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Facility Name: **Commercial Intertech Corp**

Application Number: **02-2422**

Date: **February 3, 1999**

### **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

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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.

### **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.

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### **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**

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

### **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.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; 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 **Commercial Intertech Corp** located in **Mahoning** 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.

3745-31-05

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>
P030	Modification to an existing mold dump conveyor didion shakeout, and hopper to increase PM allowable	Fabric filter w/PM = 0.01 gr/dscf of baghouse exhaust gases	3745-31-05
			3745-17-11
			3745-17-07
			3745-17-07

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
	TPY.			
Permit Allowable Emissions and/or Control/Usage Requirements	Less stringent than 3745-31-05 Visible emission (fugitive) shall not exceed 20% opacity as a 3 minute average			
PM: 0.01 gr/dscf, 1.47 lbs/hr 6.44 TPY from process	OC: 6.03 lb/hr and 26.4 TPY. CO: 10 lbs/hr and 4.4 TPY			
Visible emissions (stack) shall not exceed 5% opacity as a 6 minute average				
Fugitive PM: 7.03				

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SUMMARY  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PM	13.47 TPY (total PM emissions increase of 13.08 TPY)
OC	26.4 TPY
CO	4.4 TPY

**REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Ohio EPA, Northeast District Office, 2110 E. Aurora Road, Twinsburg, Ohio 44087.**

**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)

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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 **Ohio EPA, Northeast District Office, 2110 E. Aurora Road, Twinsburg, Ohio 44087.**

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**

##### **A. Source Description**

1. The emissions unit covered by this permit to install is for a mold dump conveyor, Didion shakeout and hopper for processing gray iron castings(P030). This PTI is to replace PTI # 02-8768 issued on November 30, 1994. The PTI modification is to account for an increase in PM emissions and to identify OC and CO emissions from this operation.

##### **B. Allowable Emissions Limitation(s)**

1. For the emissions unit P030 (mold dump conveyor, Didion

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shakeout and hopper):

- a. the PM emissions from the fabric filter baghouse exhaust shall not exceed 0.01 grain per dry standard cubic foot (gr/dscf) of exhaust gases;
- b. the stack emissions of PM shall not exceed 1.47 pounds per hour. This is based on a grain loading limit of 0.01 gr/dscf and the anticipated gas flow rate from P030 of 17,100 SCFM; and,
- c. the fugitive PM emissions into the ambient air shall not exceed 7.03 tons per year. (This emission limit is based on emission factor from AP-42.)

**C. Operational Restrictions**

1. The pressure drop across the baghouse shall be maintained within 2-4 inches of water, the normal range of operations specified by the manufacturer while the emissions unit is in operation.

**D. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall maintain annual records of the iron castings (tons) processed in this emissions unit.

**E. Reporting Requirements**

1. The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

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**F. Testing Requirements**

1. Compliance with the allowable hourly limit mass emissions rate for particulate matter emissions from the baghouse stack shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures in OAC rule 3745-17-03, if required by the Ohio EPA.
2. Compliance with the allowable visible emissions limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 9 and the procedures in OAC rule 3745-17-03, if required by the Ohio EPA.
3. Compliance with the allowable hourly carbon monoxide limitations shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 10, if required by the Ohio EPA.
4. **Emissions Limitation:** 6.03 lbs OC per hour

**Applicable Compliance Method:** To determine compliance with the organic compound limit, the following equation shall be used:

$$E = \text{maximum iron processed (tons per hour)} \times 1.2 \text{ lbs/ton}$$

where:

E = organic compound emissions (lbs/hr)  
 1.2 lbs/ton = emissions factor in lbs of organic compound per ton of iron processed (from SCC emissions factors 30400332)

5. **Emissions Limitation:** 26.4 tons OC per year

**Applicable Compliance Method:** To determine compliance with the organic compound limit, the following equation shall be used:

$$E = \text{maximum iron processed (tons per hour)} \times 1.2$$

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lbs/ton X 1/2000 tons/lbs

where:

E = organic compound emissions (lbs/hr)

1.2 lbs/ton = emissions factor in lbs of organic compound per ton of iron processed (from SCC emissions factors 30400332)

6. **Emissions Limitation:** 7.03 tons PM per year (fugitive emissions)

Applicable Compliance Method: To determine compliance with the particulate matter limit, the following equation shall be used:

$$E = [\text{iron processed (tons per year)} \times 3.2 \text{ (lbs/ton)} \times \frac{1}{2000} \text{ (ton/lbs)}] \times (1 - 0.9)$$

where:

E = particulate matter emissions (tons/year)

3.2 = emission factor in lbs particulate matter per ton iron processed (from AP-42, Table 12.10-7)

0.9 = capture efficiency for particulate matter

G. **Miscellaneous**

1. The mold dump conveyor, Didion shakeout, and hopper shall be adequately enclosed and vented to the particulate emission control system (fabric filter) to eliminate visible emissions of fugitive dust.