

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-2911-00078/00009    Renewal Number: 1**



**01/20/2006**

**Facility Identification Data**

Name: GLOBE METALLURGICAL INC  
Address: 3807 HIGHLAND AVE  
NIAGARA FALLS, NY 14305

**Owner/Firm**

Name: GLOBE METALLURGICAL INC  
Address: PO BOX 157  
BEVERLY, OH 45715-0157, USA  
Owner Classification: Corporation/Partnership

**Permit Contacts**

Division of Environmental Permits:  
Name: DOUGLAS E BORSCHER  
Address: 270 MICHIGAN AVE  
BUFFALO, NY 14203-2999

Division of Air Resources:  
Name: JACQUELINE DIPRONIO  
Address: 270 MICHIGAN AVENUE  
BUFFALO, NY 14203-2999

Air Permitting Contact:  
Name: GREG SCHOTT  
Address: GLOBE METALLURGICAL INC  
PO BOX 157  
BEVERLY, OH 45715  
Phone:7409842361

**Permit Description**

**Introduction**

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

**Summary Description of Proposed Project**

This application has been submitted for the renewal of the Air Title V Facility permit. There have been no modifications at this facility since the initial Title V permit was issued nor have there been any new requirements promulgated to which this facility would be subject. The permit application contains

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Compliance Assurance Monitoring Plans (CAM) for the Tapping Fume baghouse (EP 00001), the Furnace 9 baghouse (EP 00002) and the Furnace 11 baghouse (EP 00003). The CAM plan submission is required for these emission sources because the potential (pre-control) emissions for each is at 100% of the major source threshold for particulates, i.e. 100 tons.

### Attainment Status

GLOBE METALLURGICAL INC is located in the town of NIAGARA FALLS in the county of NIAGARA.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter < 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	MARGINAL NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

\* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.

\*\* NOx has a separate ambient air quality standard in addition to being an ozone precursor

### Facility Description

This facility is a silicon metal production facility that employs 2 submerged-arc semi-enclosed electric furnaces. Auxiliary operations include raw material storage and handling, product formulation, sizing, and packaging and fume process and loadout.

### Permit Structure and Description of Operations

The Title V permit for GLOBE METALLURGICAL INC is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process.

A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has



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the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device.

[NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

- combustion        -        devices which burn fuel to generate heat, steam or power
- incinerator       -        devices which burn waste material for disposal
- control            -        emission control devices
- process            -        any device or contrivance which may emit air contaminants that is not included in the above categories.

GLOBE METALLURGICAL INC is defined by the following emission unit(s):

Emission unit EAFURN - The No. 9 and No. 11 electric arc furnaces convert gravel, woodchips, coke, charcoal and coal into silicon metal. The furnaces are both rated at 22 megawatts per hour of input. The processes which comprise this unit are raw material handling and silicon metal melting and tapping. Each furnace is equipped with a baghouse for controlling particulate emissions. Two hoods, main and tap, are installed on each furnace and ducted to the baghouses.

Emission unit EAFURN is associated with the following emission points (EP): EP001, EP002, EP003, EP004

It is further defined by the following process(es):

Process: P01 is located at South of FURNBLDG - Raw Material Handling - Raw Material Transfer and Storage operations begin with the receipt of raw materials via truck or rail. Coal, coke, charcoal, gravel, woodchips, and turnings are unloaded via crane to piles or directly to a below grade conveyor or pit. Coal is transferred to the pit, from which it is conveyed up to enclosed raw material storage bins or unloaded to outdoor storage piles. Gravel is unloaded to piles, transported by crane to a conveyor, screened, and conveyed up to enclosed storage bins. Wood chips are dumped from a trailer to the pit and transported up to enclosed storage bins. From indoor bins, the raw materials are weighed and dropped to a skip bucket from which they are transferred to the top of the furnace.

