



**PERMIT**  
**Under the Environmental Conservation Law (ECL)**

**IDENTIFICATION INFORMATION**

Permit Type: Air Title V Facility  
Permit ID: 8-3205-00041/00013  
Mod 0 Effective Date: 07/18/2013 Expiration Date: 07/17/2018  
Mod 1 Effective Date: 04/11/2017 Expiration Date: 07/17/2018

Permit Issued To: GUARDIAN INDUSTRIES CORP  
2300 HARMON RD  
AUBURN HILLS, MI 48326-1714

Contact: MEG GARANKANI  
GUARDIAN INDUSTRIES CORP  
2300 HARMON RD  
AUBURN HILLS, MI 48326

Facility: GUARDIAN INDUSTRIES CORP  
50 FORGE AVE  
GENEVA, NY 14456

Contact: LAURA NEUBAUER  
GUARDIAN INDUSTRIES  
50 FORGE AVE  
GENEVA, NY 14456

Description:  
First modification of the Title V Facility Permit for the Guardian Industries Corporation - Geneva Float Glass Facility. The facility is utilized for float glass manufacturing. The permit modification will increase the furnace capacity throughput and includes installation of additional emission control devices to satisfy the requirements of a Consent Decree dated January 13, 2016. Additionally, the CO limit will be removed as the 3R process will no longer exist, and the NOx limit no longer applies pursuant to the Consent Decree.

The permit identifies that particulates from raw material and cullet handling operations are subject to a Part 212 standard, and are also subject to PSD BACT requirements. Both PSD and Part 212 requirements are met with emission controls serving these sources. The glass melting furnace is a Part 212 process, with a permissible particulate emission rate based on process weight, but a process emission source compliant with 40 CFR 60 NSPS satisfies Part 212 requirements. With the furnace subject to 40 CFR 60 Subpart CC particulate requirements, the more stringent NSPS limit applies. The NSPS opacity limit is also more stringent than Part 212 and requires a continuous opacity monitor for compliance assurance, until Guardian has completed the Control Device Startup.



By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator:           KIMBERLY A MERCHANT  
  6274 EAST AVON-LIMA RD  
  AVON, NY 14414-9519

Authorized Signature: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_\_\_



**Notification of Other State Permittee Obligations**

**Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification**

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

**Item B: Permittee's Contractors to Comply with Permit**

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

**Item C: Permittee Responsible for Obtaining Other Required Permits**

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

**Item D: No Right to Trespass or Interfere with Riparian Rights**

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



**LIST OF CONDITIONS**

**DEC GENERAL CONDITIONS**

**General Provisions**

- Facility Inspection by the Department
- Relationship of this Permit to Other Department Orders and Determinations
  - Applications for permit renewals, modifications and transfers
  - Applications for permit renewals, modifications and transfers
  - Permit modifications, suspensions or revocations by the Department

**Facility Level**

- Submission of application for permit modification or renewal-REGION 8 HEADQUARTERS



**DEC GENERAL CONDITIONS**

**\*\*\*\* General Provisions \*\*\*\***

**For the purpose of your Title V permit, the following section contains state-only enforceable terms and conditions.**

**GENERAL CONDITIONS - Apply to ALL Authorized Permits.**

**Condition 1: Facility Inspection by the Department**

**Applicable State Requirement: ECL 19-0305**

**Item 1.1:**

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

**Item 1.2:**

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

**Item 1.3:**

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

**Condition 2: Relationship of this Permit to Other Department Orders and Determinations**

**Applicable State Requirement: ECL 3-0301 (2) (m)**

**Item 2.1:**

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

**Condition 1-1: Applications for permit renewals, modifications and transfers**

**Applicable State Requirement: 6 NYCRR 621.11**

**Item 1-1.1:**

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

**Item1-1.2:**

The permittee must submit a renewal application at least 180 days before the expiration of permits for Title V and State Facility Permits.

