



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
CUYAHOGA COUNTY**

CERTIFIED MAIL

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: 13-03458

Fac ID: 1318000156

DATE: 11/12/2004

GE Ivanhoe Road Plant
Chris Parker
1099 Ivanhoe Rd.
Cleveland, OH 44110

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

CLAA



**Permit To Install
Terms and Conditions**

**Issue Date: 11/12/2004
Effective Date: 11/12/2004**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 13-03458

Application Number: 13-03458
Facility ID: 1318000156
Permit Fee: **\$600**
Name of Facility: GE Ivanhoe Road Plant
Person to Contact: Chris Parker
Address: 1099 Ivanhoe Rd.
Cleveland, OH 44110

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1099 Ivanhoe Rd
Cleveland, Ohio**

Description of proposed emissions unit(s):
Modification of sources P002, P029 and P031 to remove the applicability of OAC rule 3745-17-08 and the water flow rate operating restriction monitoring and reporting requirement.

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

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

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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

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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

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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.

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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>
Particulate (PE)	16.97

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P002 - natural gas-fired rotary furnace Salem F-4 (Little E)	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 6.57 TPY
MODIFIED	OAC rule 3745-17-07	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
The terms and conditions in this permit supercede the terms and conditions contained in PTI 13-3458 issued on February 18, 1999.	OAC rule 3745-17-11	Particulate emissions shall not exceed 1.5 pounds/hour.

2. Additional Terms and Conditions

- 2.a The BAT for this emissions unit includes compliance with the emission limits and the terms and conditions in this permit.

B. Operational Restrictions

1. The pressure drop across the scrubber serving emissions unit P002 shall be continuously maintained at a value of not less than 53 inches of water at all times when emissions unit P002 is in operation.
2. The scrubber serving emissions unit P002 shall be operated in accordance with manufacturer's recommendations with an adequate water level maintained in the scrubber's reservoir
3. The liquid level control unit for the scrubber serving this emissions unit shall be in service and operated in accordance with the manufacturer's recommendations when emissions unit P002 is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber serving emissions unit P002 when emissions unit P002 is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall collect and record the following information each day for emissions unit P002:
 - a. the pressure drop across the scrubber, in inches of water, once each day when the emissions unit is in operation;
 - b. confirmation, once each day when the emissions unit is in operation, that the liquid level control unit serving the scrubber is in service; and,
 - c. the downtime for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation.
3. 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 the permit. Such records may be maintained in computerized form.
4. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack / exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that shows the results of the application of the Air Toxic Policy for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - a. the static pressure drop across the scrubber serving emissions unit P002; and,
 - b. all periods of time when emissions unit P002 was in operation and the liquid level control unit serving the scrubber was not in service.
2. 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 emissions limitations, operational

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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 Cleveland Air Pollution Control. 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, 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).

E. Testing Requirements

1. Particulate emissions from emissions unit P002 (furnace F4) shall be limited to a maximum of 1.5 pounds/hour and 6.57 tons/year.
2. Visible particulate emissions from the stack serving emissions unit P002 shall be limited to no more than 20 percent opacity as a six-minute average.
3. Compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
4. 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 when required by the Cleveland Division of Air Quality; and,
 - b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.

The following test method (s) shall be employed to demonstrate compliance with the allowable mass emission rates (s): i) Methods 1 through 5 of 40 CFR part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10), and ii) Method 9 of 40 CFR part 60, Appendix A for opacity. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 Cleveland Air Pollution Control.

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

Personnel from the Cleveland Air Pollution Control shall be permitted to witness the test (s), examine the testing equipment and acquire 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 Cleveland Air Pollution Control within 30 days following completion of the test (s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Air Pollution Control.