Process: P02 is located at Center of building, Building 00FURNBLDG - Melting/Tapping - Silicon metal is produced in two submerged-arc semienclosed-type electric furnaces. The submerged arc process is a reduction smelting operation. In the production of silicon metal, quartz is the raw material from which silicon is derived. Carbon is necessary as a reducing agent and is supplied by coke, charcoal, coal, and woodchips. Smelting in the electric arc furnace is accomplished by conversion of electric energy to heat. An alternating current applied to the electrodes causes a current to flow through the charge from the electrode tips to the furnace hearth. This provides a reaction zone of temperature up to 6000 deg. F. To maintain a uniform electric load, electrode depth is continuously varied automatically, as required. At high temperatures in the reaction zone, the carbon sources react chemically with silicon dioxide gas to form carbon monoxide and silicon metal. Molten product is tapped from the furnace through a taphole located at the bottom of the furnace at hearth level. Fumes from the tapping operation are controlled by

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the baghouse which vents to emission point EP001. A scavenger system collects fumes from the building roof peak and directs them to the emission point EP001 baghouse. The molten metal and dross flow from the tap hole into a ladle. The ladle is moved by a hoist to the casting process. The metal is poured into low, flat pans that provide rapid cooling of the molten metal. Fume and dust generated and captured throughout the production process are controlled by the baghouses which vent to emission points EP002 and EP003 and then collected and reused or sold.

Emission unit RDWYPK - Plant roadways and parking lots are located throughout the facility with fugitive emissions. While some areas are unpaved, the majority of higher traffic areas are paved.

It is further defined by the following process(es):

Process: P05 Roadways & Parking - Transportation on roadways and parking areas cause fugitive emissions.

Emission unit PROFIN - Silicon metal is processed at No. 3 sizing plant. The sizing plant crushes and screens the silicon metal preparing it for distribution. Silicon metal sizing and product handling are the two processes in this unit. Emissions are controlled with baghouses and through the use of covered conveyors and enclosed storage sheds.

Emission unit PROFIN is associated with the following emission points (EP):

EP007, EP06A

It is further defined by the following process(es):

Process: P03 is located at East & west sides, Building 00FURNBLDG - Silicon Metal Sizing - Sizing operations begin with transport of silicon metal lump from storage or directly to the jaw crusher. From the jaw crusher, product is conveyed to a shaker/screen and transported to sizing or to the cone crusher, depending on size. From the cone crusher, the product is transported to a shaker/screen via a covered conveyor and then to sizing. Emissions from this operation are controlled by two baghouses which vent to emission points EP06A.

Process: P04 is located at East & west sides, Building 00FURNBLDG - Product Handling - From sizing, product is loaded to boxes, super sacks, or railcars. Hopper and Loading Conveyor involves transfer of sized silicon metal via front end loader to a bin then to a hopper for loadout to railcar. The operation is located indoors next to Sizing Plant No. 3. Conveyors, hopper and loadout point are controlled via cartridge filter venting to emission point EP007.

### Title V/Major Source Status

GLOBE METALLURGICAL INC is subject to Title V requirements. This determination is based on the following information:

Globe Metallurgical, Inc., located in Niagara Falls, N.Y. is a ferroalloy manufacturing facility engaged in the production of silicon metals. The facility is a major source of actual emissions of sulfur dioxide (100 tons), carbon monoxide (100 tons), and nitrogen oxides (100 tons) and therefore subject to the Title V permitting requirements of 40 CFR 70 and 6 NYCRR, Part 201-6.

### Program Applicability

The following chart summarizes the applicability of GLOBE METALLURGICAL INC with regards to the principal air pollution regulatory programs:

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<b>Regulatory Program</b>	<b>Applicability</b>
PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	NO
NSPS	NO
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	YES
SIP	YES

**NOTES:**

**PSD**            Prevention of Significant Deterioration (40 CFR 52) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

**NSR**            New Source Review (6 NYCRR Part 231) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

**NESHAP**        National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's)

**MACT**            Maximum Achievable Control Technology (40 CFR 63) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

**NSPS**            New Source Performance Standards (40 CFR 60) - standards of performance for

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specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV            Acid Rain Control Program (40 CFR 72 thru 78) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI            Stratospheric Ozone Protection (40 CFR 82, Subparts A thru G) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's(hydrofluorocarbons)or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT            Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP            State Implementation Plan (40 CFR 52, Subpart HH) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

**Compliance Status**

Facility is in compliance with all requirements

**SIC Codes**

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

**SIC Code**

**Description**

3313	ELECTROMETALLURGICAL PRODUCTS
3339	PRIMARY NONFERROUS METALS, NEC

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**SCC Codes**

SCC or Source Classification Code is a code developed and used by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information. Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

<b>SCC Code</b>	<b>Description</b>
3-99-999-94	MISCELLANEOUS MANUFACTURING INDUSTRIES MISCELLANEOUS INDUSTRIAL PROCESSES Other Not Classified
3-03-007-02	PRIMARY METAL PRODUCTION PRIMARY METAL PRODUCTION - SEMI-COVERED FURNACE ELECTRIC ARC FURNACE:OTHER ALLOYS/SPECIFY

