable Compliance Method:

If required, compliance shall be demonstrated by Methods 1 through 4 and Method 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

15.8 tpy of sulfuric acid mist

Applicable Compliance Method:

The annual sulfuric acid mist emission limitation was developed by multiplying the hourly allowable emission limitation of 3.60 lbs/hr by a maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

f. Emission Limitation:

7.41 lbs/hr of CO

Applicable Compliance Method:

If required, compliance shall be demonstrated by Methods 1 through 4 and Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

g. Emission Limitation:

32.46 tpy of CO

Applicable Compliance Method:

The annual CO emission limitation was developed by multiplying the hourly allowable emission limitation of 7.41 lb/hr by a maximum operating schedule of

8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

h. Emission Limitation:

3.85 lbs/hr of NOx

Applicable Compliance Method:

If required, compliance shall be demonstrated by Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

i. Emission Limitation:

16.5 tpy of NOx

Applicable Compliance Method:

The annual NOx emission limitation was developed by multiplying the hourly allowable emission limitation of 3.85 lbs/hr by a maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

j. Emission Limitation:

0.075 kg H2SO4 per metric ton of 100 percent sulfuric acid produced (0.15 lb per ton)

Applicable Compliance Method:

If required, compliance shall be demonstrated by the procedures specified in 40 CFR 60.85(b).

k. Emission Limitation:

10 percent opacity

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and the procedures of 40 CFR 60.11.

(2) The permittee shall conduct emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than July 1, 2011.

b. The emission testing shall be conducted to demonstrate compliance with the opacity restriction, and the allowable hourly and pound per ton mass emission rates for SO_2 and sulfuric acid mist.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates: for opacity, Method 9 of 40 CFR Part 60, Appendix A; and for SO_2 and sulfuric acid mist, Methods 1 through 4 and Method 8 and the procedures identified under 40 CFR 60.85(b). This test shall consist of at least three method test runs. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

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 Toledo Division of Environmental Services (TES). The permittee shall take all steps necessary to assure accurate measurements of 100% sulfuric acid production during each test run.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the TES. 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 TES's refusal to accept the results of the emission test(s).

Personnel from the TES 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 TES 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 TES.

(3) By July 1, 2011, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

(4) The permittee shall comply with the Quality Assurance Requirements of 40 CFR Part 60, Appendix F.

a. The permittee shall develop and implement a quality control program as outlined under section 3 of 40 CFR Part 60, Appendix F.

b. The permittee shall perform daily calibration drift assessments as required by section 4 of 40 CFR Part 60, Appendix F.

c. TheSO_2 CERMS shall be audited once per calendar quarter according to section 5 of 40 CFR Part 60, Appendix F. CERMS data accuracy shall be calculated according to section 6 of 40 CFR Part 60, Appendix F.

(5) 40 CFR 60.8(c)]

Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of a performance test.

g) Miscellaneous Requirements

(1) None.

2. P002, B-Plant

Operations, Property and/or Equipment Description:

Sulfuric Acid regeneration: B-plant with dual absorption and oxygen enrichment

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Sulfuric acid mist emissions shall not exceed 2.10 lbs/hr and 9.20 tpy. Carbon monoxide (CO) emissions shall not exceed 4.12 lbs/hr and 18.04 tpy. Nitrogen oxides (NOx) emissions shall not exceed 2.42 lbs/hr and 10.6 tpy. See b)(2)b., b)(2)c., and b)(2)f.
b	OAC rule 3745-31-05(D) This permit incorporates the requirements of the Consent Decree case 3:09-cv-00067-JGC filed 04/02/2009.	The permittee shall comply with the following SO_2 emission limitations. SO_2 emissions shall not exceed: a rolling, 3-hour average of 3.5 pounds per ton of 100% sulfuric acid produced (Short-Term Limit); a rolling, 365 day average of 2.50 lb per ton of 100% sulfuric acid produced (Long-Term Limit); and 173.6 tons per year as a rolling, 365 day average. See b)(2)d., b)(2)e., and b)(2)i.
c.	OAC rule 3745-18-54(X)	See b)(2)a.

d.	40 CFR Part 60, Subpart H (40 CFR 60.80-85) [In accordance with 40 CFR 60.82(a) and 60.83(a), this emissions unit is a sulfuric acid production facility subject to the emission limitation/control measures specified in this section.]	See b)(2)g.
e.	OAC rule 3745-17-07(A)	See b)(2)a.
f.	OAC rule 3745-17-11(B)	See b)(2)h.