**Item 1-1.3**

Permits are transferrable with the approval of the department unless specifically prohibited by



the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

**Condition 3: Applications for permit renewals, modifications and transfers**  
**Applicable State Requirement: 6 NYCRR 621.11**

**Item 3.1:**

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

**Item 3.2:**

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

**Item 3.3:**

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

**Condition 4: Permit modifications, suspensions or revocations by the Department**  
**Applicable State Requirement: 6 NYCRR 621.13**

**Item 4.1:**

The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

**\*\*\*\* Facility Level \*\*\*\***

**Condition 5: Submission of application for permit modification or renewal-REGION 8 HEADQUARTERS**  
**Applicable State Requirement: 6 NYCRR 621.6 (a)**

**Item 5.1:**

Submission of applications for permit modification or renewal are to be submitted to:  
NYSDEC Regional Permit Administrator

**New York State Department of Environmental Conservation**  
**Facility DEC ID: 8320500041**



Region 8 Headquarters  
Division of Environmental Permits  
6274 Avon-Lima Road  
Avon, NY 14414-9519  
(585) 226-2466

**New York State Department of Environmental Conservation**

Permit ID: 8-3205-00041/00013

Facility DEC ID: 8320500041



**Permit Under the Environmental Conservation Law (ECL)**

**ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT**

**IDENTIFICATION INFORMATION**

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2300 HARMON RD  
AUBURN HILLS, MI 48326-1714

Facility: GUARDIAN INDUSTRIES CORP  
50 FORGE AVE  
GENEVA, NY 14456

Authorized Activity By Standard Industrial Classification Code:  
3211 - FLAT GLASS  
3231 - PRODUCTS OF PURCHASED GLASS

Mod 0 Permit Effective Date: 07/18/2013

Permit Expiration Date: 07/17/2018

Mod 1 Permit Effective Date: 04/11/2017

Permit Expiration Date: 07/17/2018





## LIST OF CONDITIONS

### FEDERALLY ENFORCEABLE CONDITIONS

#### Facility Level

- 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 15 6 NYCRR 201-6.4 (a) (7): Fees
- 17 6 NYCRR 201-6.4 (c): Recordkeeping and Reporting of Compliance Monitoring
- 18 6 NYCRR 201-6.4 (c) (2): Records of Monitoring, Sampling, and Measurement
- 19 6 NYCRR 201-6.4 (c) (3) (ii): Compliance Certification
- 21 6 NYCRR 201-6.4 (e): Compliance Certification
- 2 6 NYCRR 202-2.1: Compliance Certification
- 3 6 NYCRR 202-2.5: Recordkeeping requirements
- 4 6 NYCRR 215.2: Open Fires - Prohibitions
- 5 6 NYCRR 200.7: Maintenance of Equipment
- 6 6 NYCRR 201-1.7: Recycling and Salvage
- 7 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 8 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
- 9 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
- 14 6 NYCRR 201-6.4 (a) (4): Requirement to Provide Information
- 1-1 6 NYCRR 201-6.4 (a) (8): Right to Inspect
- 23 6 NYCRR 201-6.4 (f) (6): Off Permit Changes
- 10 6 NYCRR 202-1.1: Required Emissions Tests
- 11 40 CFR Part 68: Accidental release provisions.
- 12 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 13 6 NYCRR Subpart 201-6: Emission Unit Definition
- 1-2 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-3 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 20 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
- 1-4 6 NYCRR 201-6.4 (f): Compliance Certification
- 24 6 NYCRR Subpart 201-7: Facility Permissible Emissions
- \*1-5 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 26 6 NYCRR 202-1.2: Notification
- 27 6 NYCRR 211.1: Air pollution prohibited
- 28 6 NYCRR Subpart 231-2: NOx Emission Reduction Credits
- 29 40CFR 52.21, Subpart A: Compliance Certification
- 30 40CFR 52.21(j), Subpart A: Compliance Certification
- 31 40CFR 63, Subpart ZZZZ: Applicability
- 32 40 CFR Part 98: Mandatory greenhouse gas reporting

#### Emission Unit Level

- 33 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 34 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

#### EU=U-BATCH,Proc=MAT

- 1-6 6 NYCRR 212-1.6 (a): Compliance Certification
- 1-7 6 NYCRR 212-2.4 (b): Compliance Certification

