State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL MODIFICATION **CERTIFIED MAIL**
MONTGOMERY COUNTY

Street Address: 122 S. Front Street
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329
Mailing Address: Lazarus Gov. Center P.O. Box 1049

Application No: 08-04626
Fac ID: 0857041183
DATE: 2/15/2005

Flowserve Corp Dayton Foundry Operations
Dennis Baker
PO Box 1813
Dayton, OH 45401

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
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

cc: **USEPA** **RAPCA**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install **Issue Date: 2/15/2005**
Terms and Conditions **Effective Date: 2/15/2005**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 08-04626

Application Number:	08-04626
Facility ID:	0857041183
Permit Fee:	**$200**
Name of Facility:	Flowserve Corp Dayton Foundry Operations
Person to Contact:	Dennis Baker
Address:	PO Box 1813 Dayton, OH 45401

Location of proposed air contaminant source(s) [emissions unit(s)]:
PO Box 1813
Dayton, **Ohio**

Description of proposed emissions unit(s):
Administrative modification to correct emissions unit descriptions.

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

Joseph P. Koncelik

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

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 cannot meet the requirements of this permit 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 cannot meet the requirements of this permit 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 Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

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 ninety (90) 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

Pollutant	Tons Per Year
Particulate Matter	**7.52**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F004 - 325 kilowatt power supply with 2 x 300 lb induction melting furnaces and a 500 lb induction melting furnace	OAC rule 3745-31-05(A)(3)	The particulate emissions (PE) from this emissions unit shall not exceed 1.07 lbs/hour and 4.70 tons per year (TPY). See Section A.2.a.
	OAC rule 3745-17-07(B)(1)	The visible particulate emissions from this emissions unit shall not exceed 20 percent opacity as a three-minute average.
	OAC rule 3745-17-08(B)(3)	See Section A.2.b.

2. Additional Terms and Conditions

2.a The 1.07 lbs/hour limitation was established for PTI purposes to reflect the potential to emit for the emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

2.b The permittee shall minimize or eliminate visible particulate emissions through the employment of Reasonably Available Control Measures (RACM). These measures shall include, but not be limited to the following:

i. The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust.

ii. The collection efficiency is sufficient is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

iii. The control equipment achieves an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust, whichever is less stringent.

If the permittee can demonstrate compliance with the visible emissions restriction contained in OAC rule 3745-17-07(B)(1), then the employment of the permittee's RACM, in accordance with the requirements noted above, will be deemed adequate.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the total metal melted in this emissions unit, in tons.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 location and 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 minimize or eliminate the abnormal visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (iv) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions

were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any abnormal visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitations in this permit for emissions unit F003 shall be determined in accordance with the following method(s):

   a. Emission Limitation-
   The PE from this emissions unit shall not exceed 1.07 lbs/hour.

   Applicable Compliance Method-
   Compliance shall be determined by summing the maximum hourly emission rates for metal melting, pouring, casting and cooling.

   The maximum hourly emission rate from metal melting, pouring, casting and cooling is determined by multiplying the maximum hourly production rate of 0.25 tons/hour by the emission factor of 4.29 lbs of PE/ton of metal melted, as specified in USEPA reference document AP-42, Table 12.13-2 (1/95).

   b. Emission Limitation-
   The PE from this emissions unit shall not exceed 4.70 TPY.

   Applicable Compliance Method-
   Compliance shall be determined by summing the maximum hourly emission rates for metal melting, pouring, casting and cooling.

   The annual emission rate from metal melting, pouring, casting and cooling is determined by multiplying the sum of monthly production records as specified in section II.C.1. for the calendar year, by the emission factor of 4.29 lbs of PE/ton of metal melted, as specified in USEPA reference document AP-42, Table 12.13-2 (1/95).

   c. Emission Limitation-
   The visible particulate emissions from this emissions unit shall not exceed 20 percent

opacity as a three-minute average.

Applicable Compliance Method-
If required, Compliance shall be determined by visible emission evaluations performed using the methods and procedures specified in USEPA Reference Method 9 of 40 CFR Part 60, Appendix A**.**

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F005 - 225 kilowatt power supply with 3 x 150 lb induction melting furnaces and a 300 lb induction melting furnace.	OAC rule 3745-31-05(A)(3)	The particulate emissions (PE) from this emissions unit shall not exceed 0.64 lb/hour and 2.82 tons per year (TPY). See Section A.2.a.
	OAC rule 3745-17-07(B)(1)	The visible particulate emissions from this emissions unit shall not exceed 20 percent opacity as a three-minute average.
	OAC rule 3745-17-08(B)(3)	See Section A.2.b.

2. Additional Terms and Conditions

2.a The 0.64 lb/hour limitation was established for PTI purposes to reflect the potential to emit for the emission unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

2.b The permittee shall minimize or eliminate visible particulate emissions through the employment of Reasonably Available Control Measures (RACM). These measures shall include, but not be limited to the following:

i. The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust.

ii. The collection efficiency is sufficient is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

iii. The control equipment achieves an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the exhaust, whichever is less stringent.

If the permittee can demonstrate compliance with the visible emissions restriction contained in OAC rule 3745-17-07(B)(1), then the employment of the permittee's RACM, in accordance with the requirements noted above, will be deemed adequate.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the total metal melted in this emissions unit, in tons.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive 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 location and 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 minimize or eliminate the abnormal visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not

have to document the exact start and end times for the visible emission incident under item (iv) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any abnormal visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitations in this permit for emissions unit F003 shall be determined in accordance with the following method(s):

   a. Emission Limitation-
   The PE from this emissions unit shall not exceed 0.64 lb/hour.

   Applicable Compliance Method-
   Compliance shall be determined by summing the maximum hourly emission rates for metal melting, pouring, casting and cooling.

   The maximum hourly emission rate from metal melting, pouring, casting and cooling is determined by multiplying the maximum hourly production rate of 0.25 tons/hour by the emission factor of 4.29 lbs of PE/ton of metal melted, as specified in USEPA reference document AP-42, Table 12.13-2 (1/95).

   b. Emission Limitation-
   The PE from this emissions unit shall not exceed 2.82 TPY.

   Applicable Compliance Method-
   Compliance shall be determined by summing the maximum hourly emission rates for metal melting, pouring, casting and cooling.

   The annual emission rate from metal melting, pouring, casting and cooling is determined by multiplying the sum of monthly production records as specified in section II.C.1. for the calendar year, by the emission factor of 4.29 lbs of PE/ton of metal melted, as specified in USEPA reference document AP-42, Table 12.13-2 (1/95).

   c. Emission Limitation-
   The visible particulate emissions from this emissions unit shall not exceed 20 percent

opacity as a three-minute average.

Applicable Compliance Method-
Compliance shall be determined by visible emission evaluations performed using the methods and procedures specified in USEPA Reference Method 9 of 40 CFR Part 60, Appendix A**.**

F. Miscellaneous Requirements

None