Division of Air Resources

Permit Review Report

Permit ID: 8-3205-00041/00013
Renewal Number: 1
02/02/2026

Facility Identification Data
Name: GUARDIAN INDUSTRIES CORP
Address: 50 FORGE AVE
GENEVA, NY 14456

Owner/Firm
Name: GUARDIAN INDUSTRIES CORP
Address: 2300 HARMON RD
AUBURN HILLS, MI 48326-1714, USA
Owner Classification: Corporation/Partnership

Permit Contacts
Division of Environmental Permits:
Name: SONIA PHELAN
Address: NYSDEC - REGION 8
6274 E AVON LIMA RD
AVON, NY 14414
Phone:5852265394

Division of Air Resources:
Name: ZACHARY TENNIES
Address: 6274 E Avon Lima Rd
Avon, NY 14414-9519
Phone:7162262466

Air Permitting Contact:
Name: CHRISTOPHER NAZELROD
Address: GUARDIAN INDUSTRIES CORP
50 FORGE AVE
GENEVA, NY 14456
Phone:

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 project is an application for Renewal 1 of the Air Title V permit. This Renewal incorporates changes made under an approved Operational Flexibility notification during the term of the prior permit. No other major changes have occurred since the prior permit. Changes to permit structure, emissions process, and permit conditions have been made to reflect current operations.

The following changes under Op-Flex have been added since the prior permit:

- Addition of a second vacuum system and filter control system for the furnace area (EU U-BATCH, Process MT2, Emission Source HVAC2 and Control VAC2C).
- Replacement of electrostatic precipitator (Control ESP01) current and voltage monitoring limits with power.
- Addition of portable checker burners for furnace maintenance or to increase flue gas temperature (EU U-FURNC, Emission Source F0001).
- Removal of the batch house boilers (EU U-COMBU, Emission Sources BHB01 and BHB02).

Relocation or removal of permit conditions have been made where necessary as part of this renewal to reflect the above changes. Revisions to permit conditions have been made to reflect updated regulations or to improve clarity.

Additionally, pursuant to Paragraph 127 of Consent Decree United States of America, et al. v. Guardian Industries Corp., Civil No. 15-13426, effective on January 13, 2016), Guardian Industries, LLC requested that the Geneva facility be terminated from the Consent Decree via letter on January 19, 2021. A Joint Stipulation issued by the United States District Court for the Eastern District of Michigan granted this request and terminated the Geneva facility from the Consent Decree effective July 15, 2021.

Although terminated from the Consent Decree, the facility must continue to comply with final emissions limitations, control requirements, monitoring, recordkeeping, and reporting specified in the Consent Decree. These requirements have been relocated as part of this Renewal since this regulatory citation is no longer applicable. The conditions have been relocated to 6 NYCRR 201-6.

Attainment Status
GUARDIAN INDUSTRIES CORP is located in the town of GENEVA in the county of ONTARIO.
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*	TRANSPORT REGION (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:
The Guardian Industries Corp. Geneva facility manufactures float glass and flat glass fabricated products. Float glass manufacturing involves several process and production units. The sources at the facility include

a natural gas fired furnace (propane backup), material transfer operations, scrubber, dust collectors, generators, diesel powered emergency equipment and miscellaneous small combustion sources.

Permit Structure and Description of Operations

The Title V permit for GUARDIAN INDUSTRIES CORP 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.

GUARDIAN INDUSTRIES CORP is defined by the following emission unit(s):

Emission unit UBATCH - This emission unit includes all materials handling systems and associated dust collection equipment.

Emission unit UBATCH is associated with the following emission points (EP):
BH001, BH002, BH003, C0001, X0001, X0002, X0003, X0004
Process: MAT is located at 4/5 & CULLET PAD, Building OUTSIDE - This process represents cullet and raw material unloading, weighing, transfer, and industrial cleaning operations.

Process: MT2 is located at Building OUTSIDE - This process represents cullet and raw material unloading, weighing, transfer, and industrial cleaning operations that are not subject to BACT limits and/or emissions capping.

Emission unit UCOMBU - This emission unit includes miscellaneous combustion sources including, small space heaters, small diesel engines, small boilers, small flare, and water heaters. All units are either natural gas fired, propane fired, or diesel fired. Emissions from these sources are subject to facility-wide emission limits for NOx.

Emission unit UCOMBU is associated with the following emission points (EP):
MISC1
Process: DSL is located at Building OUTSIDE - This process represents two small diesel fired water pumps

Process: NAT is located at MAIN, Building MAIN - This process covers miscellaneous natural gas fired combustion sources, including space heaters & hot water heaters.

Process: PRO is located at Building BATCH - This process represents miscellaneous LPG (propane) fired combustion sources, including 2 propane vaporizers and 1 emergency test flare.

Emission unit UCUTTG - This emission unit includes the three online glass cutting stations on the float line as well as four offline cutting stations located in the fabrication area. VOC emissions result from cutting oil used in the glass cutting areas.

Process: CUT is located at Building MAIN - This process represents the use of cutting oil for scoring and cutting glass at multiple locations.

Emission unit UFURNC - This emission unit includes the glass melting regenerative furnace with a nominal capacity of 770 tons of glass per day. The furnace is natural gas fired, with propane as the back-up fuel. This emission unit includes the glass annealing lehr and associated SO2 scrubber system.

Emission unit UFURNC is associated with the following emission points (EP):
F0001
Process: FUR is located at Building MAIN - This process represents the manufacturing of flat glass in the float glass melting furnace with a nominal capacity of 770 tons per day. It is natural gas fired, with propane fuel as emergency back-up. This process includes the optional use of three oxy-fuel firing techniques that were previously approved with Operational Flexibility Notification, including oxygen enrichment, oxygen lancing, and oxygen boosting.

Process: SCB is located at Building MAIN - This process provides controlled glass cooling in the electric annealling lehr. SO2 is injected at the lehr's front to improve glass characteristics.
Note: lehr emissions will be directed through, but not controlled by the SCR or ESP.

Emission unit UPOWER -

Emission unit UPOWER is associated with the following emission points (EP):
G0001, G0002
Process: GEN is located at UTILITY ROOM, Building MAIN - This process represents emergency back-up electrical power generation using two diesel fired generators.

Title V/Major Source Status
GUARDIAN INDUSTRIES CORP is subject to Title V requirements. This determination is based on the following information:
The Guardian Industries facility in Geneva, NY is considered a major source under Title V due to potential emissions of Nitrogen Oxide (NOx), Particulates, PM-10, Sulfur Dioxide, and Carbon Monoxide (CO).

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Program Applicability
The following chart summarizes the applicability of GUARDIAN INDUSTRIES CORP with regards to the principal air pollution
regulatory programs:

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

NOTES:
PSD Prevention of Significant Deterioration (40 CFR 52.21, 6 NYCRR 231-7, 231-8) - 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 231-5, 231-6) - 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, 6 NYCRR 200.10) - 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, 6 NYCRR 200.10) - 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, 6 NYCRR 200.10) - 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, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - 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 212-3, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 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, 6 NYCRR 200.10) - 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
3211	FLAT GLASS
3231	PRODUCTS OF PURCHASED GLASS

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
1-02-010-02	EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - LIQUEFIED PETROLEUM GAS (LPG) Propane
1-05-001-06	EXTERNAL COMBUSTION BOILERS - SPACE HEATERS

	INDUSTRIAL SPACE HEATER Natural Gas
2-01-001-02	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Reciprocating
2-02-001-02	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - DISTILLATE OIL(DIESEL) Reciprocating
3-05-014-03	MINERAL PRODUCTS MINERAL PRODUCTS - GLASS MANUFACTURE Flat Glass: Melting Furnace
3-05-014-10	MINERAL PRODUCTS MINERAL PRODUCTS - GLASS MANUFACTURE Raw Material Handling (All Types of Glass)
3-99-999-92	MISCELLANEOUS MANUFACTURING INDUSTRIES MISCELLANEOUS INDUSTRIAL PROCESSES OTHER NOT CLASSIFIED
4-02-009-20	SURFACE COATING OPERATIONS THINNING SOLVENTS - GENERAL Mineral Spirits

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Service 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 for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. 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.

