State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

CERTIFIED MAIL

RE: FINAL PERMIT TO INSTALL MODIFICATION
WASHINGTON COUNTY
Application No: 06-08134
Fac ID: 0684000105

	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

DATE: 6/21/2007

Solsil Inc.
Robert Rothwell
P O Box 157 Co Rd 32
Beverly, OH 45715-0157

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. 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, OH 43215

Sincerely,

Michael W. Ahern

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

CC: **USEPA** **SEDO**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 06-08134

Application Number: 06-08134

Facility ID: 0684000105

Permit Fee: **$700**

Name of Facility: Solsil Inc.

Person to Contact: Robert Rothwell

Address: P O Box 157 Co Rd 32
Beverly, OH 45715-0157

Location of proposed air contaminant source(s) [emissions unit(s)]:
County Route 32
Waterford, **Ohio**

Description of proposed emissions unit(s):
Administrative modification to decrease the emission limitations of P915, P916, P917, and P918.

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

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.

ii. The date(s) analyses were performed.

iii. The company or entity that performed the analyses.

iv. The analytical techniques or methods used.

v. The results of such analyses.

vi. The operating conditions existing at the time of sampling or measurement.

b. 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.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written

reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. 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 or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

7. 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this permit is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(s) covered by this permit.

11. 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.

12. 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit 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 of state-only enforceable 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 state-only required 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 (i.e., postmarked) quarterly, 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. 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.

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.

6. 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.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. 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
PM/PM_{10}(stack)	0.16
PM/PM_{10} (fugitive)	1.24

Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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 - (P915) - No. 6 Furnace controlled with a baghouse (1,000 kW induction furnace producing high purity Si metal including pouring and casting). ***Administrative modification to Chapter 31 modification to lower the allowable limits for existing furnaces no. 6, 9, 10, and 11 as well as change facility name on permit.***

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Stack Emission Limitations: Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) from the baghouse stack shall not exceed 0.01 lb/hour and there shall be no visible particulate emissions. Fugitive Emission Limitations: Visible emissions of fugitive particulate matter/particulate matter less than 10 microns in diameter (PM/PM_{10}) not collected by the capture hood shall not exceed 5% opacity as a three minute average, including pouring and casting. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Sections I.2.b and II.1 below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).
OAC rule 3745-31-05(C) (synthetic minor to avoid PSD and non-attainment review)	Stack Emission Limitations: Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) shall not exceed 0.04 ton/year, as a rolling, 12-month summation. Fugitive Emission Limitations:

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Emissions of fugitive PM/PM_{10} shall not exceed 0.31 ton/year, as a rolling, 12-month summation.
OAC rule 3745-17-07(A) OAC rule 3745-17-07(B) OAC rule 3745-17-08 OAC rule 3745-17-11(B)	The emission limitations specified by these rules are as stringent or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The permittee shall employ best available control measures on all charging, melting and tapping operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee shall maintain enclosures and vent particulate emissions to the baghouse to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional measures to ensure compliance.

II. Operational Restrictions

1. Particulate Matter/Particulate Matter less than10 microns in diameter (PM/PM_{10}) emissions from the stack shall be controlled at all times through the use of a baghouse with a control efficiency of not less than 99% and the capture efficiency of no less than 95%.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack 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. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

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 this emission 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 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 (d) 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.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the capture hood serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation:

   Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) from the baghouse stack shall not exceed 0.01 lb/hour and there shall be no visible particulate emissions.

   Applicable Compliance Method:

   The PM/PM_{10} emission limitation of 0.01 lb/hour was based on the following equation:

   1.24 lbs of furnace fume per hour of operation (based on October 2006 engineering test as submitted in PTI application. Facility doubled rate to be conservative and account for variability in fume generation).

95% closed hooding/baghouse capture efficiency (based on application information)
99% baghouse control efficiency (based on application information)

(1.24 lb/hour) x (0.95 capture efficiency) X (100 - estimated control efficiency) = 0.01lb/hour.

If required, the pounds of PM/PM_{10} per hour shall be determined according to test Methods 1-5 as set for th in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources". Tests shall be performed during worst-case operating conditions at the stack, as determined by OEPA-SEDO.

If required, visible particulate emissions shall be determined according to test Method 22 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

b. Emission Limitation:

PM/PM_{10} shall not exceed 0.04 ton/year, as a rolling, 12-month summation.