(2) Additional Terms and Conditions

a. The emission limitation specified by this rule is less stringent than the emission limitation specified by 40 CFR Part 60, Subpart H.

b. Sulfur dioxide (SO_2) emissions shall not exceed 59.5 lbs/hr, 1,428 lbs/day, and 261 tons per rolling, 365-day period.

The SO_2 emission limitations specified by b)(2)b. shall become void on July 1, 2011.

c. SO_2 emissions shall not exceed a rolling, 3-hour average of 55.5 lbs/hr.

The SO_2 emission limitation specified by b)(2)c. shall become effective on July 1, 2011.

d. The Short-Term Limit does not apply during periods of Startup, Shutdown, or Malfunction.

e. The Long-Term Limit applies at all times, including during periods of Startup, Shutdown, or Malfunction. The permittee shall commence monitoring for this emission limitation by July 11, 2011, but shall have until June 30, 2012, to demonstrate compliance with this Long-Term limit.

f. The hourly and annual emission limitations for CO and NOx are based on the potential to emit for this emissions unit at maximum capacity for 8,760 hours per year; therefore, monitoring, record keeping and reporting are not necessary to demonstrate compliance with these limits.

g. [40 CFR 60.8(c), 60.11(c), 60.82, and 60.83]

At all times except for periods of startup, shutdown, and malfunction, the permittee shall not cause to be discharged into the atmosphere any gases which:

i. contain sulfur dioxide in excess of 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H2SO4.

Beginning on July 1, 2011, the SO_2 emission limitation specified by this rule will be less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D);

ii. contain acid mist, expressed as H2SO4, in excess of 0.075 kg per metric ton of acid produced (0.15 lb/ton), the production being expressed as 100 percent H2SO4; and

iii. exhibit 10 percent opacity or greater.

[40 CFR 60.8(c)]

Emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit.

[40 CFR 60.11(d)]

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

h. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). Particulate emissions from this emissions unit are emitted in the form of sulfuric acid mist.

i. The following definitions shall apply to the terms and conditions of this emissions unit.

i. "Startup" means the period of time beginning when the feed of Sulfur-Bearing Compounds to the furnace commences and lasting for no more than 24 hours.

ii. “Sulfur-Bearing Compounds” means elemental sulfur, alkylation or other spent sulfuric acids, hydrogen sulfide, organic sulfides, mercaptans, or acid sludge, but they exclude hydrocarbon and conventional fossil fuels such as natural gas or fuel oil. ["Shutdown" means the cessation of operation of a Sulfuric Acid Plant for any reason. Shutdown begins at the time the feed of Sulfur-Bearing Compounds to the furnace ceases and ends at the earlier of three hours later or when the flow rate on the stack volumetric flow rate analyzer falls below 10% span.

iii. "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused by poor maintenance or careless operation are not malfunctions.

[40 CFR 60.2]

j. If the permittee contends that emissions during a Malfunction(s) resulted in a calculated 3-hour rolling average emission rate(s) in excess of the applicable pound SO_2 per ton emission limitation after the period of the Malfunction(s) end(s), the permittee shall recalculate the emissions (lb per ton) to exclude measurements recorded during the period(s) of the claimed Malfunction(s).Each continuous SO_2 monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous SO_2 monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of SO_2 emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

The stack SO_2 analyzer shall meet all the applicable requirements of 40 CFR 60.11, 60.13, 40 CFR Part 60, Appendix B, Performance Specification 2, and the Quality Assurance and Quality Control Procedures in 40 CFR Part 60, Appendix F, Procedure 1.

