

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 7-0501-00044/00007 Modification Number: 3



07/08/2004

Facility Identification Data

Name: NUCOR STEEL AUBURN INC
Address: 25 QUARRY ROAD
AUBURN, NY 13021

Owner/Firm

Name: NUCOR STEEL AUBURN INC
Address: 25 QUARRY ROAD
PO BOX 2008
AUBURN, NY 13021, USA
Owner Classification: Corporation/Partnership

Permit Contacts

Division of Environmental Permits:
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Air Permitting Contact:
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25 QUARRY ROAD
AUBURN, NY 13021-2008
Phone:3152584230

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 modification is for an increase in the allowable annual tons of steel produced in the Electric Arc Furnace to 665,000 tons per year and to add a new reheat furnace to replace the existing reheat furnace.

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Rolling mill annual production will remain capped at 575,000 tons per year. This project is subject to PSD review for NOx, SO2 and CO. EPA is issuing the PSD permit under the revised PSD regulations. The project is also subject to New Source Review in a nonattainment area for NOx emissions since the facility is located in the Ozone Transport Region.

Attainment Status

NUCOR STEEL AUBURN INC is located in the town of AUBURN in the county of CAYUGA. 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* ATTAINMENT)	TRANSPORT REGION (NON-
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

THE FACILITY RECEIVES SCRAP METAL AND USING AN ELECTRIC ARC FURNACE PRODUCES BILLETS OF STEEL THAT ARE SOLD AND MANUFACTURED INTO BAR STOCK AND REINFORCEMENT ROD FOR THE BUILDING TRADES. THE SCRAP IS RECEIVED BY TRUCK, SORTED BY TYPE AND USED TO MAKE SPECIFICATION STEEL. COAL AND RUBBER TIRES ARE USED FOR A SOURCE OF CARBON IN VARIOUS STEEL PRODUCTS. A LARGE BAGHOUSE COLLECTS AND FILTERS ALL STEEL PROCESS EXHAUSTS. THE PLANT CONSISTS OF AN ELECTRIC ARC SCRAP STEEL FURNACE, BILLET CONTINUOUS CASTER, RE HEAT FURNACES, AND A ROLLING MILL. THE CHARGES OF SCRAP STEEL ARE MELTED BY THE HEAT FROM ELECTRIC CURRENT PASSING THROUGH THREE ELECTRODES. MOLTEN STEEL IS TAPPED INTO A LADLE AND CONTINUOUSLY CAST INTO BILLETS. SOME BILLETS ARE SENT DIRECTLY TO THE ROLLING MILL FOR PROCESSING INTO BARS AND ROUND STOCK. OTHER BILLETS ARE STORED UNTIL A PRODUCT IS REQUIRED TO BE MANUFACTURED. WHEN THESE BILLETS ARE ROLLED,

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THEY ARE REHEATED IN A REHEAT FURNACE BEFORE THEY ARE ROLLED. SOME BILLETS ARE SOLD TO OTHER CUSTOMERS FOR FURTHER PROCESSING.

Permit Structure and Description of Operations

The Title V permit for NUCOR STEEL AUBURN 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 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.

NUCOR STEEL AUBURN INC is defined by the following emission unit(s):

Emission unit U0001B - ELECTRIC ARC FURNACE EMISSIONS ARE CONTROLLED BY DIRECT SHELL EVACUATION, CANOPY HOOD, AND CLOSED BUILDING ROOF. PARTICULATE EMISSIONS ARE RECOVERED IN A FABRIC FILTER BAGHOUSE.

Emission unit U0001B is associated with the following emission points (EP):
0001B

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

Process: 001 is located at Building MS - SCRAP STEEL IS MELTED IN THE ELECTRIC ARC FURNACE. MOLTEN STEEL IS TAPPED FROM THE FURNACE AND CONTINUOUSLY CAST INTO BILLETS. CHARGING MELTING, SLAGING, REFINING, AND TAPPING EMISSIONS ARE CONTROLLED BY DIRECT SHELL EVACUATION, CANOPY HOOD AND CLOSED BUILDING ROOF WHICH CONVEYS EMISSIONS TO A FABRIC FILTER BAGHOUSE.