**Facility Emissions Summary**

In the following table, the CAS No. or Chemical Abstract Series code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for that contaminant. If no PTE quantity is displayed, the PTE Range is provided to indicate the approximate magnitude of facility-wide emissions for the specified contaminant in terms of tons per year (tpy). The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

<b>Cas No.</b>	<b>Contaminant Name</b>	<b>PTE</b>
000630-08-0	CARBON MONOXIDE	>= 100 tpy but < 250 tpy
0NY100-00-0	HAP	>= 2.5 tpy but < 10 tpy
007439-92-1	LEAD (HAP)	> 0 but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN	>= 250 tpy
0NY075-00-0	PARTICULATES	>= 250 tpy
0NY075-00-5	PM-10	>= 100 tpy but < 250 tpy
007446-09-5	SULFUR DIOXIDE	>= 250 tpy
0NY998-00-0	VOC	>= 50 tpy but < 100 tpy

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**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**Item A:            Sealing - 6NYCRR Part 200.5**

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

**Item B:            Acceptable Ambient Air Quality - 6NYCRR Part 200.6**

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

**Item C:            Maintenance of Equipment - 6NYCRR Part 200.7**

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

**Item D:            Unpermitted Emission Sources - 6NYCRR Part 201-1.2**

If an existing emission source was subject to the permitting requirements of 6NYCRR Part 201 at the time of construction or

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modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

(a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.

(b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

**Item E:                    Emergency Defense - 6NYCRR Part 201-1.5**

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**Item F:                    Recycling and Salvage - 6NYCRR Part 201-1.7**

Where practical, any person who owns or operates an air contamination

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source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

**Item G: Prohibition of Reintroduction of Collected Contaminants to the Air - 6NYCRR Part 201-1.8**

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

**Item H: Public Access to Recordkeeping for Title V Facilities - 6NYCRR Part 201-1.10(b)**

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

**Item I: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR Part 201-3.2(a)**

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

**Item J: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR Part 201-3.3(a)**

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

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**Item K:                    Timely Application for the Renewal of Title V Permits - 6 NYCRR Part 201-6.3(a)(4)**

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

**Item L:                    Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)**

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

**Item M:                    Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)**

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

**Item N:                    Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)**

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

**Item O:                    Providing Information Upon Request - 6 NYCRR Part 201-6.5(a)(4)**

The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The permittee shall also, on request, furnish the Department with copies of records required to be kept by the permit. Where information is claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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**Item P:            Cessation or Reduction of Permitted Activity Not a Defense - 6NYCRR Part 201-6.5(a)(5)**

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

**Item Q:            Property Rights - 6 NYCRR Part 201-6.5(a)(6)**

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

**Item R:            Fees - 6 NYCRR Part 201-6.5(a)(7)**

The owner and/or operator of a stationary source shall pay fees to the department consistent with the fee schedule authorized by 6 NYCRR Subpart 482-2.

**Item S:            Right to Inspect - 6 NYCRR Part 201-6.5(a)(8)**

Upon presentation of credentials and other documents, as may be required by law, the permittee shall allow the Department or an authorized representative to perform the following:

- i.            Enter upon the permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- ii.          Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- iii.         Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- iv.         As authorized by the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

**Item T:            Severability - 6 NYCRR Part 201-6.5(a)(9)**

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

**Item U:            Progress Reports and Compliance Schedules - 6 NYCRR Part**

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**201-6.5(d)(5)**

Progress reports consistent with an applicable schedule of compliance must be submitted at least semiannually on a calendar year basis, or at a more frequent period if specified in the applicable requirement or by the Department elsewhere in this permit. These reports shall be submitted to the Department within 30 days after the end of a reporting period. Such progress reports shall contain the following:

- i. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- ii. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

**Item V:                    Off Permit Changes - 6 NYCRR Part 201-6.5(f)(6)**

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the Administrator and the Department with written notification in advance of the proposed changes within a minimum of 7 days as required by 6 NYCRR §201-6.5(f)(6).

**Item W:                    Permit Shield - 6 NYCRR Part 201-6.5(g)**

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the

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permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

**Item X:                    Reopening for Cause - 6 NYCRR Part 201-6.5(i)**

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the

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requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

**Item Y:                    Required Emission Tests - 6 NYCRR Part 202-1.1**

An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6NYCRR Part 202-1.