Cas No.	Contaminant	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
000106-99-0	1,3-BUTADIENE		0.026		
000075-07-0	ACETALDEHYDE		0.51		
000107-02-8	ACROLEIN		0.061		
007440-38-2	ARSENIC		0.000043		
000071-43-2	BENZENE		0.62		
007440-41-7	BERYLLIUM		2.4E-6		
007440-43-9	CADMIUM		0.00022		
0NY750-00-0	CARBON DIOXIDE EQUIVALENTS	181000			
000630-08-0	CARBON MONOXIDE	180000			
007440-47-3	CHROMIUM		0.00028		

007440-48-4	COBALT		0.000017
000050-00-0	FORMALDEHYDE		0.8
000110-54-3	HEXANE		0.36
007439-92-1	LEAD		0.033
007439-96-5	MANGANESE		0.000076
007439-97-6	MERCURY		0.000052
000091-20-3	NAPHTHALENE		0.056
0NY059-28-0	NICKEL (NI 059)		0.00042
0NY210-00-0	OXIDES OF NITROGEN		855.9
0NY075-00-0	PARTICULATES		173
0NY075-00-5	PM-10		173
0NY075-02-5	PM-2.5		162
0NY505-00-0	POLYCYCLIC ORGANIC MATTER (POM)	0.055	
007782-49-2	SELENIUM		4.8E-6
007446-09-5	SULFUR DIOXIDE		169
007664-93-9	SULFURIC ACID		7.1
000108-88-3	TOLUENE		0.27
0NY100-00-0	TOTAL HAP		3.3
007440-62-2	VANADIUM		0.00046
0NY998-00-0	VOC		66
001330-20-7	XYLENE, M, O & P MIXT.		0.19

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 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 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

Item B: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(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 C: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(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 D: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(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 E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(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 F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(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 G: Property Rights - 6 NYCRR 201-6.4(a)(6)
This permit does not convey any property rights of any sort or any exclusive privilege.

Item H: Severability - 6 NYCRR Part 201-6.4(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 I: Permit Shield - 6 NYCRR Part 201-6.4(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 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 J: Reopening for Cause - 6 NYCRR Part 201-6.4(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 2 01-6.7 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 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 K: 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 L: 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: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department 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 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 and maintained;
(3) During the period of the emergency the facility owner 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 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 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_02

Item B: 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 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	Condition	Short Description
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FACILITY	ECL 19-0301	80	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 52-A.21	40	Prevention of Significant Deterioration
FACILITY	40CFR 52-A.21(j)	41	Best Available Control Technology
U-BATCH/BH003/MAT/HIVAC	40CFR 52-A.21(j)	47	Best Available Control Technology
U-BATCH/C0001/MAT/PADCO	40CFR 52-A.21(j)	48	Best Available Control Technology
U-FURNC/F0001/FUR	40CFR 52-A.21(j)	75	Best Available Control Technology
U-POWER/-/GEN	40CFR 52-A.21(j)	78, 79	Best Available Control Technology
U-FURNC/-/FUR	40CFR 60-A	59	General provisions
U-FURNC/-/FUR	40CFR 60-A.4	60	General provisions - Address
U-FURNC/F0001/FUR	40CFR 60-CC.292	76, 77	Glass melting furnaces - standards for particulate matter
FACILITY	40CFR 63-ZZZZ	42	Reciprocating Internal Combustion Engine (RICE) NESHAP
FACILITY	40CFR 68	17	Chemical accident prevention provisions
FACILITY	40CFR 82-F	18	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	40CFR 98	43	Mandatory Greenhouse Gas Reporting
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	9	Maintenance of equipment.
FACILITY	6NYCRR 201-1.15	82	Requirement to Commence Construction
FACILITY	6NYCRR 201-1.4	81	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	10	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	11	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2(a)	12	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	13	Trivial Activities -

			proof of eligibility
FACILITY	6NYCRR 201-6	19, 20, 44, 45	Title V Permits and the Associated Permit Conditions
U-FURNC/-/FUR	6NYCRR 201-6	54, 55, 56, 57, 58	Title V Permits and the Associated Permit Conditions
U-FURNC/F0001/FUR	6NYCRR 201-6	61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	14	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	15	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4(c)(3)(ii	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	21	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)	22	Operational Flexibility
FACILITY	6NYCRR 201-6.4(f)(2)	23	Operational Flexibility - Protocol
FACILITY	6NYCRR 201-6.5(a)	83	State Enforceable Requirements
FACILITY	6NYCRR 201-7	24, 46	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1.1	16	Required emissions tests.
FACILITY	6NYCRR 202-1.2	27	Notification.
FACILITY	6NYCRR 202-2.4(a)(3)	28	Emission statement methods and procedures
FACILITY	6NYCRR 202-2.5	7	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	84	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	29, 30, 31	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 212-1.6(a)	32	Limiting of Opacity
FACILITY	6NYCRR 212-2.2	85	High Toxicity Air Contaminants (HTACs) Mass Emission Limits
FACILITY	6NYCRR 212-2.3(b)	33	State Air Program Non-Criteria air contaminants subject Table 4
FACILITY	6NYCRR 212-2.4(b)	34	Control of Particulate from New

			and Modified Process Emission Sources
U-BATCH/X0001/MAT/SSSBV	6NYCRR 212-2.4(b)	49	Control of Particulate from New and Modified Process Emission Sources
U-BATCH/X0002/MAT/SSDBV	6NYCRR 212-2.4(b)	50	Control of Particulate from New and Modified Process Emission Sources
U-BATCH/X0004/MT2/VAC2C	6NYCRR 212-2.4(b)	51	Control of Particulate from New and Modified Process Emission Sources
U-CUTTG/-/CUT	6NYCRR 212-3.1(a)	53	Reasonably Available Control Technology for Major Facilities
FACILITY	6NYCRR 215.2	8	Open Fires - Prohibitions
U-FURNC	6NYCRR 220-2.4(a)	87	Furnace recordkeeping.
U-FURNC	6NYCRR 220-2.4(c)	88	NOx Continuous Emissions Monitoring System (CEMS) requirements.
FACILITY	6NYCRR 221.2	86	Prohibition.
FACILITY	6NYCRR 225-1.2(d)	35	Sulfur-in-Fuel Limitation - Distillate Oil
FACILITY	6NYCRR 227-1.4(a)	36	Opacity Standard
U-COMBU/MISC1	6NYCRR 227-1.4(a)	52	Opacity Standard
FACILITY	6NYCRR 227-2.4(d)	37	Small boilers, small combustion turbines, and small stationary internal combustion engines.
FACILITY	6NYCRR 231-2	38, 39	New Source Review in Nonattainment Areas and Ozone Transport Region
U-FURNC/F0001/FUR	6NYCRR 231-2.5	74	Lowest achievable emission rate, LAER

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

ECL 19-0301
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.