The converter Inlet SO_2 analyzer likewise shall meet all applicable requirements of 40 CFR Part 60, Appendix B, Performance specification 2, and 40 CFR Part 60, Appendix F, Procedure 1, except as follows:

(a) The permittee shall select the optimum location to obtain representative SO_2 readings. Turbulence near the blower exit and/or elevated temperature at the converter inlet may require an analyzer measurement location that differs from the requirements of Performance Specification 2.

(b) In lieu of annual relative Accuracy Test Audits ("RATA"), as described in section5.1.1. of Appendix F, the permittee shall conduct quarterly cylinder gas audits)i.e., four per year) on the Converter Inlet SO_2 Analyzer.

The volumetric flow rate analyzer will meet 40 CFR Part 60, Appendix B, Performance specification 6 and the Quality Assurance and Quality Control Procedures in 40 CFR Part 60, Appendix F, Procedure 1. [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

k. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) A flow monitor shall be maintained and operated for this emissions unit to allow for monitoring SO2 emissions in units of pounds per hour, pounds per day, and tons per year. This continuous flow monitoring equipment shall comply with the requirements specified in 40 CFR Part 60.

(2) The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

[40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

(3) [OAC rule 3745-31-05(A)(3)]

The continuous monitoring system shall also include a flow monitor. The combination of the SO_2 continuous monitoring system and flow monitor will be identified in this permit as the SO_2 Continuous Emission Rate Monitoring System (CERMS). The CERMS shall monitor SO_2 emissions in units of pounds per ton of 100% acid produced, pounds per hour, pounds per day, and tons per rolling, 365-day period.

(4) The permittee shall operate and maintain the SO_2 CERMS to continuously monitor and record SO_2 emissions from this emissions unit in units of the applicable standard(s):

a. pounds per ton of 100% acid produced as a rolling, 3-hour average, pounds per hour as a 3-hour average, pounds per day, and tons per rolling, 365-day period. On July 1, 2011, d)(4)a. shall become void.

b. beginning on July 1, 2011, pounds per ton of 100% sulfuric acid produced as a rolling, 3-hour average (Short-Term Limit), pounds per ton of 100% sulfuric acid produced as a rolling, 365 day average (Long-Term Limit), pounds per hour as a rolling, 3-hour average, tons per year as a rolling, 365 day average.

(5) The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60. The permittee shall maintain records of all data obtained by the SO_2 CERMS including, but not limited to:

a. emissions of SO_2 in parts per million SO_2 on an instantaneous (1-minute) basis. Beginning on July 1, 2011, emissions of SO_2 in parts per million SO_2 on an instantaneous (1-minute and 5-minute) basis;

b. emissions of SO_2 in units of the applicable standard in the appropriate averaging period (pounds per ton of 100% acid produced as a rolling 3-hour average, pounds per hour as a 3-hour average, pounds per day, and tons per rolling, 365-day period); d)(5)b. shall become void on July 1, 2011

c. beginning July 1, 2011, emissions of SO_2 in pounds per hour and in all units of the applicable standard in the appropriate averaging period (pounds per ton of 100% acid produced as a rolling 3-hour average, as a rolling, 365 day average, pounds per hour as a rolling, 3-hour average, and tons per year as a rolling, 365-day average);

d. results of quarterly cylinder gas audits;

e. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

f. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

g. hours of operation of the emissions unit, continuous SO_2 monitoring system, and control equipment;

h. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous SO_2 monitoring system;

i. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous SO_2 monitoring system; as well as,

j. the reason (if known) and the corrective actions taken (if any) for each such event in (h) and (i).

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

(6) [40 CFR 60.84(a)]

The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be SO_2. Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the SO_2 portion of the Method 8 results shall be used. The span value shall be set at a dual range of 0 – 500 ppm and 0 - 3,600 ppm of SO_2.

(7) The permittee shall maintain a written quality assurance/quality control plan for the continuous SO_2 monitoring system which meets the requirements of 40 CFR Part 60.13 and has been certified by the U.S. EPA or the Ohio EPA, Central Office, designed to ensure continuous valid and representative readings of SO_2 emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60,

Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous SO_2 monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendix F]

(8) 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 stack serving this emissions unit. 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 color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

(9) [40 CFR 60.7(b)]

The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the affected emissions unit, any malfunction of the air pollution control equipment, or any periods during which a continuous monitoring system or monitoring device is inoperative.

