



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Lazarus Gov.
Center

RE: **FINAL PERMIT TO INSTALL MODIFICATION** CERTIFIED MAIL
LUCAS COUNTY
Application No: 04-00923

DATE: 11/20/2001

Marsulex Inc
Duane Abbott
6800 W CENTRAL AVE, STE L-1
TOLEDO, OH 43617

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

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

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

Very truly yours,

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

TDES



**Permit To Install
Terms and Conditions**

**Issue Date: 11/20/2001
Effective Date: 11/20/2001**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 04-00923

Application Number: **04-00923**
APS Premise Number: **0448020014**
Permit Fee: **\$0**
Name of Facility: **Marsulex Inc Abbott**
Person to Contact: **Duane**
Address: **6800 W CENTRAL AVE, STE L-1
TOLEDO, OH 43617**

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1400 Otter Creek Rd
Oregon, OHIO**

Description of modification:
Sulfuric acid plant.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Marsulex Inc

Facility ID: **0448020014**

PTI Application: 04-00923

Modification Issued: 11/20/2001

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

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

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

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

Marsulex Inc

Facility ID: **0448020014**

PTI Application: 04-00923

Modification Issued: 11/20/2001

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

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

PERMIT TO OPERATE APPLICATION AND OPERATION AFTER COMPLETION OF CONSTRUCTION

If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

5

Marsulex Inc

PTI Application: 04-00923

Modification Issued: 11/20/2001

Facility ID: **0448020014**

Marsulex Inc

Facility ID: 0448020014

PTI Application: 04-00923

Modification Issued: 11/20/2001

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Marsulex Inc** located in **Lucas** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
P001	Sulfuric Acid Plant/A-Plant (Modification)	Dual Absorption and oxygen enrichment	3745-31-05 3745-18-54 (X) 3745-21-08 (B) 3745-21-06 (B) 40 CFR Part 51, Appendix p 40 CFR Part 60, Appendix B, PS 6	102.7 lbs/hr, 2465 lbs/day & 450 tons/yr SO ₂ 6.5 lbs SO ₂ /ton 100% acid produced. 3.6 lbs/hr and 15.8 tons/yr sulfuric acid mist; 3.85 lbs/hr and 16.5 tons/yr NO _x ; 0.82 lb/hr and 3.59 tons/yr CO
P002	Sulfuric Acid Plant/B-Plant (Modification)	Dual Absorption and oxygen enrichment	3745-31-05 3745-18-54 (X) 3745-21-08 (B) 3745-21-06 (B) 40 CFR Part 51, Appendix p 40 CFR Part 60, Appendix B, PS 6	59.5 lbs/hr, 1428 lbs/day and 261 tons/yr SO ₂ ; 6.5 lbs SO ₂ /ton 100% acid produced; 2.1 lbs/hr and 9.2 tons/yr sulfuric acid mist; 2.42 lbs/hr and 10.6 tons/yr NO _x ; 0.82 lb/hr and 3.59 tons/yr CO

Marsulex Inc
PTI Application: 04-00923
Modification Issued: 11/20/2001

Facility ID: **0448020014**

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Carbon Monoxide	7.18
Nitrogen Oxides	27.4
Sulfur Dioxide	711
Sulfuric Acid Mist	25

CONSTRUCTION STATUS

The **TDES** shall be notified in writing as to (a) the construction starting date, (b) the construction completion date, and (c) the date the facilities were placed into operation for the following sources: P001/A-Plant and P002/B-Plant.

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report describing the test procedures followed and the results of such tests shall be submitted and signed by the person responsible for the test. The Director, or an Ohio EPA representative, shall be allowed to witness the test, examine testing equipment, and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

- A. A completed Intent to Test form shall be submitted to the appropriate Ohio EPA District Office or Local Air Pollution Control Agency where the original permit application was filed. This notice shall be made 30 days in advance and shall specify the source operating parameters, the proposed test procedures, and the time, date, place and person(s) conducting such tests.
- B. Two copies of the test results shall be submitted within 30 days after the completion of the performance test.
- C. Tests shall be performed for the following source(s) and pollutant(s):

Source

Pollutant(s)

P001, P002

SO₂, Sulfuric Acid Mist

RECORD(S) RETENTION AND AVAILABILITY

All records required by this Permit to Install shall be retained on file for a period of not less than three years unless otherwise indicated by Ohio Environmental Protection Agency. All records shall be made available to the Director, or any representative of the Director, for review during normal business hours.

8

Marsulex Inc

PTI Application: 04-00923

Modification Issued: 11/20/2001

Facility ID: **0448020014**

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **TDES**.