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the Permit to Install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation (s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Manganese compounds

Pollutant: Antimony compounds

Manganese TLV (ug/m3): 200.0

Antimony TLV (ug/m3): 500.0

Maximum Hourly Emission Rate (pounds/hour): 3.88

Predicted 1-Hour Maximum Ground-Level

Manganese Concentration (ug/m3): 0.433

Antimony Concentration (ug/m3): 0.392

Manganese MAGLC (ug/m3): 4.76

Antimony MAGLC (ug/m3): 11.90

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OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified Permit to Install prior to making a "modification" as defined in OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used (typically for coatings or cleanup materials) or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV specified in the above table;
 - b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate and decreased stack height);
 - c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
 - d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.
2. The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
 - b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,
 - c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy; determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation (s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P029 - natural gas-fired rotary furnace F-73 (part of Big E)	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 5.2 TPY
MODIFIED		Combined particulate emissions from P029 and P031 shall not exceed 10.4 tons/year.
The terms and conditions in this permit supercede the terms and conditions contained in PTI 13-3458 issued on February 18, 1999.	OAC rule 3745-17-07	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11	Particulate emissions shall not exceed 1.19 pounds/hour

2. Additional Terms and Conditions

- 2.a The BAT for this emissions unit includes compliance with the emission limits and the terms and conditions in this permit.

B. Operational Restrictions

1. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 52 inches of water at all times when emissions unit P029 is in operation.
2. The scrubber for emissions units P029 and P031 shall be operated in accordance with

manufacturer's recommendations with an adequate water level maintained in the scrubber's reservoir

3. The liquid level control unit for the scrubber serving this emissions unit shall be in service and operated in accordance with the manufacturer's recommendations when emissions unit P029 is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber serving emissions unit P029 when emissions units P029 is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall collect and record the following information each day for emissions unit P029:
 - a. the pressure drop across the scrubber, in inches of water, once each day when the emissions unit is in operation;
 - b. confirmation, once each day when the emissions unit is in operation, that the liquid level control unit serving the scrubber is in service; and,
 - c. the downtime for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation.
3. 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 the permit. Such records may be maintained in computerized form.
4. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack / exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that shows the results of the application of the Air Toxic Policy for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - a. the static pressure drop across the scrubber serving emissions unit P029; and,
 - b. all periods of time when emissions unit P029 was in operation and the liquid level control unit serving the scrubber was not in service.
2. 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 emissions 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 Cleveland Air Pollution Control. 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, 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).

E. Testing Requirements

1. Particulate emissions from emissions unit P029 (furnace F73) shall be limited to a maximum of 1.19 pounds/hour and 5.2 tons/year.
2. The combined particulate emissions from emissions units P029 and P031 shall be limited to 10.4 tons/year.
3. Visible particulate emissions from the stack serving emissions units P029 and P031 shall be limited to no more than 20 percent opacity as a six-minute average.
4. Compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
5. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

Emissions Unit ID: **P029**

- a. the emission testing shall be conducted when required by the Cleveland Division of Air Quality; and,
- b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.

The following test method (s) shall be employed to demonstrate compliance with the allowable mass emission rates (s): i) Methods 1 through 5 of 40 CFR part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10), and ii) Method 9 of 40 CFR part 60, Appendix A for opacity . Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 Cleveland Air Pollution Control.

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

Personnel from the Cleveland Air Pollution Control shall be permitted to witness the test (s), examine the testing equipment and acquire 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 Cleveland Air Pollution Control within 30 days following completion of the test (s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Air Pollution Control.