(10) See 40 CFR Part 60, Subpart H (40 CFR 60.80-85)

(11) Prior to the installation of the continuous SO_2 monitoring system specified under d)(13), the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 2. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous SO_2 monitoring system meets the requirements of Performance Specifications 2 and 6. Once received, the letter(s)/document(s) of certification shall be maintained on-site and shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

[40 CFR 60.13] and [40 CFR Part 60, Appendix B]

(12) Beginning on July 1, 2011, the permittee shall comply with the CEMS Plan identified as Appendix G in the Request Administrative Modification Number M0001081 submitted by the permittee on January 10, 2011 and the below requirements.

a. SO_2 emissions will be monitored using an SO_2 analyzer at the converter inlet, and SO_2 analyzer at the exit stack, and a stack flow rate analyzer. Except for any analyzer malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), Thepermittee will conduct monitoring during all Operating Periods and during Shutdown. The combination of SO_2 emission monitors and flow monitor will be identified in this permit as the SO_2 Continuous Emission Rate Monitoring System (CERMS).

b. Once every five (5) minutes and one (1) minute, the analyzers will measure the stack SO_2 concentration (fraction, dry basis), the converter inlet SO_2 concentration (fraction, dry basis) and the volumetric flow rate (dry standard cubic feet per minute).

c. During routine calibration checks and adjustments of any of the analyzers, the pre-calibration will be used to fill in any analyzer gaps that occur pending completion of the calibration checks and adjustments.

d. If any one or more than one analyzer is/are not operating for a period of 24 hours or greater, data gaps in the array involving the non-operational analyzer(s) will be filled in as follows:

i. Exit stack gas will be sampled and analyzed for SO_2 at least once per hour, during all Operating Periods. Sampling will be conducted by Reich test or other established method (e.g. portable analyzer). The most recent hourly reading will be substituted for the twelve (12) five-minute readings that would otherwise have been taken if the analyzer had been operating normally.

ii. Converter inlet gas either will be sampled and analyzed for SO_2 using a Reich test or other established method, or the concentration will be estimated using engineering judgment, at least once every four (4) hours during all Operating Periods. The most recent four-hour measurement/estimate will be substituted for the 48 five-minute readings that would otherwise have been taken if the system had been operating normally.

iii. Stack volumetric flow rate will be estimated using engineering judgment.

e. If any one or more than one analyzer is/are not operating for a period of less than 24 hours, one of the following must be done: (i) the requirements set forth for a 24-hour or greater period of downtime must be used to fill in the data gaps; or (ii) the data recorded for the five minute reading immediately preceding the affected analyzer's(s') stoppage must be used to fill in the data gap.

f. In order to secure data on a "dry basis", The permittee may either:

i. assume the moisture content is the greater of 3% or the highest measured moisture content in any Relative Accuracy Test Audit ("RATA"); or

ii. for saturated gas streams only, measure the stack temperature using a stack temperature sensor at the time of each SO_2 measurement and determine the moisture content using a psychometric chart or standard text water vapor pressure correlation.

e) Reporting Requirements

(1) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous SO_2 monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR Parts 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter, documenting all instances of SO_2 emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-18, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous SO_2 and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total SO_2 emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous SO_2 monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous SO_2 monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous SO_2 monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous SO_2 monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[40 CFR 60.7]

(2) The permittee shall submit quarterly Data Assessment Reports containing the information outlined in section 7 of 40 CFR Part 60, Appendix F. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

(3) The permittee shall submit semi-annual written reports that:

a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. describe any corrective actions taken to eliminate the visible particulate emissions.

These reports shall be submitted by January 31, and July 31 of each year and shall address the data obtained during the previous 6-month period.