Emission unit U0RBF1 - BILLET REHEAT FURNACE HEATS BILLETS TO ROLLING TEMPERATURE PRIOR TO ROLLING INTO FINISHED PRODUCTS.

Emission unit U0RBF1 is associated with the following emission points (EP):
0RBF1, 0RBF2

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

Process: 002 is located at Building RF - STEEL BILLETS ARE REHEATED IN NATURAL GAS FIRED FURNACES PRIOR TO ROLLING INTO FINISHED PRODUCTS.

Title V/Major Source Status

NUCOR STEEL AUBURN INC is subject to Title V requirements. This determination is based on the following information:

Facility is major due to the actual emissions of CO and NOx being in excess of 100 tons per year.

Program Applicability

The following chart summarizes the applicability of NUCOR STEEL AUBURN INC with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability
PSD	YES
NSR (non-attainment)	YES
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	NO
NSPS	YES
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

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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 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

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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
3312	BLAST FURNACES AND STEEL MILLS

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.

SCC Code	Description
3-04-007-32	SECONDARY METAL PRODUCTION SECONDARY METAL PRODUCTION - STEEL FOUNDRIES STEEL FOUNDRIES - ELECTRIC ARC FURNACE - BAGHOUSE
3-04-007-40	SECONDARY METAL PRODUCTION SECONDARY METAL PRODUCTION - STEEL FOUNDRIES STEEL FOUNDRIES - REHEATING FURNACE - NATURAL GAS

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

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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.

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
000630-08-0	CARBON MONOXIDE	1397620	
007440-47-3	CHROMIUM (HAP)	326	
007439-92-1	LEAD (HAP)	3441	
007439-96-5	MANGANESE (HAP)	2465	
0NY210-00-0	OXIDES OF NITROGEN	234040	
0NY075-00-0	PARTICULATES	193500	
0NY075-00-5	PM-10	193500	
007446-09-5	SULFUR DIOXIDE	166720	
0NY998-00-0	VOC	97620	

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.

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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 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

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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 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)

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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.

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)

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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.

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,

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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 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

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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 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

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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 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.

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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 to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item CC: Federally Enforceable Requirements - 40 CFR 70.6(b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility 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 regulated by this Subpart, during normal operating hours, for the

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purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Regulatory Analysis

Location Facility/EU/EP/Process/ES	Regulation	Short Description	Condition
FACILITY	ECL 19-0301	Powers and Duties of the Department with respect to air pollution control	3-30
FACILITY	40CFR 52-A.21	Prevention of Significant Deterioration	3-6
U-0001B	40CFR 52-A.21	Prevention of Significant Deterioration	3-8, 3-9
U-0001B/0001B/001	40CFR 52-A.21	Prevention of Significant Deterioration	3-18, 3-19
U-0001B	40CFR 60-AAa	Steel plants:electric arc furnaces and Argon-Oxygen decarburization vessels	3-10
U-0001B/0001B/001	40CFR 60-AAa.272a (a) (1)	Steel plants:electric arc furnaces and Argon-Oxygen decarburization vessels - standard for particulate matter	3-20
U-0001B/0001B/001	40CFR 60-AAa.272a (a) (2)	Steel plants:electric arc furnaces and Argon-Oxygen decarburization vessels - standard for particulate matter	3-21
U-0001B/-/001	40CFR 60-AAa.272a (a) (3)	Steel plants:electric arc furnaces and Argon-Oxygen decarburization vessels - standard for particulate matter	3-11
U-0001B/-/001	40CFR 60-AAa.272a (b)	Steel plants:electric arc furnaces and Argon-Oxygen decarburization vessels - standard for particulate matter	3-12
U-0001B/-/001	40CFR 60-AAa.274a (b)	Steel plants:electric arc furnaces and Argon-Oxygen decarburization vessels - monitoring of operations	3-13
U-0001B/-/001/00001	40CFR 60-AAa.274a (d)	Steel plants:electric arc furnaces and Argon-Oxygen decarburization vessels - monitoring of operations	3-15
U-0001B/-/001	40CFR 60-AAa.274a (h)	Steel plants:electric arc furnaces and Argon-Oxygen decarburization vessels - monitoring of operations	3-14
FACILITY	40CFR 68	Chemical accident prevention provisions	3-7
FACILITY	6NYCRR 201-1.4	Unavoidable noncompliance and violations	3-31
FACILITY	6NYCRR 201-6	Title V Permits and the Associated Permit	24, 38, 39

