



State of Ohio Environmental Protection Agency

Street Address:
1800 WaterMark Drive
Columbus, OH 43215-1099

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

Mailing Address:
P.O. Box 1049
Columbus, OH 43216-1049

**RE: PERMIT TO INSTALL DIRECT FINAL
FRANKLIN COUNTY
Application No: 01-7496**

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

DATE: April 7, 1999

Ohio Steel Industries, Inc.
Richard D Biggs
2575 Ferris Road
Columbus, OH 43224

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

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 Director's 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
Ohio EPA, Central District Office, DAPC



Permit to Install
Terms and Conditions

Application Number: 01-7496

APS Premise Number: 0125040121

Permit Fee: **\$ 2800.00**

Name of Facility: Ohio Steel Industries, Inc.

Person to Contact: Richard D Biggs

Address: 2575 Ferris Road

Columbus, OH 43224

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

**2575 Ferris Road
Columbus, OHIO**

Description of proposed emissions unit(s):

ONE PVC BLENDER SYSTEM (P002); ONE BULK PVC TRANSFER AND STORAGE SYSTEM (P004); ONE BLENDED PVC TRANSFER TO STORAGE BIN (P005).

Date of Issuance: April 7, 1999

Effective Date: April 7, 1999

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any

information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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 of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. 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 emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

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

7. 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.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

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

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

10. 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.

11. 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).

12. 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.

13. Source Operation and Operating Permit Requirements 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, 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 emissions unit(s) covered by this permit.

14. Construction Compliance Certification

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

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	34.87

PART II: SPECIAL TERMS AND CONDITIONS

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
PVC Blender System	OAC rule 3745-31-05	Allowable annual particulate emissions from this emissions unit shall not exceed 17.3 tons PM per year. See B.1 below.
	OAC rule 3745-17-11	Allowable hourly particulate emissions from this emissions unit shall not exceed 3.95 lbs PM per hour.
	OAC rule 3745-17-07(A)(1)(a)	Visible particulate emissions from this emissions unit shall not exceed 20% opacity as a six minute average, except as provided by rule.

2. **Additional Terms and Conditions**

- a. None.

B. Operational Restrictions

1. The facility shall employ a vacuum hopper bag filter with 99% control efficiency, an AAF air filter with 98% control efficiency, and a pickup control hood with 90% capture efficiency to control particulate emissions from emissions unit P002 when the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following:
 - a. the mass quantity of PVC powder and additives processed in this emissions unit; and,
 - b. the number of hours this emissions unit was in operation each day.

D. Reporting Requirements

1. None.

E. Testing Requirements

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

- a. Emissions Limitation:

Allowable hourly PM emissions from this emissions unit shall not exceed 3.95 lbs PM per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emissions Limitation:

Allowable annual PM emissions from this emissions unit shall not exceed 17.3 tons PM per year.

Applicable Compliance Method:

The annual PM emissions limitation is obtained by multiplying the allowable hourly PM emissions limitation by 8760 (hours/year) and dividing by 2000 (pounds/ton).

- c. Emissions Limitation:

Particulate emissions shall be controlled by a vacuum hopper bag filter with 99% control efficiency and an AAF air filter with 98% control efficiency.

Applicable Compliance Method:

If required, a particulate emissions test shall be conducted at the inlet and outlet of the control devices to determine the control efficiency for these control devices. This testing shall be in accordance with 40 CFR Part 60, Appendix A, Method 5.

- d. Emissions Limitation

Visible particulate matter emissions from any stack shall not exceed 20% opacity, as a 6-minute weighted average, except as provided by rule.

Applicable Compliance Method:

For the purpose of determining compliance with paragraph (A)(1) of rule 3745-17-07 of the Ohio Administrative Code, visible particulate emissions shall be determined according to OAC 3745-17-03 (B)(1).

F. Miscellaneous Requirements

None.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Bulk PVC Transfer and Storage System	OAC rule 3745-31-05	Allowable hourly particulate emissions from this emissions unit shall not exceed 3.6 lbs PM per hour.
	OAC rule 3745-17-11	Allowable annual particulate emissions from this emissions unit shall not exceed 0.27 ton PM per year. See B.1 below.
	OAC rule 3745-17-07(A)(1)(a)	Particulate emission limitations established by this rule are less stringent than the particulate emission limits established by best available technology. Visible particulate emissions from this emissions unit shall not exceed 20% opacity as a six minute average, except as provided by rule.

2. **Additional Terms and Conditions**

- a. None.

B. Operational Restrictions

1. The facility shall employ a silo settling chamber with 90% control efficiency, a bulk PVC silo cyclone with 91% control efficiency, and a bulk PVC silo bag filter with 99% control efficiency to control particulate emissions from emissions unit P004.

2. The facility shall unload a maximum of 146 truckloads of bulk PVC powder per calendar year (i.e., January through December). Each truckload shall contain a maximum of 40,000 pounds of bulk PVC powder.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the number of truckloads processed per month.

