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Facility Name: **Galt Alloys, Inc**

Application Number: **15-1323**

Date: **October 28, 1998**

**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.

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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.

#### **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**

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.

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**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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The air contaminant emissions units listed below comprise the Permit to Install for **Galt Alloys, Inc** located in **Stark** 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.

Ohio EPA Source Number	Source Identification Description	BAT Determination	Applicable Federal & OAC Rules	Permit Allowable Mass Emissions and/or Control/Usage Requirements
P011	Ferroalloy electric induction furnace (#7) with a maximum rated capacity of 3300 lbs/hour and controlled with a baghouse.	Compliance with the applicable OAC regulations and the terms and conditions of this permit, and use of a baghouse for control.	3745-17-07 (6/14/91)	BAT is more stringent
			3745-17-11 (6/14/91)	BAT is more stringent
			3745-31-05 (4/12/96)	PM/PM <sub>10</sub> : 0.005 gr/dscf with a maximum airflow of 40,500 dscfm from the baghouse; and 7.6 tpy
				no visible emissions from baghouse
P012	Ferroalloy electric induction furnace (#8) with a maximum rated capacity of 3300 lbs/hour and controlled with a baghouse.	Compliance with the applicable OAC regulations and the terms and conditions of this permit, and use of a baghouse for control.	3745-17-07 (6/14/91)	BAT is more restrictive
			3745-17-11 (6/14/91)	BAT is more restrictive
			3745-31-05 (4/12/96)	PM/PM <sub>10</sub> : 0.005 gr/dscf with a maximum airflow of 40,500

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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>
P012 cont'd				dscfm from the baghouse; and 7.6 tpy  no visible emissions from baghouse exhaust stack

\* Emissions limits stated for P011 are the total emissions combined for P011 and P012. Both furnaces shall be controlled by the same baghouse.

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
PM/PM <sub>10</sub>	7.6**

Note: The information contained under the Summary of Emissions section of the Permit to Install is for informational purposes only and is not enforceable.

\*\* The PM/PM<sub>10</sub> allowable includes 0.45 Tons/year of nickel and 0.23 tons/year of manganese.

**CONSTRUCTION STATUS**

The **Canton City Health Department, Air Pollution Control Division** 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: **P011 and P012.**

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**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 Canton City Health Department, Air Pollution Control Division 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 pollutants(s):

**Source**

**Pollutant(s)**

**P011 & P012**

**PM**

**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.

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**REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Canton Air Pollution Control, 420 Market Avenue North, Canton, Ohio 44702-1544.**

**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 **Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.**

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.

**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.

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**ADDITIONAL SPECIAL TERMS AND CONDITIONS**

**A. Operational Restrictions**

1. The electric induction furnaces, including all associated equipment, shall be operated and maintained in accordance with the manufacturer's specifications.
2. The maximum combined annual production rate for P011 and P012 shall not exceed 15,610 tons.
3. The pressure drop across the baghouse shall be maintained within the range determined during the performance test (Condition D.2) to ensure proper operation of the fabric filter.
4. The permittee shall achieve a capture efficiency which shall reduce the escape of fugitive emissions to the maximum extent possible through the use of good engineering practices.
5. Use of metals in these furnaces will include: Al, Fe, Ti, Fe-B, Mn, Si-Zr, and Si. The permittee shall obtain approval from the Canton City Health Department, Division of Air Pollution Control prior to the use of metals other than those listed in this Condition.

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

1. The permittee shall maintain annual records of the actual combined production rate for P011 and P012 for each calendar year in tons/year.
2. 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 at times when the melting and pouring operations are being performed.

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3. 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.
  
4. 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 roof fans, roof monitors, doors, and other openings in the building housing the induction furnaces. 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

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

**C. Reporting Requirements**

1. If the permittee exceeds the annual production rate specified in Condition A.2, the permittee shall submit a written report of this exceedance to the Canton City Health Department Air Pollution Control Division within 30 days of the exceedance. The exceedance report, at a minimum, shall identify the actual production rate for the calendar year of concern. A report is only required if an exceedance occurs.
2. 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 in Condition A.3.
3. The permittee shall submit semiannual written reports which (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 to the Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the roof fans, roof monitors, doors, and other openings in the building housing the induction furnaces and (b) describe any corrective actions taken to minimize the visible particulate emissions. These reports shall be submitted to the Canton City Health Department, Air Pollution Control Division by January 31 and July 31 of each year and shall cover the previous 6-month period.

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**D. Compliance Methods and Emission Testing Requirements**

1. Compliance with the emissions limitations of this permit shall be determined in accordance with the following methods:

a. Emission limitation

0.005 gr/dscf

Applicable Compliance Method

40 CFR Part 60, Appendix A, Method 5

b. Emission Limitation

7.6 tons/year of PM/PM<sub>10</sub>

Applicable Compliance Method

The ton/year limitations were developed in the following manner:

For PM/PM<sub>10</sub>, convert gr/dscf (determined per Condition D.2) to lb/hr based on the maximum airflow of 40,500 dscf/min. Then multiply the lb/hr emission rate by the maximum operating schedule of 8760 hours/year, and divide by 2000 lbs/ton.

Therefore, provided compliance is shown with the hourly/daily limitations, compliance will also be shown with the annual limitations.

c. Visible Emission Limitation

There shall be no visible particulate emissions from the stack for the fabric filter servicing this emissions unit

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Applicable Compliance Method

40 CFR Part 60, Appendix A, Method 22

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 3 months after startup of the furnaces.
  - b. 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 Canton City Health Department, Air Pollution Control Division.
  - c. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PM/PM<sub>10</sub>, utilizing the test methods noted in Conditions D.1.a.
  - d. The emission testing shall be used to determine the appropriate pressure drop range for efficient operation of the baghouse by taking pressure drop readings throughout the course of the test(s) using the equipment installed per Condition B.2.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Canton City Health Department, Air Pollution Control Division. 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 Canton City Health Department, Air Pollution Control Division's refusal to accept the results of the emission test(s).

Personnel from the Canton City Health Department, Air Pollution Control Division shall be permitted to witness the test(s), examine the testing equipment, and acquire

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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 Canton City Health Department, Air Pollution Control Division within 30 days following completion of the test(s).

**E. Miscellaneous Requirements**

None.