**Item Z:                    Visible Emissions Limited - 6 NYCRR Part 211.3**

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

**Item AA:                 Open Fires - 6 NYCRR Part 215**

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, rubbish for salvage, or rubbish generated by industrial or commercial activities.

**Item BB:                 Permit Exclusion - ECL 19-0305**

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged



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**Applicability Discussion:**

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

ECL 19-301.

This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6NYCRR Part 201-1.4

This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

6NYCRR Part 201-6

This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6NYCRR Part 201-6.5(c)

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This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6NYCRR Part 201-6.5(c)(2)

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6NYCRR Part 201-6.5(c)(3)(ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6NYCRR Part 201-6.5(e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6NYCRR Part 202-2.1

Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.

6NYCRR Part 202-2.5

This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6NYCRR Part 211-.2

This regulation prohibits any emissions of air contaminants to the outdoor atmosphere which may be detrimental to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property regardless of the existence of any specific air quality standard or emission limit.

40 CFR Part 68.

This Part lists the regulated substances and there applicability thresholds and sets

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the requirements for stationary sources concerning the prevention of accidental releases of these substances.

#### 40 CFR Part 82, Subpart F

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act Amendments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

#### **Facility Specific Requirements**

In addition to Title V, GLOBE METALLURGICAL INC has been determined to be subject to the following regulations:

#### 40CFR 64

The federal Compliance Assurance Monitoring (CAM) rule, 40 CFR Part 64, requires monitoring of control device, capture system, and/or process parameters to provide a reasonable assurance of compliance with emission limitations or standards. It applies to emission units that use a control device to comply with certain standards and limitations and that have potential pre-control device emissions equal to or greater than a major source threshold.

Acid Rain program requirements; stratospheric ozone protection requirements; post-1990 New Source Performance Standards, Emission Guidelines, and National Emission Standards for Hazardous Air Pollutants; and some other limitations are exempt from CAM. However, many of the exempt requirements are subject to less stringent periodic monitoring under 40 CFR Part 70 and 6NYCRR Subpart 201-6.

#### 6NYCRR 201-6.5 (c) (3) (ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

#### 6NYCRR 212.10 (c) (3)

Acceptable NOx RACT compliance plans submitted to the Department will become part of the State SIP.

#### 6NYCRR 212.3 (a)

This rule requires compliance with the degree of control specified in Tables 2, 3 and 4 for existing (on or before July 1, 1973) process emission sources.



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6NYCRR 212 .4 (c)

This rule requires existing sources (in operation after July 1, 1973) of solid particulates with environmental rating of B or C which are not subject to Table 5 "Processes for which Permissible Emission Rate is Based on Process Weight, to be limited to an particulate emission rate not to exceed 0.05 grains per dry standard cubic foot.

6NYCRR 212 .6 (a)

This rule specifies an opacity limitation of less than 20% for any six consecutive minute period for all process emission sources.

6NYCRR 212 .9 (d)

Establishes processes subject to process weight including the equation to be used to determine the permissible emission rate based on process weight for the ferror alloy production furnaces.

6NYCRR 225-1.2 (d)

The sulfur-in-fuel limitations for residual and distillate oil and for solid fuel are listed in Tables 1,2 and 3 or 6 NYCRR Part 225-1.2(c), (d) and (e)

6NYCRR 225-1.4

This regulation allows the Commissioner of the NYSDEC to issue an order granting a temporary variance from the sulfur-in-fuel limitations in 6 NYCRR Part 225-1 where it can be shown, to the commissioner's satisfaction, that there is an insufficient supply of conforming fuel, either of the proper type required for use in a particular air contamination source or generally throughout an area of the State.

6NYCRR 225-1.5 (a)

This regulation allows for the use of a fuel with a sulfur content greater than that allowed on Tables 1,2 or 3 of 6 NYCRR Part 225-1.2 if the source owner can show that the emissions of sulfur dioxide do not exceed the amount allowed using the equation cited in this regulation

6NYCRR 225-1.6 (b)

This regulation requires that as of January 1, 1988 any person who buys, sells, offer for sale, or uses fuel must comply with the percent sulfur requirements specified in section 6 NYCRR 225-1.2 .

6NYCRR 225-1.8 (d)

This requires that sampling, compositing and analysis of fuel samples must be done in accordance with methods acceptable to the commissioner.