D. Reporting Requirements

1. The permittee shall submit annual deviation (excursion) reports if more than 146 truckloads of bulk PVC powder, as described in Section B.2, are processed during the previous calendar year (i.e., January through December). These reports shall include a copy of such record, the probable cause of such deviations, and any corrective actions or preventative measures which have been or will be taken. If no deviations occurred during the calendar year, the permittee shall submit an annual report, which states that no deviations occurred during that calendar year. These reports shall be sent to the Ohio EPA, Central District Office, by January 31 of each year.

E. Testing Requirements

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

a. Emissions Limitation:

Allowable hourly PM emissions from this emissions unit shall not exceed 3.6 lbs PM per hour.

Applicable Compliance Method:

Compliance shall be determined by using the following calculations as provided by the facility:

Silo settling:	40,000 lbs x 0.9	=	36,000 lbs
PVC to cyclone:	40,000 lbs - 36,000 lbs	=	4,000 lbs
Cyclone collection:	4,000 lbs x 0.91	=	3,640 lbs
PVC to bag filter:	4,000 lbs - 3,640 lbs	=	360 lbs
Bag filter collection:	360 lbs x 0.99	=	356.4 lbs
PM emitted:	360 lbs - 356.4 lbs	=	3.6 lbs/hour

b. Emissions Limitation:

Allowable annual PM emissions from this emissions unit shall not exceed 0.27 ton PM per year.

Applicable Compliance Method:

Compliance shall be determined by using the following calculations as provided by the facility:

$$\begin{aligned} \text{Total annual PM emissions} &= \\ &= (\text{number of truckloads/year}) \times (3.6 \text{ lbs PM}^*/\text{truckload}) \times (1 \text{ ton}/2000 \text{ lbs}) \\ &= \text{tons PM/year} \end{aligned}$$

*based on the maximum 40,000 pound truckload

c. Emissions Limitation

Visible particulate matter emissions from any stack shall not exceed 20% opacity, as a 6-minute weighted average, except as provided by rule.

Applicable Compliance Method:

For the purpose of determining compliance with paragraph (A)(1) of rule 3745-17-07 of the Ohio Administrative Code, visible particulate emissions shall be determined according to OAC 3745-17-03 (B)(1).

F. Miscellaneous Requirements

None.

PART II: SPECIAL TERMS AND CONDITIONS [Continued]

A. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blended PVC Transfer to Storage Bins or Gaylord Storage	OAC rule 3745-31-05	Allowable annual particulate emissions from this emissions unit shall not exceed 17.3 tons PM per year. See B.1 below.
	OAC rule 3745-17-11	Allowable hourly particulate emissions from this emissions unit shall not exceed 3.95 lbs PM per hour.
	OAC rule 3745-17-07(A)(1)(a)	Visible particulate emissions from this emissions unit shall not exceed 20% opacity as a six minute average, except as provided by rule.

2. **Additional Terms and Conditions**

- a. None.

B. Operational Restrictions

1. The facility shall employ a cyclone unit with 91% control efficiency, a silo vent bag filter with 99% control efficiency, a cartridge air filter with 99% control efficiency, and a collection system with 90% capture efficiency to control particulate emissions from emissions unit P005 when the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain daily records of the following:
 - a. the mass quantity of blended PVC powder processed in this emissions unit; and,
 - b. the number of hours this emissions unit was in operation each day.

D. Reporting Requirements

1. None.

E. Testing Requirements

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

- a. Emissions Limitation:

Allowable hourly PM emissions from this emissions unit shall not exceed 3.95 lbs PM per hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emissions limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

- b. Emissions Limitation:

Allowable annual PM emissions from this emissions unit shall not exceed 17.3 tons PM per year.

Applicable Compliance Method:

The annual PM emissions limitation is obtained by multiplying the allowable hourly PM emissions limitation by 8760 (hours/year) and dividing by 2000 (pounds/ton).

- c. Emissions Limitation:

Particulate emissions shall be controlled by a cyclone unit with 91% control efficiency and a bag filter with 99% control efficiency to control particulate emissions from emissions unit P005 when the emissions unit is in operation.

Applicable Compliance Method:

If required, a particulate emissions test shall be conducted at the inlet and outlet of the control devices to determine the control efficiency for these control devices. This testing shall be in accordance with 40 CFR Part 60, Appendix A, Method 5.

- d. Emissions Limitation

Visible particulate matter emissions from any stack shall not exceed 20% opacity, as a 6-minute weighted average, except as provided by rule.

Applicable Compliance Method:

For the purpose of determining compliance with paragraph (A)(1) of rule 3745-17-07 of the Ohio Administrative Code, visible particulate emissions shall be determined according to OAC 3745-17-03 (B)(1).

F. Miscellaneous Requirements

None.