

Mr. William G. Grimes
Gartland Foundry
PO Box 1564
Terre Haute, Indiana 47808

April 25, 2001

Re: AA 167-14263
First Administrative Amendment to
Part 70 167-5998-00007

Dear Mr. Grimes:

Gartland Foundry was issued a permit on September 27, 2000 for a grey iron foundry for the manufacture of iron castings.. A letter requesting the following changes was received on February 15, 2001:

- (1) The stack test requirement be deferred to between the 24th and 30th months of the 5-year permit period.
- (2) The acceptable pressure drop ranges listed in the Title V permit for the Wheelabrator 88 (BH3), Steelcraft (BH1), and the Mikropul (BH5) dust collectors be modified to ½ to 8 inches of water.

Pursuant to the provisions of 326 IAC 2-7-11 which states that an administrative permit amendment is a Part 70 permit revision that makes a change to a monitoring, maintenance, or record keeping requirement established by this article that is not environmentally significant. Such change shall not be an administrative amendment if the monitoring, maintenance, or record keeping is required by an applicable requirement. Therefore, the permit is hereby administratively amended as follows:

D.1.3, D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

During the period between ~~6 and 12~~ **24th and 30th** months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM and VCAPC may require compliance testing when necessary to determine if the facility is in compliance.

Gartland Foundry has restructured their operating schedules and melting capabilities to the point where they have not run the cupola since March of 2000. Currently, they are melting exclusively with their induction furnaces and the extension would be used to fully evaluate the potential of restarting the cupola, with the likelihood that they would not fire it up again. **However, if the cupola is started up for any reason, the testing shall be performed within sixty (60) days of the startup date.**

D.2.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse (BH1) used in conjunction with the Electric Induction Furnaces #3 and #4, at least once per shift when either Electric Induction Furnace is in operation and venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of ~~4.0~~ **1.0** and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and VCAPC, and shall be calibrated at least once every six (6) months.

D.4.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with sand muller and sand conveyor, at least once per shift when the sand muller and sand conveyor are in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of ~~4.0~~ 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with casting shakeout, at least once per shift when the casting shakeout system is in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of ~~4.0~~ 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the spin blast, at least once per shift when the spin blast is in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and Vigo County Air Pollution Control and shall be calibrated at least once every six (6) months.

Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ), and Vigo County Air Pollution Control (VCAPC) have agreed that the pressure drop range shall be 1.0 to 6.0 inches of water. The requested range of ½ to 8 inches of water was considered to be broad. The information supplied by Steelcraft Corporation stated that anything over 6 inches of water indicates that the baghouse(s) is not operating properly. Therefore, the pressure drop range was determined to be 1.0 and 6.0 inches of water.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Darren Woodward, at (812)462-3433, extension 15.

Sincerely,

George M. Needham
Director
Vigo County Air Pollution Control

Attachments

DKW

cc: Mindy Hahn - IDEM
Winter Bottum - IDEM

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

One (1) Cupola, identified as EU110, with a maximum capacity of 11.2 tons of metal per hour, using scrubber identified as SCR for control, and exhausting to stack SC-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM) [326 IAC 6-1-2] [326 IAC 6-1-13] [326 IAC 11-1]

Pursuant to OP 07-3321-01-92, issued on January 1, 1992, the PM emissions from the foundry cupola shall be limited to 0.15 grains per dry standard cubic foot at an air flow rate of 20,000 cubic feet per minute. PM emissions from the cupola are also limited to 25.68 pounds per hour and 112.5 tons per year (based on a 12 month rolling total).

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

During the period between 24th and 30th months after issuance of this permit, the Permittee shall perform PM testing utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM and VCAPC may require compliance testing when necessary to determine if the facility is in compliance.

D.1.4 Particulate Matter (PM)

The scrubber (SCR) for PM control shall be in operation at all times when the cupola is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.5 Visible Emissions Notations

- (a) Daily visible emission notations of the cupola scrubber stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Two (2) Electric Induction Furnaces as follows:

- (a) EU130, consisting of induction furnace #3, with a maximum capacity of 5.0 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.
- (b) EU140, consisting of induction furnace #4, with a maximum capacity of 5.0 tons of metal per hour, using baghouse BH1 for control, and exhausting to stack SC-2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to OP 07-3321-03-95, issued on August 21, 1995, the particulate matter (PM) emissions from Electric Induction Furnaces #3 and #4 shall be limited to 0.02 grains per dry standard cubic foot at an air flow rate of 20,000 cubic feet per minute. PM is also limited to 2.98 pounds per hour, and 13.04 tons per year.

These limits also satisfy the requirements of 326 IAC 2-2, for minor modifications to a major PSD source.

D.2.2 Housekeeping

Pursuant to OP-07-3321-03-95, the charge materials for electric induction furnaces #3 and #4 shall be stored inside a building. Also, visible emissions from any building opening shall not exceed 20% opacity, as determined by 40 CFR 60 Appendix A, Method 9 and 326 IAC 5-1.

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

During the period between 24th and 30th months after issuance of this permit, the Permittee shall perform PM testing on each Electric Induction Furnace utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM and VCAPC may require compliance testing when necessary to determine if the facility is in compliance.

D.2.5 Particulate Matter (PM)

Pursuant to OP-07-3321-03-95, issued on August 21, 1995, the baghouse for PM control shall be in operation and control emissions from the Electric Induction Furnaces #3 and #4 are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.6 Visible Emissions Notations

- (a) Daily visible emission notations of the Electric Induction Furnace stack (SC-2) exhaust shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.2.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse (BH1) used in conjunction with the Electric Induction Furnaces #3 and #4, at least once per shift when either Electric Induction Furnace is in operation and venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM and VCAPC, and shall be calibrated at least once every six (6) months.

D.2.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the Electric Induction Furnace operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.2.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated processes will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.10 Record Keeping Requirements

- (a) To document compliance with Condition D.2.5, the Permittee shall maintain records of daily visible emission notations of the Electric Induction Furnace stack exhaust.

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM and VCAPC may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM and VCAPC, compliance with the particulate matter limit specified in Condition D.3.1 and D.3.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.4.5 Particulate Matter (PM)

- (a) The baghouse (BH5) for PM control from the sand muller and sand conveyor shall be in operation at all times when the sand muller and sand conveyor are in operation.
- (b) The baghouse (BH3) for PM control from the casting shakeout shall be in operation at all times when the casting shakeout system is in operation.
- (c) The baghouse (BH2) for PM control from the spin blast shall be in operation at all times when the spin blast is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.6 Visible Emissions Notations

- (a) Daily visible emission notations of the three baghouse (BH2, BH3, and BH5) exhausts shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.4.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with sand muller and sand conveyor, at least once per shift when the sand muller and sand conveyor are in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with casting shakeout, at least once per shift when the casting shakeout system is in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the spin blast, at least once per shift when the spin blast is in operation and when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 4.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

**PART 70 OPERATING PERMIT
OFFICE OF AIR MANAGEMENT
and
Vigo County Air Pollution Control**

**Gartland Foundry Company
330 Grant Street
Terre Haute, Indiana 47802**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T167-5998-00007	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: September 27, 2000
First Administrative Amendment AA 167-14263	Pages Affected: 32, 34, 35, and 41
Issued by: George M. Needham, Director Vigo County Air Pollution Control	Issuance Date: April 25, 2001