#### EU=U-BATCH,EP=BH001,Proc=MAT



37 40CFR 52.21(j), Subpart A: Compliance Certification

**EU=U-BATCH,EP=BH002,Proc=MAT**

38 40CFR 52.21(j), Subpart A: Compliance Certification

**EU=U-BATCH,EP=BH003,Proc=MAT,ES=HIVAC**

39 40CFR 52.21(j), Subpart A: Compliance Certification

**EU=U-BATCH,EP=C0001,Proc=MAT**

40 40CFR 52.21(j), Subpart A: Compliance Certification

**EU=U-BATCH,EP=X0001,Proc=MAT**

1-8 6 NYCRR 212-2.4 (b): Compliance Certification

**EU=U-BATCH,EP=X0002,Proc=MAT**

1-9 6 NYCRR 212-2.4 (b): Compliance Certification

**EU=U-BATCH,EP=X0003,Proc=MAT**

1-10 6 NYCRR 212-2.4 (b): Compliance Certification

**EU=U-CLEAN,Proc=DEG**

41 6 NYCRR Part 226: Compliance Certification

**EU=U-COMBU**

42 6 NYCRR 227-1.3: Compliance Certification

43 40CFR 52.21(j), Subpart A: Compliance Certification

**EU=U-CUTTG,Proc=CUT**

1-11 6 NYCRR 212-3.1 (a): Compliance Certification

**EU=U-FURNC**

1-12 6 NYCRR 201-6.4 (f) (2): Compliance Certification

**EU=U-FURNC,Proc=FUR**

1-13 6 NYCRR 212-1.6 (a): Compliance Certification

1-14 40CFR 52.21(j), Subpart A: Compliance Certification

1-15 40CFR 52.21(j), Subpart A: Compliance Certification

48 40CFR 60, NSPS Subpart A: Applicability of General Provisions of 40  
CFR 60 Subpart A

1-16 40CFR 60.11(d), NSPS Subpart A: Compliance Certification

1-17 40CFR 60.293, NSPS Subpart CC: Compliance Certification

1-18 40CFR 60.293(c), NSPS Subpart CC: Compliance Certification

**EU=U-FURNC,EP=F0001**

1-19 6 NYCRR 212-2.1 (b): Compliance Certification

**EU=U-FURNC,EP=F0001,Proc=FUR**

1-20 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification

1-21 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification

1-22 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification

1-23 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification

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- 1-24 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-25 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-26 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-27 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-28 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-29 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-30 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-31 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-32 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-33 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-34 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-35 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-36 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-37 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-38 6 NYCRR 201-6.2 (d) (8) (iii) ('b'): Compliance Certification
- 1-39 6 NYCRR 212-1.5 (e) (1): Compliance Certification
- 1-40 6 NYCRR 212-1.5 (e) (1): Compliance Certification
- 1-41 6 NYCRR 212-1.6 (a): Compliance Certification
- 1-42 6 NYCRR 231-2.5: Compliance Certification
- 1-43 6 NYCRR 231-2.5: Compliance Certification
- 1-44 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-45 40CFR 60.292, NSPS Subpart CC: Compliance Certification

**EU=U-FURNC,EP=F0001,Proc=FUR,ES=F0001**

- 1-46 6 NYCRR 201-6.4 (d) (1): Compliance Certification
- 1-47 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-48 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-49 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-50 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-51 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-52 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-53 40CFR 60.293(b)(1), NSPS Subpart CC: Compliance Certification

**EU=U-FURNC,EP=F0001,Proc=SCB**

- 1-54 6 NYCRR 212-1.6 (a): Compliance Certification

**EU=U-POWER**

- 61 40CFR 52.21(j), Subpart A: Compliance Certification

**EU=U-POWER,EP=G0001,Proc=GEN,ES=G0001**

- 62 6 NYCRR 227-1.3: Compliance Certification
- 63 40CFR 52.21(j), Subpart A: Compliance Certification

**EU=U-POWER,EP=G0002,Proc=GEN,ES=G0002**

- 64 6 NYCRR 227-1.3: Compliance Certification
- 65 40CFR 52.21(j), Subpart A: Compliance Certification

**EU=U-SCRUB**

- 1-55 6 NYCRR 201-6.4 (f): Compliance Certification

**EU=U-SCRUB,EP=L0001,Proc=SCR**

- 1-56 6 NYCRR 212-1.6 (a): Compliance Certification

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- 1-57 40CFR 52.21(j), Subpart A: Compliance Certification
- 1-58 40CFR 52.21(j), Subpart A: Compliance Certification

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 69 ECL 19-0301: Contaminant List
- 70 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 71 6 NYCRR 211.2: Visible Emissions Limited
- 72 6 NYCRR 221.2: Asbestos containing surface coatings prohibited

**Emission Unit Level**

**EU=U-FURNC**

- 73 6 NYCRR 220-2.4 (a): Compliance Demonstration
- 1-59 6 NYCRR 220-2.4 (b): Compliance Demonstration
- 1-60 6 NYCRR 220-2.4 (c): Compliance Demonstration
- 76 6 NYCRR 220-2.4 (d): Compliance Demonstration

**EU=U-FURNC,EP=F0001**

- 1-61 6 NYCRR 212-2.1 (a): Compliance Demonstration
- 1-62 6 NYCRR 212-2.1 (a): Compliance Demonstration

NOTE: \* preceding the condition number indicates capping.