(4) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the emission limitations in b) shall be determined in accordance with the following methods: Miscellaneous Requirements

a. Emission Limitation:

3.5 pounds ofSO_2 per ton of 100% sulfuric acid produced as a 3-hour rolling average; 4.0 pounds ofSO_2 per ton of 100% sulfuric acid produced as a 3-hour rolling average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in d). If required, compliance shall be demonstrated by Methods 1 through 4 and Method 8 of 40 CFR Part 60, Appendix A and the procedures specified in 40 CFR 60.85(b). Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

b. Emission Limitation:

59.5 lbs/hr of SO_2 and 55.5 lbs/hr of SO_2 as a rolling, 3-hour average

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in d). If required, compliance shall be demonstrated by Methods 1 through 4 and Method 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

c. Emission Limitation:

1,428 lbs/day of SO2, 261 tons of SO_2 per rolling, 365-day period, 2.50 lb of SO_2 per ton of 100% sulfuric acid produced as a rolling, 365 day average; 173.6 tons per year of SO_2 as a rolling, 365-day average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the monitoring and record keeping requirements specified in d).

d. Emission Limitation:

2.10 lbs/hr of sulfuric acid mist

Applicable Compliance Method:

If required, compliance shall be demonstrated by Methods 1 through 4 and Method 8 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

e. Emission Limitation:

9.20 tpy of sulfuric acid mist

Applicable Compliance Method:

The annual sulfuric acid mist emission limitation was developed by multiplying the hourly allowable emission limitation of 2.10 lbs/hr by a maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

f. Emission Limitation:

4.12 lbs/hr of CO

Applicable Compliance Method:

If required, compliance shall be demonstrated by Methods 1 through 4 and Method 10 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

g. Emission Limitation:

18.04 tpy of CO

Applicable Compliance Method:

The annual CO emission limitation was developed by multiplying the hourly allowable emission limitation of 4.12 lb/hr by a maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

h. Emission Limitation:

2.42 lbs/hr of NOx

Applicable Compliance Method:

If required, compliance shall be demonstrated by Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

i. Emission Limitation :

10.6 tpy of NOx

Applicable Compliance Method:

The annual NOx emission limitation was developed by multiplying the hourly allowable emission limitation of 2.42 lbs/hr by a maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual emission limitation.

j. Emission Limitation:

0.075 kg H2SO4 per metric ton of 100 percent sulfuric acid produced (0.15 lb per ton)

Applicable Compliance Method:

If required, compliance shall be demonstrated by the procedures specified in 40 CFR 60.85(b).

k. Emission Limitation:

10 percent opacity

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing methods and procedures specified in Method 9 of 40 CFR Part 60, Appendix A and the procedures of 40 CFR 60.11.

(2) The permittee shall conduct emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted no later than July 1, 2011.

b. The emission testing shall be conducted to demonstrate compliance with the opacity restriction, and the allowable hourly and pound per ton mass emission rates for SO_2 and sulfuric acid mist.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates: for opacity, Method 9 of 40 CFR Part 60, Appendix A; and for SO_2 and sulfuric acid mist, Methods 1 through 4 and Method 8 and the procedures identified under 40 CFR 60.85. This test shall consist of at least three method test runs. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

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 Toledo Division of Environmental Services (TES). The permittee shall take all steps necessary to assure accurate measurements of 100% sulfuric acid production during each test run.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the TES. 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 TES's refusal to accept the results of the emission test(s).

Personnel from the TES 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 TDOES 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 TDOES.

(3) By July 1, 2011, the permittee shall conduct certification tests of the continuous SO_2 monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous SO_2 monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Ongoing compliance with the SO_2 emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

(4) The permittee shall comply with the Quality Assurance Requirements of 40 CFR Part 60, Appendix F.

a. The permittee shall develop and implement a quality control program as outlined under section 3 of 40 CFR Part 60, Appendix F.

b. The permittee shall perform daily calibration drift assessments as required by section 4 of 40 CFR Part 60, Appendix F.

c. TheSO_2 CEMS shall be audited once per calendar quarter according to section 5 of 40 CFR Part 60, Appendix F. CEMS data accuracy shall be calculated according to section 6 of 40 CFR Part 60, Appendix F.

(5) 40 CFR 60.8(c)]

Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of a performance test.

g) Miscellaneous Requirements

(1) None.