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FACILITY	6NYCRR 201-6.5 (c)	Conditions Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	3-1
FACILITY	6NYCRR 201-6.5 (c) (2)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	3-2
FACILITY	6NYCRR 201-6.5 (e)	Compliance Certification	3-3
FACILITY	6NYCRR 202-1.1	Required emissions tests.	2-3
FACILITY	6NYCRR 202-2.1	Emission Statements - Applicability	30
FACILITY	6NYCRR 202-2.5	Emission Statements - record keeping requirements.	31
FACILITY	6NYCRR 211.2	General Prohibitions - air pollution prohibited.	61
U-0001B	6NYCRR 216	Iron and/or Steel Processes	2-6
FACILITY	6NYCRR 216.3	Particulate emissions.	35
U-0001B/0001B	6NYCRR 216.5	Gaseous emissions.	3-16
U-ORBF1/ORBF1	6NYCRR 227-1.3 (a)	Smoke Emission Limitations.	3-24
U-ORBF1/ORBF2	6NYCRR 227-1.3 (a)	Smoke Emission Limitations.	3-26
U-ORBF1/ORBF1/002/00005	6NYCRR 227-2.4 (g)	Emission limitations for other combustion sources.	3-25
FACILITY	6NYCRR 231-2.4	Permit Requirements	3-4
U-0001B/0001B/001/00002	6NYCRR 231-2.5 (a)	LAER	3-22, 3-23
U-ORBF1/ORBF2/002/00006	6NYCRR 231-2.5 (a)	LAER	3-27, 3-28
FACILITY	6NYCRR 231-2.9 (a)	Emission offset applicability	3-5
U-0001B/0001B/001	6NYCRR 231-2.9 (a)	Emission offset applicability	3-17
U-ORBF1/ORBF2/002/00006	6NYCRR 231-2.9 (a)	Emission offset applicability	3-29

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.

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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)

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(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 202-1.1

This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

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

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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 their applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

Facility Specific Requirements

In addition to Title V, NUCOR STEEL AUBURN INC has been determined to be subject to the following regulations:

40CFR 52-A.21

This citation applies to facilities that are subject to Prevention of Significant Deterioration provisions; ie: facilities that are located in an attainment area and that emit pollutants which are listed in 40 CFR 52.21(b)(23)(i) .

40CFR 60-AAa

NSPS Requirement.

40CFR 60-AAa.272a (a) (1)

x

40CFR 60-AAa.272a (a) (2)

x

40CFR 60-AAa.272a (a) (3)

x

40CFR 60-AAa.272a (b)

appliesx

40CFR 60-AAa.274a (b)

regulation applies

40CFR 60-AAa.274a (d)

40 CFR 60-AAa.274a(d) applies to this facility.

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40CFR 60-AAa.274a (h)

40 CFR 60-AAa.274a(h) applies to this facility.

6NYCRR 216

This Part contains air pollution control requirements for iron and/or steel processes as defined in Section 216.1 (e).

6NYCRR 216 .3

This section contains the particulate emission limitations for various confined processes in the iron and/or steel industry.