6 NYCRR 200.6
Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6 NYCRR 200.7
Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

6 NYCRR 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.

6 NYCRR 201-1.7
Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8
Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)
An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, 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.

6 NYCRR 201-3.3 (a)
The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, 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.

6 NYCRR Subpart 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.

6 NYCRR 201-6.4 (a) (4)
This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.4 (a) (7)
This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.4 (a) (8)
This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and

monitoring, as necessary.

6 NYCRR 201-6.4 (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.

6 NYCRR 201-6.4 (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.

6 NYCRR 201-6.4 (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.

6 NYCRR 201-6.4 (d) (4)
This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6 NYCRR 201-6.4 (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.

6 NYCRR 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.

6 NYCRR 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.

6 NYCRR 211.2
This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

6 NYCRR 215.2
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

40 CFR Part 68

This Part lists the regulated substances and there applicability thresholds and sets 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, GUARDIAN INDUSTRIES CORP has been determined to be subject to the following regulations:
40 CFR 52.21
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) .

40 CFR 52.21 (j)
BACT determinations are made on a case-by-case basis and can be no less stringent than any requirement that exists in the current State Implementation Plan (SIP) or 40 CFR 60 and 61. Emission and operational limitations required from a BACT determination will have to be entered into the special permit conditions, separately by the permit reviewer.

40 CFR 60.292
This condition sets the particulate emissions standard for glass melting furnaces which fire gasseous fuels, liquid fuels, or a combination of both.

40 CFR 60.4
This condition lists the USEPA Region 2 address for the submittal of all communications to the "Administrator". In addition, all such communications must be copied to NYSDEC Bureau of Quality Assurance (BQA).

40 CFR Part 60, Subpart A
This regulation contains the General Provisions of 40 CFR 60. The facility owner is responsible for reviewing these general provisions in detail and complying with all applicable technical, administrative and reporting requirements

40 CFR Part 63, Subpart ZZZZ
This regulation defines performance standards for stationary reciprocating internal combustion engines

40 CFR Part 98
40 CFR Part 98 sets forth the reporting requirements for facilities that are subject to the mandatory reporting of greenhouse gases.

6 NYCRR 201-1.15
The existence of a valid permit shall not be construed as authorizing construction if construction is not commenced within 18 months after the date of permit issuance, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time as determined by the department. Up to an 18-month extension may be granted by the department upon a showing of good cause in a written request by the facility owner or operator. The department may suspend, modify or revoke the permit or registration pursuant to Part 621 of this Title if construction or modification has not commenced within 18 months of issuance of such permit or registration, or construction has been discontinued for a period of more than 18 months at any point after issuance of such permit or registration.

6 NYCRR 201-6.4 (f)
This section describes the operational flexibility protocol proposed by the facility. The protocol will allow the facility owner or operator to make certain changes at the facility without the need for a permit modification. Changes made pursuant to the protocol must be approved by the Department, and will be rolled into the permit during the next renewal or modification.

6 NYCRR 201-6.4 (f) (2)
This section describes the requirements for operational flexibility protocols included in Title V permits. The facility owner or operator may make certain changes to the facility that have been reviewed and approved pursuant to the protocol without first obtaining a permit modification for those changes.

6 NYCRR 201-6.5 (a)
This subdivision states that the Department shall include state enforceable conditions in Title V permits. State enforceable conditions related to regulations developed pursuant to the Climate Leadership and Community Protection Act (CLCPA) and Article 75 of New York State Environmental Conservation Law may be included in future versions of this permit, as applicable.

6 NYCRR 202-1.2

This regulation specifies that the department is to be notified at least 30 days in advance of any required stack test. The notification is to include a list of the procedures to be used that are acceptable to the department. Finally, free access to observe the stack test is to be provided to the department's representative.

6 NYCRR 202-2.4 (a) (3)
Once a facility is required to submit annual emission statements electronically, emission statements must be submitted to the department per the specified schedule, in this regulation beginning the reporting year that a Title V permit containing a condition mandating electronic submittal is issued.

6 NYCRR 211.1
This regulation requires that no person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property.

6 NYCRR 212-1.6 (a)
This provisions requires that the facility owner or operator not cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water.

6 NYCRR 212-2.2
Table 2 of 212-2.2 lists the compounds eligible for the alternative compliance option. The table lists actual annual mass emission limits for select compounds. The mass emission limit represents a conservative offsite concentration which will be below the respective annual guideline concentration for the particular air contaminant.

6 NYCRR 212-2.3 (b)
Table 4 of 212-2.3 describes the reduction in emissions required for a non-criteria air contaminant based on its uncontrolled emission rate. The uncontrolled emission rate in conjunction with the assigned environmental rating determines the degree of controlled applied.

6 NYCRR 212-2.4 (b)
Particulate emissions from any process emission source, which received a B or C Environmental Rating, and for which an application was received by the department after July 1, 1973 are restricted to 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis.

6 NYCRR 212-3.1 (a)
This provision states that owners and/or operators of facilities which emit volatile organic compounds or nitrogen oxides in amounts greater than the applicability emission rates found in 212-3(a)(1) and (2) must

submit a plan to reduce those emissions and be in compliance by a specific date.

6 NYCRR 220-2.4 (a)

The owner or operator of a glass melting furnace located at a glass plant that meets the applicability requirements of section 220-2.1 must maintain a file of daily glass production rates. The production rates must be summarized monthly. Glass production records must be retained for at least five years following the date of such records and must be made available for inspection by the department during normal business hours.

6 NYCRR 220-2.4 (c)

The owner or operator of a glass melting furnace shall demonstrate compliance with the NOx RACT emission limits established in Section 220-2.3(a) using a CEMS. The CEMS shall comply with the requirements of subdivsion (c) of this section or with equivalent requirements approved by the Department.

6 NYCRR 221.2

No person in the State of New York shall engage in or allow surface coating by the spraying of asbestos or asestos-containing materials.

6 NYCRR 225-1.2 (d)

This subdivision sets the sulfur-in-fuel limitation for distillate oil fired emission sources throughout the State.

6 NYCRR 227-1.4 (a)

This subdivisions sets the opacity standard for subject stationary combustion installations.

6 NYCRR 227-2.4 (d)

This section includes NOx RACT requirements for small boilers, small combustion turbines, and small stationary internal combustion engines.

6 NYCRR 231-2.5
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.

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)).

6 NYCRR Subpart 201-7
This section of Part 201-7 specifies the criteria that need to be met in order to restrict emissions to avoid Title V or other applicable requirements using federally enforceable permit conditions permit.