Marsulex Inc
PTI Application: 04-00923
Modification Issued: 11/20/2001

Facility ID: **0448020014**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **TDES**.

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. The owner or operator must apply for and obtain a permit to install from the Ohio EPA (OEPA) before increasing production above levels listed in the permit to install application or making any further modifications to the source.
2. The owner or operator shall record on a daily basis the emissions of sulfur dioxide (SO₂) in units of pounds per day. Maximum allowable emissions are 450 tons/year based upon a rolling 365 day period for P001, and 261 tons/year per rolling 365 day period for P002. Upon start up under this permit to install modification to allow the production increase, the rolling 365 day tons/year emissions allowables shall be met. The emissions from the previous year's operation shall be used in calculating compliance.
3. Monitoring Requirements:

The owner or operator shall maintain and operate the continuous bubbler system (CBS) to record and

Marsulex Inc

Facility ID: **0448020014**

PTI Application: 04-00923

Modification Issued: 11/20/2001

report SO₂ emissions data from sources P001 and P002 in accordance with the May 5, 1987 approved State Implementation Plan revision for Coulton Chemical. The CBS shall comply with the requirements specified in 40 cfr part 51, Appendix P. The CBS shall record and report SO₂ emissions in pounds per hour, pounds per day, tons per year, and pounds of SO₂ produced per ton of one-hundred percent sulfuric acid produced. The pounds per hour emission measurements shall be based on three (3)-hour "block" averages. There are eight (8) block averages per day. These records shall be maintained at the facility and be available upon request for inspection for a period of five (5) years.

Within 120 days of the effective date of this permit to install, flow monitors shall be installed and tested for sources P001 and P002 to allow for monitoring sulfur dioxide in units of pounds per hour, pounds per day, and pounds per year. This continuous monitoring equipment shall comply with the requirements specified in 40 CFR, Part 60. Initial certification of the flow monitor shall be performed in accordance with procedures specified in 40 CFR Part 60, Appendix B, Performance Specification 6.

An intent to test notification shall be submitted to the Toledo Division of Environmental Services (TDOES) thirty (30) days prior to certification testing of the flow monitor. Representatives of the Ohio EPA shall be permitted to witness the performance specification test. Two copies of the test results shall be submitted to the TDOES within Forty-Five (45) days after the test is completed.

The owner or operator shall implement a quality assurance /quality control program. All maintenance on any portion of the monitoring system shall be documented in a logbook dedicated to the monitoring system.

4. Reporting excess emissions:

For the purposes of reporting excess emissions, the owner or operator shall report all daily exceedances of the pounds per day applicable emission limitation for sources listed in this permit to install based on an arithmetic average of the eight (8) three (3)-hour "block" averages for each calendar day. For the purposes of reporting excess emissions on an annual basis (the SO₂ tons per year limitation), the eight (8) three(3)-hour readings for each calendar day shall be averaged on a 365 day rolling basis. The owner or operator shall report all exceedances of the 6.5 pounds of S)₂ emitted per ton of one-hundred percent sulfuric acid produced.

Excess Emission reports shall be submitted to the Toledo Division of Environmental Services on a quarterly basis. The reports shall be submitted February 1, May 1, August 1, and November 1 of each year and shall cover the data obtained during the previous calendar quarters.

5. Applicability of the pounds of SO₂ per ton of one-hundred percent sulfuric acid produced limit during periods of startup and shut down:

During periods of start-up and shut-down of P001 and P002, the owner or operator shall minimize emissions by utilizing good engineering practices and OAC rule 3745-15-06. The owner or operator shall comply with the applicable hourly mass SO₂ limit during periods of start-up or shut-down. During periods of start-up or shut-down, the pounds of SO₂ per ton of one-hundred percent sulfuric acid produced limit does not apply because sulfuric acid is not produced at one hundred percent capacity.

Marsulex IncFacility ID: **0448020014****PTI Application: 04-00923****Modification Issued: 11/20/2001**

6. Within 180 day of start-up, the owner or operator shall conduct an emission test for the sources listed in this permit in order to demonstrate compliance with the allowable hourly mass emission rate for sulfur dioxide and sulfuric acid mist. The emission test shall be conducted according to procedures specified in EPA Method 8. Tests must be conducted while the emission units are operating at a minimum of 90% of the maximum capacity listed in the Permit to Install application.

If compliance testing on an emission unit is performed at less than 90% of maximum rated capacity, then terms and conditions restricting operation will be added to the emission unit's permit to Operate. Operation of the emission unit will be restricted by the following equation.

$$M_{all} = \frac{M_{test}}{0.9}$$

M_{all} = Allowable operating rate, lbs/hr

M_{test} = Operating rate during performance test, lbs/hr