Applicable Compliance Method:

The annual emission limit was determined by the following equation:

(0.01 lb/hr) X (8,760 hr/1 year) X (1 ton/2,000 lbs) = 0.04 ton/year

Therefore**,** compliance with this emission limitation can be assumed provided the permittee comply with the short term limit of 0.01 lb/hr.

c. Emission Limitation:

Emissions of fugitive PM/PM_{10} shall not exceed 0.31 ton/year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance is based on the following equation:

1.24 lbs of furnace fume per hour of operation (based on October 2006 engineering test as submitted in PTI application. Facility doubled rate to be conservative and account for variability in fume generation).
95% capture efficiency (based on application information)

(1.24 lb/hour X 1/estimated capture efficiency) - 1.24 lb/hour = 0.07 lb/hour
(0.07 lb/hr) X (8,760 hr/1 year) X (1 ton/2,000 lbs) = 0.31 ton/year**.**

d. Emission Limitation:

Visible emissions of fugitive particulate not collected by the capture hood shall not exceed 5% opacity as a three minute average, including pouring and casting.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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 - (P915) - No. 6 Furnace controlled with a baghouse (1,000 kW induction furnace producing high purity Si metal including pouring and casting). ***Administrative modification to Chapter 31 modification to lower the allowable limits for existing furnaces no. 6, 9, 10, and 11 as well as change facility name on permit.***

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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 - (P916) - No. 9 Furnace controlled with a baghouse (1,000 kW induction furnace producing high purity Si metal including pouring and casting). ***Administrative modification to Chapter 31 modification to lower the allowable limits for existing furnaces no. 6, 9, 10, and 11 as well as change facility name on permit.***

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Stack Emission Limitations: Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) from the baghouse stack shall not exceed 0.01 lb/hour and there shall be no visible particulate emissions. Fugitive Emission Limitations: Visible emissions of fugitive particulate matter/particulate matter less than 10 microns in diameter (PM/PM_{10}) not collected by the capture hood shall not exceed 5% opacity as a three minute average, including pouring and casting. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Sections I.2.b and II.1 below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).
OAC rule 3745-31-05(C) (synthetic minor to avoid PSD and non-attainment review)	Stack Emission Limitations: Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) shall not exceed 0.04 ton/year, as a rolling, 12-month summation. Fugitive Emission Limitations:

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Emissions of fugitive PM/PM_{10} shall not exceed 0.31 ton/year, as a rolling, 12-month summation.
OAC rule 3745-17-07(A) OAC rule 3745-17-07(B) OAC rule 3745-17-08 OAC rule 3745-17-11(B)	The emission limitations specified by these rules are as stringent or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The permittee shall employ best available control measures on all charging, melting and tapping operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee shall maintain enclosures and vent particulate emissions to the baghouse to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional measures to ensure compliance.

II. Operational Restrictions

1. Particulate Matter/Particulate Matter less than10 microns in diameter (PM/PM_{10}) emissions from the stack shall be controlled at all times through the use of a baghouse with a control efficiency of not less than 99% and the capture efficiency of no less than 95%.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack 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. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

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 this emission 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 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 (d) 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.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the capture hood serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation:

   Particulate Matter/Particulate Matter less than10 microns in diameter (PM/PM_{10}) from the baghouse stack shall not exceed 0.01 lb/hour and there shall be no visible particulate emissions.

   Applicable Compliance Method:

   The PM/PM_{10} emission limitation of 0.01 lb/hour was based on the following equation:

   1.24 lbs of furnace fume per hour of operation (based on October 2006 engineering test as submitted in PTI application. Facility doubled rate to be conservative and account for variability in fume generation).

95% closed hooding/baghouse capture efficiency (based on application information)
99% baghouse control efficiency (based on application information)

(1.24 lb/hour) x (0.95 capture efficiency) X (100 - estimated control efficiency) = 0.01lb/hour.

If required, the pounds of PM/PM_{10} per shall be determined according to test Methods 1-5 as set for th in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources". Tests shall be performed during worst-case operating conditions at the stack, as determined by OEPA-SEDO.

If required, visible particulate emissions shall be determined according to test Method 22 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

b. Emission Limitation:

PM/PM_{10} shall not exceed 0.04 ton/year, as a rolling, 12-month summation.

Applicable Compliance Method:
The annual emission limit was determined by the following equation:

(0.01 lb/hr) X (8,760 hr/1 year) X (1 ton/2,000 lbs) = 0.04 ton/year.