6 NYCRR Subpart 231-2
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 addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.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 addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

Compliance Certification
Summary of monitoring activities at GUARDIAN INDUSTRIES CORP:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
FACILITY	40	record keeping/maintenance procedures
FACILITY	41	monitoring of process or control device parameters as surrogate
U-BATCH/BH003/MAT/HIVAC	47	record keeping/maintenance procedures
U-BATCH/C0001/MAT/PADCO	48	monitoring of process or control device parameters as surrogate
U-FURNC/F0001/FUR	75	intermittent emission testing
U-POWER/-/GEN	78	work practice involving specific operations
U-POWER/-/GEN	79	record keeping/maintenance procedures
U-FURNC/F0001/FUR	76	monitoring of process or control device parameters as surrogate
U-FURNC/F0001/FUR	77	intermittent emission testing

FACILITY	20	record keeping/maintenance procedures
U-FURNC/-/FUR	54	intermittent emission testing
U-FURNC/-/FUR	55	continuous emission monitoring (cem)
U-FURNC/-/FUR	56	continuous emission monitoring (cem)
U-FURNC/-/FUR	57	continuous emission monitoring (cem)
U-FURNC/-/FUR	58	continuous emission monitoring (cem)
U-FURNC/F0001/FUR	61	continuous emission monitoring (cem)
U-FURNC/F0001/FUR	62	record keeping/maintenance procedures
U-FURNC/F0001/FUR	63	record keeping/maintenance procedures
U-FURNC/F0001/FUR	64	record keeping/maintenance procedures
U-FURNC/F0001/FUR	65	record keeping/maintenance procedures
U-FURNC/F0001/FUR	66	record keeping/maintenance procedures
U-FURNC/F0001/FUR	67	record keeping/maintenance procedures
U-FURNC/F0001/FUR	68	record keeping/maintenance procedures
U-FURNC/F0001/FUR	69	record keeping/maintenance procedures
U-FURNC/F0001/FUR	70	record keeping/maintenance procedures
U-FURNC/F0001/FUR	71	monitoring of process or control device parameters as surrogate
U-FURNC/F0001/FUR	72	continuous emission monitoring (cem)
U-FURNC/F0001/FUR	73	continuous emission monitoring (cem)
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	23	record keeping/maintenance procedures
FACILITY	25	monitoring of process or control device parameters as surrogate
FACILITY	26	monitoring of process or control device parameters as surrogate
FACILITY	30	monitoring of process or control device parameters as surrogate
FACILITY	31	monitoring of process or control device parameters as surrogate
FACILITY	32	monitoring of process or control device parameters as surrogate
FACILITY	85	record keeping/maintenance procedures
FACILITY	33	record keeping/maintenance procedures
FACILITY	34	intermittent emission testing
U-BATCH/X0001/MAT/SSSBV	49	monitoring of process or control device parameters as surrogate
U-BATCH/X0002/MAT/SSDBV	50	record keeping/maintenance procedures
U-BATCH/X0004/MT2/VAC2C	51	record keeping/maintenance procedures
U-CUTTG/-/CUT	53	monitoring of process or control device parameters as surrogate
U-FURNC	87	record keeping/maintenance procedures
U-FURNC	88	record keeping/maintenance procedures
FACILITY	35	work practice involving specific operations
FACILITY	36	monitoring of process or control device parameters as surrogate
U-COMBU/MISC1	52	monitoring of process or control device parameters as surrogate
FACILITY	37	record keeping/maintenance procedures
FACILITY	39	monitoring of process or control device parameters as surrogate
U-FURNC/F0001/FUR	74	continuous emission monitoring (cem)

Basis for Monitoring

6 NYCRR Subpart 201-1.7

- 6 NYCRR 201-1.7 – The facility owner or operator recycles waste glass (cullet) from the process back into the batch. However, cullet dust, collected in the cullet return system, cannot be recycled for technical reasons. The variable chemistry of the dust would unpredictably affect batch chemistry. Also, the dust is too fine and creates particulate carryover problems in the furnace.

6 NYCRR Subpart 201-6

- 6 NYCRR 201-6.2(d)(8)(iii)(b) – Pursuant to Paragraph 127 of Consent Decree United States of America, et al. v. Guardian Industries Corp., Civil No. 15-13426, effective on January 13, 2016), Guardian Industries, LLC requested that the Geneva facility be terminated from the Consent Decree via letter on January 19, 2021. A Joint Stipulation issued by the United States District Court for the Eastern District of Michigan granted this request and terminated the Geneva facility from the Consent Decree effective July 15, 2021.

  Although terminated from the Consent Decree, the facility must continue to comply with final emissions limitations, control requirements, monitoring, recordkeeping, and reporting specified in the Consent Decree. These requirements have been relocated as part of this Renewal since this regulatory citation is no longer applicable. The conditions have been relocated to 6 NYCRR 201-6.

  Minor changes have been made to reflect where initial or one-time compliance requirements have been met or for clarity by combining similar conditions:
  - Consolidation of the SO2 and NOx limits during furnace startup.
  - Removal of duplicate condition requiring annual H2SO4 testing.
  - Removal of duplicate condition requiring annual PM testing.
  - Consolidation of SO2 and NOx CEMS maintenance and reporting requirements.

  References to the “first operating day” or “after completing Control Device startup” have been removed since this effective date has passed.

6 NYCRR Part 201-7 Emissions Capping

- 6 NYCRR 201-7.1:

  Carbon Monoxide - To cap-out of New Source Review Prevention of Significant Deterioration (PSD) requirements under 40 CFR 52.21(b)(23), a facility-wide emissions cap for Carbon Monoxide (CO) was established at the time of initial facility permitting. The initial CO cap was set at 99.7 tpy and required compliance using a CO CEMS on the glass furnace. With the replacement of the 3R NOx control system with selective catalytic reduction (SCR), the CO CEMS was no longer required due to the associated reduction in CO emissions from the glass furnace. Accordingly, as part of the Ren 0, Mod 1 significant permit modification (Effective 04/11/2017), the compliance demonstration was changed to monthly emissions calculations and the cap lowered to 90 tpy.

  This 90 tpy cap has been retained as part of this permit renewal and continues to require compliance using monthly emissions calculations, recordkeeping, and annual reporting. Compliance with this cap is determined on a 12-month rolling basis using material usage and appropriate emissions factors.

  PM/PM2.5/PM10 – A 1.4 lbs/hour PM/PM2.5/PM10 emission limit was established as part of the Ren 0, Mod 1 significant permit modification (effective 04/11/2017) for the material and cullet handling operations (EU U-BATCH, Process MAT). This project included the addition of Emission Points (EPs) X0001, X0002, X0003 and associated emissions sources. This limit was located under 6 NYCRR 212-2.4(b) but served to cap the PM/PM2.5/PM10 Project Emissions Potential below the significant project thresholds for 6 NYCRR 231-8 Significant Deterioration (PSD) applicability.

  Since the original intent of this limit was for capping, it has been relocated to this citation. The significant project thresholds are specified in tons per year and a short-term exceedance of the hourly limit would not necessarily cause the facility to exceed the tons per year threshold. Furthermore, the hourly limit was not practically enforceable since the compliance method was meeting permit conditions under 6 NYCRR 212-2.4(b) and 40 CFR 52.21(j) requiring the operation and monitoring of

particulate control devices and did not require CEMS. Therefore, to align the averaging method with the significant project threshold and make the limit practically enforceable, the cap has been updated to a 6.08 tons per year limit (corresponding to the PTE used in the original application). This revised capping condition continues to limit emissions below PSD applicability and adds monthly emissions calculations and annual reporting requirements.

The facility must continue to comply with the control device monitoring and operation under 6 NYCRR 212-2.4(b) and 40 CFR 52.21(j). Confirmatory emissions testing may be requested at any time to verify compliance.