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the Permit to Install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation (s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in

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the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Manganese compounds

Pollutant: Antimony compounds

Manganese TLV (ug/m3): 200.0

Antimony TLV (ug/m3): 500.0

Maximum Hourly Emission Rate (pounds/hour): 3.88

Predicted 1-Hour Maximum Ground-Level

Manganese Concentration (ug/m3): 0.433

Antimony Concentration (ug/m3): 0.392

Manganese MAGLC (ug/m3): 4.76

Antimony MAGLC (ug/m3): 11.90

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified Permit to Install prior to making a "modification" as defined in OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used (typically for coatings or cleanup materials) or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

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PTI Application: 13-02459
Modif

Facility ID: 1318000156

Emissions Unit ID: P029

2. The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
 - a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
 - b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,
 - c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy; determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation (s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P031 - natural gas-fired rotary furnace F-1002 (part of Big E)	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 5.2 TPY
MODIFIED		Combined particulate emissions from P029 and P031 shall not exceed 10.4 tons/year.
The terms and conditions in this permit supercede the terms and conditions contained in PTI 13-3458 issued on February 18, 1999.	OAC rule 3745-17-07	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11	Particulate emissions shall not exceed 1.19 pounds/hour

2. Additional Terms and Conditions

- 2.a The BAT for this emissions unit includes compliance with the emission limits and the terms and conditions in this permit.

B. Operational Restrictions

1. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 52 inches of water at all times when emissions unit P031 is in operation.
2. The scrubber for emissions units P029 and P031 shall be operated in accordance with

manufacturer's recommendations with an adequate water level maintained in the scrubber's reservoir.

3. The liquid level control unit for the scrubber serving this emissions unit shall be in service and operated in accordance with the manufacturer's recommendations when emissions unit P031 is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber serving emissions unit P031 when emissions units P031 is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.
2. The permittee shall collect and record the following information each day for emissions unit P031:
 - a. the pressure drop across the scrubber, in inches of water, once each day when the emissions unit is in operation;
 - b. confirmation, once each day when the emissions unit is in operation, that the liquid level control unit serving the scrubber is in service; and,
 - c. the downtime for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation.
3. 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 the permit. Such records may be maintained in computerized form.
4. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack / exhaust parameters, etc.); and
 - b. a copy of the resulting computer model runs that shows the results of the application of the Air Toxic Policy for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:
 - a. the static pressure drop across the scrubber serving emissions unit P031; and,
 - b. all periods of time when emissions unit P031 was in operation and the liquid level control unit serving the scrubber was not in service.
2. 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 emissions 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 Cleveland Air Pollution Control. 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, 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).

E. Testing Requirements

1. Particulate emissions from emissions unit P031 (furnace F1002) shall be limited to a maximum of 1.19 pounds/hour and 5.2 tons/year.
2. The combined particulate emissions from emissions units P029 and P031 shall be limited to 10.4 tons/year.
3. Visible particulate emissions from the stack serving emissions units P029 and P031 shall be limited to no more than 20 percent opacity as a six-minute average.
4. Compliance with the visible particulate emission limitation shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).
5. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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- a. the emission testing shall be conducted when required by the Cleveland Division of Air Quality; and,
- b. the emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates.

The following test method (s) shall be employed to demonstrate compliance with the allowable mass emission rates (s): i) Methods 1 through 5 of 40 CFR part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10), and ii) Method 9 of 40 CFR part 60, Appendix A for opacity . Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 Cleveland Air Pollution Control.

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

Personnel from the Cleveland Air Pollution Control shall be permitted to witness the test (s), examine the testing equipment and acquire 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 Cleveland Air Pollution Control within 30 days following completion of the test (s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland Air Pollution Control.

F. Miscellaneous Requirements

1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the Permit to Install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation (s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both

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the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Manganese compounds

Pollutant: Antimony compounds

Manganese TLV (ug/m3): 200.0

Antimony TLV (ug/m3): 500.0

Maximum Hourly Emission Rate (pounds/hour): 3.88

Predicted 1-Hour Maximum Ground-Level

Manganese Concentration (ug/m3): 0.433

Antimony Concentration (ug/m3): 0.392

Manganese MAGLC (ug/m3): 4.76

Antimony MAGLC (ug/m3): 11.90

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified Permit to Install prior to making a "modification" as defined in OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. changes in the composition of the materials used (typically for coatings or cleanup materials) or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

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2. The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:
 - a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
 - b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,
 - c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy; determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation (s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.