Therefore, compliance with this emission limitation can be assumed provided the permittee comply with the short term limit of 0.01 lb/hr.

c. Emission Limitation:

Emissions of fugitive PE shall not exceed 0.31 ton/year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance is based on the following equation:

1.24 lbs of furnace fume per hour of operation (based on October 2006 engineering test as submitted in PTI application. Facility doubled rate to be conservative and account for variability in fume generation).
95% capture efficiency (based on application information)

(1.24 lb/hour X 1/estimated capture efficiency) - 1.24 lb/hour = 0.07 lb/hour
(0.07 lb/hr) X (8,760 hr/1 year) X (1ton/2,000 lbs) = 0.31 ton/year.

d. Emission Limitation:

Visible emissions of fugitive particulate not collected by the capture hood shall not exceed 5% opacity as a three minute average, including pouring and casting.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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 - (P916) - No. 9 Furnace controlled with a baghouse (1,000 kW induction furnace producing high purity Si metal including pouring and casting). ***Administrative modification to Chapter 31 modification to lower the allowable limits for existing furnaces no. 6, 9, 10, and 11 as well as change facility name on permit.***

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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 - (P917) - No. 10 Furnace controlled with a baghouse (1,000 kW induction furnace producing high purity Si metal including pouring and casting). Administrative modification to Chapter 31 modification to lower the allowable limits for existing furnaces no. 6, 9, 10, and 11 as well as change facility name on permit.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Stack Emission Limitations: Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) from the baghouse stack shall not exceed 0.01 lb/hour and there shall be no visible particulate emissions. Fugitive Emission Limitations: Visible emissions of fugitive particulate matter/particulate matter less than 10 microns in diameter (PM/PM_{10}) not collected by the capture hood shall not exceed 5% opacity as a three minute average, including pouring and casting. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Sections I.2.b and II.1 below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).
OAC rule 3745-31-05(C) (synthetic minor to avoid PSD and non-attainment review)	Stack Emission Limitations: Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) shall not exceed 0.04 ton/year, as a rolling, 12-month summation. Fugitive Emission Limitations:

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Emissions of fugitive PM/PM_{10} shall not exceed 0.31 ton/year, as a rolling, 12-month summation.
OAC rule 3745-17-07(A) OAC rule 3745-17-07(B) OAC rule 3745-17-08 OAC rule 3745-17-11(B)	The emission limitations specified by these rules are as stringent or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The permittee shall employ best available control measures on all charging, melting and tapping operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee shall maintain enclosures and vent particulate emissions to the baghouse to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional measures to ensure compliance.

II. Operational Restrictions

1. Particulate Matter/Particulate Matter less than10 microns in diameter (PM/PM_{10}) emissions from the stack shall be controlled at all times through the use of a baghouse with a control efficiency of not less than 99% and the capture efficiency of no less than 95%.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack 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. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

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 this emission 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 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 (d) 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.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the capture hood serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation:

   Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) from the baghouse stack shall not exceed 0.01 lb/hour and there shall be no visible particulate emissions.

   Applicable Compliance Method:

   The PM/PM_{10} emission limitation of 0.01 lb/hour was based on the following equation:

   1.24 lbs of furnace fume per hour of operation (based on October 2006 engineering test as submitted in PTI application. Facility doubled rate to be conservative and account for variability in fume generation).
   95% closed hooding/baghouse capture efficiency (based on application information)

99% baghouse control efficiency (based on application information)

(1.24 lb/hour) x (0.95 capture efficiency) X (100 - estimated control efficiency) = 0.01lb/hour.

If required, the pounds of PM/PM_{10} per hour shall be determined according to test Methods 1-5 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources". Tests shall be performed during worst-case operating conditions at the stack, as determined by OEPA-SEDO.

If required, visible particulate emissions shall be determined according to test Method 22 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

b. Emission Limitation:

PM/PM_{10} shall not exceed 0.04 ton/year, as a rolling, 12-month summation.

Applicable Compliance Method:

The annual emission limit was determined by the following equation:

(0.01 lb/hr) X (8,760 hr/1 year) X (1 ton/2,000 lbs) = 0.04 ton/year.

Therefore, compliance with this emission limitation can be assumed provided the permittee comply with the short term limit of 0.01 lb/hr.

c. Emission Limitation:

Emissions of fugitive PE shall not exceed 0.31 ton/year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance is based on the following equation:

1.24 lbs of furnace fume per hour of operation (based on October 2006 engineering test as submitted in PTI application. Facility doubled rate to be conservative and account for variability in fume generation).
95% capture efficiency (based on application information)

(1.24 lb/hour X 1/estimated capture efficiency) - 1.24 lb/hour = 0.07 lb/hour
(0.07 lb/hr) X (8,760 hr/1 year) X (1ton/2,000 lbs) = 0.31 ton/year.

d. Emission Limitation:

Visible emissions of fugitive particulate not collected by the capture hood shall not exceed 5% opacity as a three minute average, including pouring and casting.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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 - (P917) - No. 10 Furnace controlled with a baghouse (1,000 kW induction furnace producing high purity Si metal including pouring and casting). ***Administrative modification to Chapter 31 modification to lower the allowable limits for existing furnaces no. 6, 9, 10, and 11 as well as change facility name on permit.***