As discussed below, EPs BH001, BH002, BH0003, and C0001 and associated emission sources were subject to 40 CFR 52.21(j) Best Available Control Technology (BACT) requirements at the time of initial permitting. These EPs and sources continue to remain subject to BACT and compliance with the cap is met by complying with the existing BACT requirements and monitoring conditions.

6 NYCRR Part 211 General Prohibitions

- 6 NYCRR 211.2 - Two monitoring conditions are included for the glass furnace (U-FURNC) requiring an annual Method 9 test and monthly Method 22 visible emissions to demonstrate compliance. These monitoring conditions were established following removal of the COMS requirement under NSPS Subpart CC. Prior permits included these conditions under 6 NYCRR 212-1.6(a). However, since the glass furnace is exempt from Part 212 as discussed under 6 NYCRR 212-2.3(a) below, they have been relocated to this citation as part of this Renewal.

6 NYCRR Part 212 General Process Emission Sources

- 6 NYCRR 212-1.6(a) - The regulation of opacity (visible emissions) under 6 NYCRR Part 212 does not specify periodic monitoring.

  The material handling operations (U-BATCH) are equipped with particulate control devices and subject to periodic monitoring specified assure compliance with particulate limits and proper control device operation. Therefore, since this process only emits solid particulates, operation of controls and compliance with monitoring is expected to result in negligible opacity from this process. Therefore, a monitoring condition is included for U-BATCH requiring monthly visible emissions observations (and follow-up Method 9 tests, if required).

  Please note that glass cutting operations (U-CUTTG) are subject to this requirement. However, this process does not have a dedicated emission point and does not emit directly to the outdoor air. Therefore, no monitoring condition for this citation has been included for this process

- 6 NYCRR 212-2.3(a) – This citation specifies the air cleaning requirements for criteria air contaminants under 6 NYCRR Part 212.

  Glass Furnace (U-FURNC)

  Under the exemption at 6 NYCRR 212-1.4(b) glass plants subject to Subpart 220-2 are exempt from Part 212 *only with respect to emissions not given an A-rating*. Carbon monoxide and sulfuric acid do not have a toxicity rating in DEC Program Policy DAR-1 and have been assigned an Environmental

Rating of B by the Department. This ER has been verified in the modeling report discussed below which showed off-site concentrations of carbon monoxide and sulfur dioxide are less than the applicable NAAQS. Therefore, carbon monoxide and sulfur dioxide emissions from U-FURNC are not subject to Part 212.

Emissions of NOx from U-FURNC are subject to 6 NYCRR 212-3 NOx RACT requirements (see more detailed applicability discussion under 6 NYCRR 212-3.1 below.) Per 6 NYCRR 212-1.5(f), process operations subject to Subpart 212-3 RACT are not subject to the control provisions in Subpart 212-2.

Per 6 NYCRR 212-1.5(d), a process source subject to a NSPS satisfies the requirements of 6 NYCRR Part 212 for the respective air contaminant regulated by the Federal standard by demonstrating compliance with the standard, particulate emissions from the glass furnace (Emission Unit U-FURNC) are regulated under 40 CFR 60, Subpart CC. Therefore, emissions of particulates from U-FURNC are compliant with Part 212 by complying with NSPS Subpart CC.

Based on the above, no permit conditions or requirements are included for this citation. The facility owner or operator may be required to re-demonstrate compliance with the NAAQS upon request by the Department or prior to commencing any process change or modification. Reevaluation is required no later than the next permit renewal.

- 6 NYCRR 212-2.3(b) – This citation specifies the air cleaning requirements for non-criteria air contaminants under 6 NYCRR Part 212.

Glass Furnace (U-FURNC)
Per 6 NYCRR 212-1.4(b) glass plants subject to Subpart 220-2 are exempt from Part 212 *only with respect to emissions not given an A-rating*.

The glass furnace (Emission Unit U-FURNC) emits the following High Toxicity Air Contaminants (HTACs) which have been assigned an A-rating by the Department: formaldehyde, benzene, manganese, cadmium, chromium, lead, and nickel. U-FURNC also emits the following non-HTACs: sulfuric acid, naphthalene, 1,4-dichlorobenzene, toluene, and hexane.

As discussed above, particulate emissions from the glass furnace (Emission Unit U-FURNC) are regulated under 40 CFR 60, Subpart CC. Control of particulates under the NSPS will also control emissions of lead, manganese, cadmium, chromium, and nickel. Therefore, compliance with Subpart 212-2 requirements for these pollutants is met through compliance with NSPS Subpart CC per 6 NYCRR 212-1.5(d).

Per the requirements of 6 NYCRR 212-2.1(a), process operations that emit HTACs must either meet the air cleaning requirements in 6 NYCRR 212-2.3(b) or comply with the Mass Emission Limit (MEL) under 6 NYCRR 212-2.2. Based on documentation provided in the permit renewal application (and subsequent modification applications or Op-Flex's) emissions of benzene are below the MEL and in compliance with the requirements of Part 212 (please note that manganese, cadmium, chromium, and nickel are also below their respective MELs.) Conversely, emissions of formaldehyde exceeded the respective MEL.

For A-rated air contaminants with an Emission Rate Potential less than 0.1 lbs/hour, the facility must demonstrate compliance with the respective AGC/SGC in DAR-1. An air modeling report submitted on June 10, 2017 showed that off-site impacts of formaldehyde are less than the applicable AGC/SGC and therefore in compliance with the requirements of Part 212. The air modeling report methods and findings were approved by the Department as part of this permit.

For HTACs that have annual actual emissions below their MELs, compliance is assured through meeting emission limits, monitoring, operation of controls, and other requirements, as specified elsewhere in the permit. Therefore, no additional specific monitoring is included for these contaminants under this citation. A recordkeeping/reporting condition is included requiring the facility to maintain documentation that emissions are below the MELs on an annual basis.

Based on the toxicity ratings in DAR-1, sulfuric acid (moderate toxicity), naphthalene (moderate), 1,4-dichlorobenzene (moderate), toluene (low), and hexane (moderate) emissions have been assigned an Environmental Rating of B or C by the Department. For non-HTACs with actual annual emissions less than 100 pounds per year – no modeling is required per DAR-1. These ERs have been verified in the modeling report which showed off-site concentrations of these contaminants are less than the applicable AGC/SGC. Therefore, emissions of these contaminants from U-FURNC are not subject to Part 212 as discussed above. Accordingly, no permit conditions are included under this regulation for these contaminants.

Material Handling Operations (U-BATCH)
Material handling operations (U-BATCH, Process MAT) only emit solid particulates that have not been assigned an Environmental Rating of A. The particulates emitted by this process do not contain any HTACs nor individual contaminants with a toxicity rating of high in DAR-1. Therefore, particulate emissions from U-BATCH are not subject to 6 NYCRR 212-2.3 and must meet the particulate standard in 6 NYCRR 212-2.4

- 6 NYCRR 212-2.4(b) - This citation limits particulate emissions to 0.05 gr/dscf for process sources subject to 6 NYCRR Part 212.

Glass Furnace (U-FURNC)
As discussed above, particulate emissions from the glass furnace (Emission Unit U-FURNC) are regulated under 40 CFR 60, Subpart CC and therefore in compliance with Part 212 requirements per 6 NYCRR 212-1.5(d).

Material Handling Operations (U-BATCH)
Prior permits excluded this emission limitation from material handling operations (EU U-BATCH, Process MAT) since the PM/PM2.5/PM10 emissions cap is more restrictive with respect to total hourly emissions from all the EPs in Process MAT. However, the grain loading standard under this citation is applicable on an emission point basis and theoretically, could be exceeded at a single emission point while still complying with the total emissions cap. Therefore, this limit has been added as part of this permit renewal.