6NYCRR 216 .5

The facility is subject to Part 216.5 NO_x RACT for the EAF. However, the Part 231-2 LAER limit is more stringent and therefore covers NO_x RACT compliance.

6NYCRR 227-1.3 (a)

This regulation prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.

6NYCRR 227-2.4 (g)

This subdivision is meant to require RACT on a significant combustion source which has no RACT provisions. This includes those units which have been "exempted." Rather than treat a significant source that falls below the size cutoffs of other subdivisions in this section as requiring no control, if the unit emits over 3 lb/hr uncontrolled or more than 15 lb./day.

As an example, a 300 hp internal combustion engines which is uncontrolled is exempt from needing a permit upstate. However, this unit emits about 7 lb/hr. This unit is a significant source of NO_x and should therefore have RACT applied.

6NYCRR 231-2.4

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

The permitting requirements for proposed source projects and new major facilities are set forth in section 231-2.4.

6NYCRR 231-2.5 (a)

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan

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County.

Emission controls equivalent to the lowest achievable emission rate (LAER) must be implemented for each contaminant for which Subpart 231-2 is applicable for a given source project or new major facility. LAER is defined as the most stringent emission limitation achieved in practice or which can be expected to be achieved in practice for a category of emission sources taking into consideration each air contaminant which must be controlled (6 NYCRR 200.1(ak)).

6NYCRR 231-2.9 (a)

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

The project emission potential for a proposed source project must be offset with emission reduction credits created or obtained pursuant to 6 NYCRR 231-2.6 or obtained from a state in which New York State has a reciprocal trading agreement in place.

Compliance Certification

Summary of monitoring activities at NUCOR STEEL AUBURN INC:

Location Facility/EU/EP/Process/ES	Type of Monitoring	Cond No.
FACILITY	record keeping/maintenance procedures	3-6
U-0001B	continuous emission monitoring (cem)	3-8
U-0001B	continuous emission monitoring (cem)	3-9
U-0001B/0001B/001	intermittent emission testing	3-18
U-0001B/0001B/001	intermittent emission testing	3-19
U-0001B	record keeping/maintenance procedures	3-10
U-0001B/0001B/001	intermittent emission testing	3-20
U-0001B/0001B/001	monitoring of process or control device parameters as surrogate	3-21
U-0001B/-/001	monitoring of process or control device parameters as surrogate	3-11
U-0001B/-/001	monitoring of process or control device parameters as surrogate	3-12
U-0001B/-/001	monitoring of process or control device parameters as surrogate	3-13
U-0001B/-/001/00001	record keeping/maintenance procedures	3-15
U-0001B/-/001	record keeping/maintenance procedures	3-14
FACILITY	record keeping/maintenance procedures	3-3
FACILITY	record keeping/maintenance procedures	30
U-0001B	monitoring of process or control device parameters as surrogate	2-6
U-0001B/0001B	record keeping/maintenance procedures	3-16
U-ORBF1/ORBF1	monitoring of process or control device parameters as surrogate	3-24
U-ORBF1/ORBF2	monitoring of process or control device parameters as surrogate	3-26
U-ORBF1/ORBF1/002/00005	intermittent emission testing	3-25



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U-0001B/0001B/001/00002	continuous emission monitoring (cem)	3-22
U-0001B/0001B/001/00002	continuous emission monitoring (cem)	3-23
U-ORBF1/0RBF2/002/00006	continuous emission monitoring (cem)	3-27
U-ORBF1/0RBF2/002/00006	continuous emission monitoring (cem)	3-28
FACILITY	record keeping/maintenance procedures	3-5
U-0001B/0001B/001	work practice involving specific operations	3-17
U-ORBF1/0RBF2/002/00006	work practice involving specific operations	3-29

Basis for Monitoring

Facility level: Monitoring for compliance with Title V.

EU level: Monitoring for compliance with 40 CFR 52.21, 40 CFR 60 AAa (and AAa.272a), and 6 NYCRR Part 227-2.