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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 - (P918) - No. 11 Furnace controlled with a baghouse (1,000 kW induction furnace producing high purity Si metal including pouring and casting). Administrative modification to Chapter 31 modification to lower the allowable limits for existing furnaces no. 6, 9, 10, and 11 as well as change facility name on permit.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Stack Emission Limitations: Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) from the baghouse stack shall not exceed 0.01 lb/hour and there shall be no visible particulate emissions. Fugitive Emission Limitations: Visible emissions of fugitive particulate matter/particulate matter less than 10 microns in diameter (PM/PM_{10}) not collected by the capture hood shall not exceed 5% opacity as a three minute average, including pouring and casting. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Sections I.2.a and II.1 below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C).
OAC rule 3745-31-05(C) (synthetic minor to avoid PSD and non-attainment review)	Stack Emission Limitations: Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) shall not exceed 0.04 ton/year, as a rolling, 12-month summation. Fugitive Emission Limitations:

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Emissions of fugitive PM/PM_{10} shall not exceed 0.31 ton/year, as a rolling, 12-month summation.
OAC rule 3745-17-07(A) OAC rule 3745-17-07(B) OAC rule 3745-17-08 OAC rule 3745-17-11(B)	The emission limitations specified by these rules are as stringent or less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The permittee shall employ best available control measures on all charging, melting and tapping operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee shall maintain enclosures and vent particulate emissions to the baghouse to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing additional measures to ensure compliance.

II. Operational Restrictions

1. Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) emissions from the stack shall be controlled at all times through the use of a baghouse with a control efficiency of not less than 99% and the capture efficiency of no less than 95%.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack 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. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

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 this emission 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 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 (d) 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.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the capture hood serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation:

   Particulate Matter/Particulate Matter less than 10 microns in diameter (PM/PM_{10}) from the baghouse stack shall not exceed 0.01 lb/hour and there shall be no visible particulate emissions.

   Applicable Compliance Method:

   The PM/PM_{10} emission limitation of 0.01 lb/hour was based on the following equation:

   1.24 lbs of furnace fume per hour of operation (based on October 2006 engineering test as submitted in PTI application. Facility doubled rate to be conservative and account for variability in fume generation).

95% closed hooding/baghouse capture efficiency (based on application information)
99% baghouse control efficiency (based on application information)

(1.24 lb/hour) x (0.95 capture efficiency) X (100 - estimated control efficiency) = 0.01lb/hour.

If required, the pounds of PM/PM_{10} per hour shall be determined according to test Methods 1-5 as set for th in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources". Tests shall be performed during worst-case operating conditions at the stack, as determined by OEPA-SEDO.

If required, visible particulate emissions shall be determined according to test Method 22 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

b. Emission Limitation:

PM/PM_{10} shall not exceed 0.04 ton/year, as a rolling, 12-month summation.

Applicable Compliance Method:

The annual emission limit was determined by the following equation:

(0.01 lb/hr) X (8,760 hr/1 year) X (1 ton/2,000 lbs) = 0.04 ton/year.

Therefore, compliance with this emission limitation can be assumed provided the permittee comply with the short term limit of 0.01 lb/hr.

c. Emission Limitation:

Emissions of fugitive PM/PM_{10} shall not exceed 0.31 ton/year, as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance is based on the following equation:

1.24 lbs of furnace fume per hour of operation (based on October 2006 engineering test as submitted in PTI application. Facility doubled rate to be conservative and account for variability in fume generation).
95% capture efficiency (based on application information)

(1.24 lb/hour X 1/estimated capture efficiency) - 1.24 lb/hour = 0.07 lb/hour
(0.07 lb/hr) X (8,760 hr/1 year) X (1 ton/2,000 lbs) = 0.31 ton/year**.**

d. Emission Limitation:
Visible emissions of fugitive particulate not collected by the capture hood shall not exceed 5% opacity as a three minute average, including pouring and casting.

Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources" as such appendix existed on July 1, 2002.

VI. Miscellaneous Requirements

None

B. State Only Enforceable Section

I. 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 - (P918) - No. 11 Furnace controlled with a baghouse (1,000 kW induction furnace producing high purity Si metal including pouring and casting). ***Administrative modification to Chapter 31 modification to lower the allowable limits for existing furnaces no. 6, 9, 10, and 11 as well as change facility name on permit.***

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
None	None

2. Additional Terms and Conditions

2.a None

II. Operational Restrictions

None

III. Monitoring and/or Recordkeeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None