All subject EPs utilize particulate emissions control devices and therefore compliance with the standard is met use of controls. Monitoring conditions for the operation of fabric filters and pressure drop monitoring on EPs X0001, X0002, and X0003 are included to demonstrate on-going compliance

with this requirement. This monitoring also serves to demonstrate on-going compliance with the PM/PM10/PM2.5 cap under 6 NYCRR 201-7.

As described below, EPs BH001, BH002, BH0003, and C0001 were subject to BACT for particulates at the time of initial permitting and required to install and monitor particulate controls. Multiple monitoring conditions are included for these EPs and associated sources to comply with BACT. Compliance with BACT is presumed to demonstrate compliance with this requirement and therefore, for permit streamlining, no monitoring is included for these EPs under this citation.

An additional monitoring condition has been included for subject points requiring a Method 5 stack test to confirm compliance upon request by the Department.

- 212-3.1 – NOx and VOC Reasonably Available Control Technology (RACT) requirements for process sources located at major sources of NOx or VOC emissions. The facility has PTE NOx and VOC emissions greater than 100 tpy and 50 tpy, respectively and therefore, process emissions sources are tentatively subject to NOx and VOC RACT under this Subpart.

Glass Furnace (U-FURNC)
As discussed above, per 6 NYCRR 212-1.5(b) glass plants subject to 6 NYCRR 220-3 are exempt from Part 212 *except for air contaminants given an A-rating.* Environmental Ratings for individual air contaminants (as a subset of VOCs) from U-FURNC are discussed under 6 NYCRR 212-2.3. Additionally, emissions from NOx from U-FURNC were required to comply with 6 NYCRR 231-2 Lowest Achievable Emission Rate (LAER) during initial permitting. LAER is the most stringent degree of control specified and satisfies BACT and RACT requirements. Therefore, U-FURNC is not subject to Subpart 212-3 RACT requirements because it already meets a more stringent degree of control for VOC and NOx respectively. Accordingly, no permit conditions are included.

Material Handling Operations (U-BATCH)
Material handling operations only emit solid particulates and therefore are not subject to NOx or VOC RACT requirements.

Glass Cutting Operations (U-CUTTG)

Glass cutting operations (U-CUTTG) have a VOC emission rate potential (ERP) greater than 3.0 lbs/hour and actual emissions greater than 15 lbs/day and required a VOC RACT analysis per 6 NYCRR 212-3.1(c)(4) to evaluate the feasibility of control for this process. Please note that this process is fugitive and emits into the facility. However, Subpart 212-3.1 RACT applicability has been assessed assuming all emissions emit through a single emission point.

The facility owner or operator submitted a VOC RACT analysis on June 29, 2017 (updated March 29, 2018) which demonstrated that add-on controls, process changes, and material substitution are not technically and/or economically feasible (calculated based on actual VOC emissions per the procedure in DEC Program Policy DAR-20). Economic feasibility of controls was assessed based on annual (tons per year) emissions from this process. The results of the VOC RACT analysis have been accepted by the Department as part of this permit.

Consistent with this analysis, VOC emissions from U-CUTTG are limited to 47.5 tons per year on a 12-month rolling basis. A monitoring condition is included under this citation requiring monthly calculations to demonstrate compliance with this limit and re-evaluation of the analysis upon permit renewal.

6 NYCRR Part 220-2 - NOx RACT for Glass Plants

- 6 NYCRR Part 220-2.4(a) - Specifies the production records required to be kept by glass furnaces subject to this subpart. A recordkeeping condition is included consistent with the regulation.
- 6 NYCRR Part 220-2.3(a) – Specifies the NOx Reasonably Available Control Technology (RACT) requirements for glass plants. Emissions from NOx from U-FURNC were required to comply with 6 NYCRR 231-2 Lowest Achievable Emission Rate (LAER) during initial permitting. LAER is the most stringent degree of control specified and satisfies BACT and RACT requirements. Therefore, U-FURNC already meets a more stringent degree of control for NOx. Accordingly, no RACT limit nor permit conditions are included under this citation.
- 6 NYCRR Part 220-2.4(c**) –** Specifies the maintenance, data collection, recordkeeping, and reporting requirements for NOx CEMS required under this Subpart. Please note that although no RACT condition is included in the permit for streamlining as discussed below, the facility is still subject to the CEMS requirement.

  The data collection and operating requirements have been included in the NOx LAER monitoring condition under 6 NYCRR 231-2.5. A separate monitoring condition for maintenance and reporting has been included under this citation consistent with the regulation. The initial CEMS plan submission and certification testing (see 220-2.4(c)(2)&(3)) has already been completed, therefore, references to these requirements have been omitted.

6 NYCRR Part 225 Sulfur in Fuel

- 6 NYCRR 225-1.2(d) – This citation limits sulfur content for distillate fuels. A monitoring condition is included consistent with the monitoring in the regulation.

6 NYCRR Subpart Part 226-1 Solvent Cleaning Operations

- 6 NYCRR 226 – The facility owns and operates small parts washers which are subject to requirements under this Subpart. These sources are exempt from permitting and therefore, not included in the facility permit. Accordingly, the applicable requirements are not listed although the sources remain subject to the rule.

6 NYCRR Part 227 Stationary Combustion Installations

- 6 NYCRR 227-1.3(c) – Specifies the annual tune-up requirement for stationary combustion installations subject to Subpart 227-1 consistent with the regulation.
- 6 NYCRR 227-1.4(a) – Specifies the applicable opacity limit for stationary combustion installations. A monitoring condition has been included requiring an annual Method 9 test for the natural gas-fired generators to demonstrate compliance. Prior permits only required a Method 9 on request. This frequency aligns with Method 9 frequency for the glass furnace and is consistent with Department procedure.

  A Method 9 test is required upon request for smaller combustion sources (U-COMBU, Process NAT) that would otherwise be exempt from permitting but are included in the permit for NSR purposes.
- 6 NYCRR 227-2.4(d) – Specifies the NOx RACT requirements for small stationary combustion installations (greater than or equal to 1 MMBtu and less than 10 MMBtu, or less than 400 brake horsepower) at major sources of NOx emissions. The water pump engine and two small boilers are

subject to annual tune-up requirements under this paragraph. This requirement is equivalent to the annual tune-up requirement under 6 NYCRR 227-1.3(c), therefore, for permit streamlining a condition is not included under this citation.

- 6 NYCRR 227-2.4(f) – Specifies the NOx RACT requirements for stationary internal combustion engines at major sources of NOx emissions. The diesel-fired emergency generators (U-POWER) are greater than 400 brake horsepower but exempt from the control requirements under 6 NYCRR 227-2.4 per 227-2.4(f)(6). Therefore, no permit conditions are included for this subdivision.

6 NYCRR Part 231 New Source Review

- 6 NYCRR Part 231-2 – The facility was subject to the emission offset requirements during initial permitting under 6 NYCRR 231-2.9 requiring that NOx emissions are offset by ERCs at a 1 to 1.15 ratio. To comply with this requirement, 984.3 tons of NOx Emission Reduction Credits (ERCs) were obtained by the facility to offset up to 855.9 tons of annual NOx emissions. An additional 25 tons of NOx ERCs were reserved (1009.3 tons total) for return to NYS Dept. of Economic Development in the event of facility shutdown. A monitoring condition establishing the use of these ERCs has been retained as part of this renewal.