**Compliance Certification**

Summary of monitoring activities at GLOBE METALLURGICAL INC:

<b>Location Facility/EU/EP/Process/ES</b>	<b>Type of Monitoring</b>	<b>Cond No.</b>
E-AFURN/EP001	record keeping/maintenance procedures	20
E-AFURN/EP002	record keeping/maintenance procedures	23



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E-AFURN/EP003	record keeping/maintenance procedures	26
FACILITY	record keeping/maintenance procedures	4
FACILITY	record keeping/maintenance procedures	5
FACILITY	record keeping/maintenance procedures	6
E-AFURN/-/P02	record keeping/maintenance procedures	18
E-AFURN/EP002	record keeping/maintenance procedures	21
E-AFURN/EP003	record keeping/maintenance procedures	24
E-AFURN/EP001	record keeping/maintenance procedures	19
E-AFURN/EP004	intermittent emission testing	27
P-ROFIN/-/P03	record keeping/maintenance procedures	29
P-ROFIN/-/P04	record keeping/maintenance procedures	30
E-AFURN	monitoring of process or control device parameters as surrogate	17
P-ROFIN	monitoring of process or control device parameters as surrogate	28
E-AFURN/EP002	record keeping/maintenance procedures	22
E-AFURN/EP003	record keeping/maintenance procedures	25
FACILITY	record keeping/maintenance procedures	10

**Basis for Monitoring**

Applicable Requirements Subject to Monitoring:

The two electric arc furnaces are subject to the process weight emission limits for ferroalloy furnaces as determined by Table 5 of 6NYCRR, Part 212.9(e). Permissible emissions are calculated using the formula shown in Table 4 of 212.9(d) and based on the process weight input of 25,098 pounds of raw materials per furnace are 21.3 pounds per hour per emission point.

The furnaces each having hourly nitrogen oxide emissions of 87.6 pounds are also subject to the NOx RACT compliance requirements of 6NYCRR, Part 212.10. A NOx RACT analysis has been submitted and reviewed by this Department and the USEPA. and has determined that there are no feasible control technologies available. RACT as no control will be incorporated into this permit limiting NOx emissions to 87.6 pounds per hour per furnace and a combined 767.3 tons per year of NOx. In addition, the facility is required to perform regular refractory maintenance on these furnaces and continue to investigate emissions reductions technologies. The RACT compliance plan will be submitted to the USEPA as a source specific SIP revision.

Particulate emissions from the baghouses associated with crushing and grinding and material handling, emission points EP06A and EP007, along with the tap fume collector (emission point EP001) and the spare tap fume baghouse, emission point EP004, are limited to .05 gr/dscf.

It has been determined by this Department's legal staff and Albany that the coal and petroleum coke or other forms of coke, used in the furnace charge are a fuel source subject to the sulfur in fuel limitations of 6NYCRR, Part 225-1.2(d) Table 2. The maximum allowable sulfur content is 1.7 lb/ million Btu gross heat content. The average allowable is 1.4 lb/million Btu during any consecutive three month period. The sulfur content of coke used can range from 2 % to 5.5% by weight which would exceed the sulfur limitation. However, since coke provides more fixed carbon, one pound of coke is equivalent to 1.5 pounds of coal and generates less Nox per pound of material produced. Therefore, pursuant to 225-1.5(a) a general variance will allow the usage of coke exceeding the sulfur limitation in combination with coal in the furnace charge provided that the emissions from the combined usage do not exceed sulfur dioxide emissions as calculated by the formula described in that section. Coal and coke will be combined in a ratio of a minimum 4:1 to ensure compliance with the limit.

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Inspection and Maintenance Procedures:

Visible Emissions:

Daily non-Method 9 visible observations of each baghouse will be conducted and recorded on a weekly log sheet. If visible emissions are observed, corrective action will be taken and a follow-up observation will be conducted. These records will be kept for a minimum of 2 years.

Baghouse Maintenance Inspections:

Inspection of the tap fume collection system and the baghouses for the #9 and #11 furnaces will be conducted on a daily basis. Each furnace collector has a dedicated computer system which allows personnel to evaluate baghouse and dust handling operating parameters and initiate preventative maintenance, diagnostic, and corrective maintenance programs. In addition to daily computer alarms and diagnostic checks, additional maintenance activities are performed at weekly and monthly intervals. The remaining collectors are inspected by outside contractors on a quarterly basis.

Recordkeeping:

Records of minor corrective actions including maintenance, electrical and operational changes will be recorded in baghouse logbooks. All other corrective actions will be filed with the visible emissions observation and maintenance inspection logs.