  The 855.9 ty NOx limit has been retained as part of this renewal but has been relocated from 40 CFR 52.21 to this citation since LAER is more stringent. This limit is based on the baseline actual emissions used during the PSD/NNSR evaluations. A monitoring condition is included requiring monitoring, recordkeeping, and reporting to demonstrate compliance with this limit.

- 6 NYCRR Part 231-2.5 – The facility was subject to non-attainment New Source Review (NNSR) for NOx emissions at the time of initial permitting. Therefore, the following emission units/sources were required to meet Lowest Achievable Emission Rate (LAER) requirements under 6 NYCRR 231-2.5. The NOx LAER limits have been retained as part of this renewal.

  Float Glass Furnace (U-FURNC)
  The float glass furnace U-FURNC continues to be subject to a 199 lbs/hour (30-day rolling average NOx emissions limit which has been retained as part of this Renewal. This limit was previously increased from the 190 lbs/hour limit established in the pre-construction NNSR review/LAER determination as part of the Ren 0, Mod 1 ATV permit modification. This limit does not apply during periods of startup or malfunction, maintenance, or during abnormally low production rate days as defined in the Consent Decree. Separate limits for these periods apply as established in the Consent Decree.

  A 1.23 lbs/MMBtu NOx limit for U-FURNC was previously applicable but removed as part of the Ren 0, Mod 3 ATV permit modification since the 199 lbs/hour limit is more restrictive.

  As discussed above, with the termination of the facility from the Consent Decree, the NOx limits, monitoring, and other requirements from the Consent Decree have been relocated to this citation. Please note that the general requirements (definitions, reporting, etc.) are also located under this citation.

  NOx must be continuously monitored with a certified Continuous Monitoring System (CEMS) consistent with the LAER determination and 6 NYCRR 220-2. As discussed above, the NOx CEMS is subject to the operating, maintenance, and reporting requirements of 6 NYCRR 220-2.4. The CEMS data collection procedures under 6 NYCRR 220-2.4(c)(4) are included in the monitoring condition for the 199 lbs/hour NOx limit. Please note that the averaging period calculation method specified in subparagraph 220-2.4(c)(4)(i) corresponds to a NOx emission limit in terms of lbs/ton glass produced.

Since the NOx LAER limit is in terms of lbs/hour, the rolling averaging calculation procedure has been changed from the regulation.

Monitoring conditions are included under this citation specifying the limits, monitoring, and recordkeeping requirements.

Background
During the initial permitting process, the facility owner or operator objected to the requirement of 3R NOx reduction technology as LAER , arguing that it was not a proven technology over the course of an entire float glass furnace campaign. There was no guarantee from the manufacturer of performance or information on the effects on other pollutants. Despite these objections, EPA required the use of 3R technology, resulting in the 190 lbs/hour (6.5 lbs/ton glass produced) LAER limit.

The facility's operating experience and data showed that emissions of Carbon Monoxide increase with increasing use of the 3R technology. For some time after the initial construction permit was issued, the facility experienced problems balancing the NOx and CO to remain compliant with both. The 3R burners were used as designed to maintain NOx below the 190 lb/hr limit until April 2003 when the furnace regenerators experienced a partial collapse in one of the regenerators where 3R was used, causing significant process upset and excess emissions. This premature structural failure was found to be caused by the 3R burners.

Following this first collapse, the facility owner or operator shut off the 3R burners and entered into a Consent Order (R8- 20030606-18) with the Department to allow continued operation under interim limits while the process was stabilized and alternative NOx control options were considered. The facility owner or operator used a combination of NOx reduction methods in conjunction with more limited use of the 3R burners to comply with the increased 199 lb/hr limit provided for in the Consent Order. The 199 lbs/hour (6.8 lbs NOx/ton of glass) limit is comparable to their competitors' NOx limits.

The Consent Order provided less stringent interim limits and averaging times for Carbon Monoxide as well.

Emergency Generators (U-POWER)
The following limit for the emergency generators were established as part of the LAER determination during the initial NNSR pre-construction review:
NOx: 2.7 lbs/MMBtu and 52.45 lbs/hour

The compliance method for this limit is the same as the methods for complying with the Prevention of Significant Deterioration (PSD) Best Available Control Technology (BACT) limits. Additionally, hours of operation are limited consistent with the BACT requirements. Therefore, these limits and associated monitoring have been included in the conditions under 40 CFR 52.21(j) as discussed below:

Miscellaneous Combustion Sources (U-COMBU, Process NAT)
NOx LAER limits and requirements for the miscellaneous combustion sources are addressed in combination with BACT requirements under 40 CFR 52.21(j) below.

40 CFR 52.21 Prevention of Significant Deterioration (PSD)

- 40 CFR 52.21(j) – Specifies the applicability and Best Available Control Technology (BACT) requirements established during the Prevention of Significant Deterioration (PSD) pre-construction

BACT determination and revised in the Consent Decree. The facility is subject to PSD for particulate matter, PM-10, sulfur dioxide, sulfuric acid, and oxides of nitrogen.

Emissions of NOx are regulated under New Source Review individually and as an ozone precursor. At the time of initial permitting, PSD was not delegated to New York State and was regulated under 40 CFR Part 52. Therefore, because of the respective attainment designations for NOx and ozone, NOx emissions from the facility were subject to dual review under both 40 CFR Part 52 PSD and 6 NYCRR 231-2 Nonattainment New Source Review (NNSR). Based on the NNSR determination, NOx emissions were required to comply with LAER which requires application of controls focused on the "top" option without consideration of cost. Compliance with LAER thereby satisfies the BACT requirements as well. Accordingly, no additional BACT limits are included under this citation where LAER is applied.

The 855.9 ty NOx limit has been retained as part of this renewal but relocated from this citation to 6 NYCRR 231-2 since LAER is more stringent.

Float Glass Furnace (U-FURNC)
The following BACT limits for the glass Furnace (U-FURNC) were established as part of the BACT determination during the initial PSD pre-construction review:

- Sulfur Dioxide: 2.07 lb/ton and 60 lb/hr
- Sulfuric Acid: 0.17 lb/ton and 5 lb/hr
- Particulates: 0.5 gr/kg (1 lb/ton) and 29.2 lb/hr

The Consent Decree required the installation of additional controls and established lower emissions limits for sulfur dioxide, sulfuric acid, and particulates. These controls and limits were added to the ATV permit as part of the Ren 0, Mod 1 modification and the less restrictive initial BACT limits for U-FURNC removed as part of the Ren 0, Mod 3 modification. By complying with the more restrictive Consent Decree requirements, the facility is in compliance with the initial BACT determination.

The 0.73 lbs/ton PM-10 limit has been retained as part of this renewal. This limit was added upon request by EPA during the Ren 0, Mod 1 significant permit modification with the addition of the lower 0.45 PM limit from the Consent Decree and revision of the initial PM-10 BACT limit for the furnace. The revised limit reflected the installation of particulate controls pursuant to the Consent Decree.

Raw Material Handling (U-BATCH)
The following BACT limits for the raw material handling operations (U-BATCH) were established as part of the BACT determination during the initial PSD pre-construction review:

- Particulates: 90% removal efficiency during unloading/loading operations

Compliance is met through the operation, maintenance, and monitoring of four baghouses/dust collectors for particulate control (Controls BH0001, BH002, BH003, C0001). Monitoring conditions are included to ensure BACT controls for particulate - at least 90% removal efficiency during the unloading/loading of these silos.

Based on historic monitoring and stack test data, each dust collector must be operated with a minimum pressure drop of 1.0 inches of water column (in. w.c.). The pressure differential varies by material and throughout the unloading process. A minimum differential of 1 in. w.c. ensures that the bags are intact and operating as designed. The monitoring conditions require that the pressure drop be recorded weekly while operational. This frequency was based on the unloading schedules.

A monitoring condition for particulate emission from the Hi-Vac Industrial Vacuum System (Control BH003) requires the operation of the associated filter system whenever the vacuum is in use. This system is automatically cleaned when the pressure differential reaches a set point.

These limits and monitoring conditions have been retained as part of this renewal.

Please note that this limit only applies to the sources/controls proposed at initial permitting. As discussed under 6 NYCRR 201-7 above, Controls X0001, X0002, X0003 (an associated emissions sources: BAGUS, SSD01, and SSS01) were added as part of a modification and not subject to the initial BACT requirements. Applicability is specified in the monitoring conditions.

Generators (U-POWER)
The following BACT limits for the emergency generators were established as part of the BACT determination during the initial PSD pre-construction review:
Carbon Monoxide: 0.26 lbs/MMBtu and 5.09 lbs/hour
Sulfur Dioxide: 0.06 lbs/MMBtu and 1.16 lbs/hour
PM/PM10: 0.04 lbs/MMBtu and 0.75 lbs/hour

Compliance with the above limits is demonstrated through use of ignition timing retard with a turbo charger and aftercooler. A monitoring condition has been retained requiring operating these systems.

Additionally, the generators are each limited to 200 hours of operation per year. A monitoring condition has been retained requiring monitoring and keeping records of generator operation.

Prior permits limited the maximum sulfur content of diesel combusted in these sources to 0.05% by weight. Per 6 NYCRR Subpart 225-1.5(d), these sources are subject to a more stringent sulfur content limit of 0.0015% by weight for any emission source firing distillate oils after July 1, 2023. The 0.05% sulfur content limit remains in effect consistent with the original BACT determination however, compliance with this limit is assured through compliance with 6 NYCRR 225-1.5(d). Therefore, for permit streamlining, the permit condition 0.05% limit has been removed as part of this Renewal

Miscellaneous Combustion Sources (U-COMBU, Process NAT)
A BACT condition has been retained in the permit to ensure that the numerous small combustion sources around the facility are operated as they were designed by the manufacturer. Generally, these are off-the-shelf devices are the most efficient available for their purpose at the time of construction and do not lend themselves to modifications or add-on controls. NOx and CO emissions from these miscellaneous small combustion sources are calculated and added into facility wide totals for purposes the NOx limit and CO cap discussed above.

Prior permits limited the maximum sulfur content of diesel combusted in these sources to 0.05% by weight. Per 6 NYCRR Subpart 225-1.5(d), these sources are subject to a more stringent sulfur content limit of 0.0015% by weight for any emission source firing distillate oils after July 1, 2023. The 0.05% sulfur content limit remains in effect consistent with the original BACT determination however, compliance with this limit is assured through compliance with 6 NYCRR 225-1.5(d). Therefore, for permit streamlining, the permit condition 0.05% limit has been removed as part of this Renewal

40 CFR 60, Subpart CC Glass Furnaces NSPS

- 40 CFR 60.292 – Specifies the particulate standards for |glass furnaces without modified processes. Previously, the glass furnace (U-FURNC) was classified as a “glass furnace with modified processes” and subject to the particulate and opacity standards under 40 CFR 60.693. With the installation of the electrostatic precipitator (Control ESP01) in accordance with the Consent Decree, U-FURNC was

reclassified to a "glass furnace without modified processes" as part of the Ren 0, Mod 3 ATV permit. Please note that with the reclassification the glass furnace is no longer subject to an opacity standard under 40 CFR 60, Subpart CC nor required to operate a COMS (40 CFR 60.292 does not specify an opacity standard for glass furnaces without modified processes). Opacity from the glass furnace is now regulated under 6 NYCRR 211.2 above.

Per Table CC-1, flat glass furnaces firing gaseous fuels are limited to 0.225 g PM/kg glass produced (0.45 lbs PM/tons glass). Consistent with the regulation and the terminated Consent Decree, a monitoring condition is included requiring annual stack testing to demonstrate compliance with this limit. Additional conditions are included for monitoring of ESP01 operation to ensure continuous compliance.

- 40 CFR 60.296(a) - This condition states the notification requirements to change a glass melting furnace between a furnace without modified processes to a furnace with modified processes (and vis versa).

40 CFR 63, Subpart A NSPS General Provisions

- 40 CFR 60, Subpart A – Specifies the general requirements for monitoring, recordkeeping, and reporting for operations subject to Federal National Emissions Standards for Hazardous Air Pollutants (NESHAP).

40 CFR 63 Subpart SSSSSS Glass Furnace Area Source MACT

- The facility does not manufacture any colored glass or conduct any other processes which are applicable to the Subpart SSSSSS requirements. Therefore, the facility is not subject to this Subpart and no conditions pertaining to this regulation are included in the permit. If the facility were modified to accommodate an applicable process, the facility would submit an initial notification as required under section 63.11456.

40 CFR 63, Subpart ZZZZ Reciprocating Internal Combustion Engine NESHAP

- The Department has not accepted delegation of 40 CFR 63, Subpart ZZZZ. Therefore, a single general condition regarding the applicability of this Subpart is included for subject sources (emergency generators). Please note that the applicable sources are exempt from permitting and not listed as an emissions source in the permit.

40 CFR 64, Compliance Assurance Monitoring

- 40 CFR Part 64 – The glass furnace (Emission Unit U-FURNC) is:
    - Required to meet NOx, SO2, and particulates in accordance with LAER and BACT requirements or, as established in the Consent Decree;
    - Uses control devices to capture and control emissions in accordance with these limits; and,
    - Has pre-control potential emissions of NOx, SO2, and particulates greater than 100 tons per year.

Therefore, the controls for U-FURNC are tentatively subject to CAM requirements for NOx, particulates, SO2, and sulfuric acid. Per, 40 CFR 64.2(b)(1)(vi), emissions limitations or standards where continuous monitoring is required by the ATV permit are not subject to CAM. NOx and SO2 are monitored continuously using CEMS and therefore exempt per this provision.

Monitoring conditions are included for the particulate controls requiring continuous monitoring of ESP voltage and current to ensure that the particulate limits are met. These limits are established based on the initial stack testing and are reevaluated during subsequent testing (required annually.)

Therefore, because a continuous compliance determination method is specified in the permit for the ESP which is directly correlated with the particulate emission rate during testing, the glass furnace exempt from CAM for particulates per 40 CFR 64.2(b)(1)(vi).

Particulates emission limits for material handling operations (Emission Unit U-BATCH) are met through controls but do not have pre-control potential emissions greater than 100 tons per year. VOCs, sulfuric acid, etc. have emissions limitations that are met without the use of controls. Therefore, these pollutants/emission units do not meet the applicability for CAM outlined above.

Per the above, the facility is exempt from CAM and no requirements are included under this citation.