**FEDERALLY ENFORCEABLE CONDITIONS**

**\*\*\*\* Facility Level \*\*\*\***

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**The items listed below are not subject to the annual compliance certification requirements under Title V. Permittees may also have other obligations under regulations of general applicability.**

**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 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 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 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 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 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 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 201-6.4 (i)**

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

i. When additional applicable requirements under the act become applicable to a title V facility with a remaining permit term of 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 therequirement is later than the date on which the 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 section 201- 6.6 of this Subpart.

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.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS  
SUBJECT TO ANNUAL CERTIFICATIONS AT ALL TIMES**

**The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements at all times.**

**Condition 1: Acceptable Ambient Air Quality  
Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 200.6**

**Item 1.1:**

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





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contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

**Condition 15: Fees**

**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (7)**

**Item 15.1:**

The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0303.

**Condition 17: Recordkeeping and Reporting of Compliance Monitoring**

**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.4 (c)**

**Item 17.1:**

The following information must be included in any required compliance monitoring records and reports:

(i) The date, place, and time of sampling or measurements;

(ii) The date(s) analyses were performed;

(iii)The company or entity that performed the analyses;

(iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;

(v) The results of such analyses including quality assurance data where required; and

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

Any deviation from permit requirements must be clearly identified in all records and reports. Reports must be certified by a responsible official, consistent with Section 201-6.2 of Part 201.

**Condition 18: Records of Monitoring, Sampling, and Measurement**

**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.4 (c) (2)**

**Item 18.1:**

Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements found in applicable regulations. Records of all monitoring data and support information must be retained for a period of at least 5 years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all



reports required by the permit.

**Condition 19: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.4 (c) (3) (ii)**

**Item 19.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 19.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To meet the requirements of this facility permit with respect to reporting, the permittee must:

Submit reports of any required monitoring at a minimum frequency of every 6 months, based on a calendar year reporting schedule. These reports shall be submitted to the Department within 30 days after the end of a reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the responsible official for this facility.

Notify the Department and report permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the permitting authority based on the following schedule:

- (1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
- (2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
- (3) For all other deviations from permit requirements,



the report shall be contained in the 6 month monitoring report required above.

(4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.2(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

The provisions of 6 NYCRR 201-1.4 shall apply if the permittee seeks to have a violation excused unless otherwise limited by regulation. In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets. Notwithstanding any recordkeeping and reporting requirements in 6 NYCRR 201-1.4, reports of any deviations shall not be on a less frequent basis than the reporting periods described in paragraphs (1) and (4) above.

In the case of any condition contained in this permit with a reporting requirement of "Upon request by regulatory agency" the permittee shall include in the semiannual report, a statement for each such condition that the monitoring or recordkeeping was performed as required or requested and a listing of all instances of deviations from these requirements.

In the case of any emission testing performed during the previous six month reporting period, either due to a request by the Department, EPA, or a regulatory requirement, the permittee shall include in the semiannual



report a summary of the testing results and shall indicate whether or not the Department or EPA has approved the results.

All semiannual reports shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.4(e), contained elsewhere in this permit.

Monitoring Frequency: SEMI-ANNUALLY  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2014.  
Subsequent reports are due every 6 calendar month(s).

**Condition 21: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.4 (e)**

**Item 21.1:**  
The Compliance Certification activity will be performed for the Facility.

**Item 21.2:**  
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Requirements for compliance certifications with terms and conditions contained in this facility permit include the following:

- i. Compliance certifications shall contain:
  - the identification of each term or condition of the permit that is the basis of the certification;
  - the compliance status;
  - whether compliance was continuous or intermittent;
  - the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related recordkeeping and reporting requirements of this permit;
  - such other facts as the Department may require to determine the compliance status of the facility as specified in any special permit terms or conditions;
- and
- such additional requirements as may be specified elsewhere in this permit related to compliance

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certification.

ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit which are identified as being subject to certification, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.

iii. Compliance certifications shall be submitted annually. Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters. The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the Department.

iv. All compliance certifications shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office). Please send annual compliance certifications to Chief of the Stationary Source Compliance Section, the Region 2 EPA representative for the Administrator, at the following address:

USEPA Region 2  
Air Compliance Branch  
290 Broadway  
New York, NY 10007-1866

The address for the RAPCE is as follows:

NYSDEC Region 8 Headquarters  
6274 East Avon-Lima Road  
Avon, NY 14414-9519

The address for the BQA is as follows:

NYSDEC  
Bureau of Quality Assurance  
625 Broadway  
Albany, NY 12233-3258

Monitoring Frequency: ANNUALLY  
Reporting Requirements: ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2014.  
Subsequent reports are due on the same day each year



**Condition 2: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 202-2.1**

**Item 2.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 2.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due by April 15th for previous calendar year

**Condition 3: Recordkeeping requirements**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 202-2.5**

**Item 3.1:**

(a) The following records shall be maintained for at least five years:

- (1) a copy of each emission statement submitted to the department; and
- (2) records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

(b) These records shall be made available at the facility to the representatives of the department upon request during normal business hours.

**Condition 4: Open Fires - Prohibitions**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 215.2**

**Item 4.1:**

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

**Item 4.2**

Per Section 215.3, burning in an open fire, provided it is not contrary to other law or regulation, will be allowed as follows:

(a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter



and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.

- (b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.
- (c) Small fires used for cooking and camp fires provided that only charcoal or untreated wood is used as fuel and the fire is not left unattended until extinguished.
- (d) On-site burning of agricultural wastes as part of a valid agricultural operation on contiguous agricultural lands larger than five acres actively devoted to agricultural or horticultural use, provided such waste is actually grown or generated on those lands and such waste is capable of being fully burned within a 24-hour period.
- (e) The use of liquid petroleum fueled smudge pots to prevent frost damage to crops.
- (f) Ceremonial or celebratory bonfires where not otherwise prohibited by law, provided that only untreated wood or other agricultural products are used as fuel and the fire is not left unattended until extinguished.
- (g) Small fires that are used to dispose of a flag or religious item, and small fires or other smoke producing process where not otherwise prohibited by law that are used in connection with a religious ceremony.
- (h) Burning on an emergency basis of explosive or other dangerous or contraband materials by police or other public safety organization.
- (i) Prescribed burns performed according to Part 194 of this Title.
- (j) Fire training, including firefighting, fire rescue, and fire/arson investigation training, performed under applicable rules and guidelines of the New York State Department of State's Office of Fire Prevention and Control. For fire training performed on acquired structures, the structures must be emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and must be at least 300 feet from other occupied structures. No more than one structure per lot or within a 300 foot radius (whichever is bigger) may be burned in a training exercise.
- (k) Individual open fires as approved by the Director of the Division of Air Resources as may be required in response to an outbreak of a plant or animal disease upon request by the commissioner of the Department of Agriculture and Markets, or for the destruction of invasive plant and insect species.
- (l) Individual open fires that are otherwise authorized under the environmental conservation law, or by rule or regulation of the Department.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS  
SUBJECT TO ANNUAL CERTIFICATIONS ONLY IF APPLICABLE**

**The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period.**

**[NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]**

**Condition 5: Maintenance of Equipment  
Effective between the dates of 07/18/2013 and 07/17/2018**



**Applicable Federal Requirement:6 NYCRR 200.7**

**Item 5.1:**

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

**Condition 6: Recycling and Salvage**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-1.7**

**Item 6.1:**

Where practical, the owner or operator of an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.

**Condition 7: Prohibition of Reintroduction of Collected Contaminants to the air**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-1.8**

**Item 7.1:**

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

**Condition 8: Exempt Sources - Proof of Eligibility**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-3.2 (a)**

**Item 8.1:**

The owner or operator of an emission source or activity that is listed as being exempt may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all records necessary for demonstrating compliance with this Subpart on-site for a period of five years, and make them available to representatives of the department upon request.

**Condition 9: Trivial Sources - Proof of Eligibility**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-3.3 (a)**

**Item 9.1:**

The owner or operator of an emission source or activity that is listed as being trivial in this Section may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request.





**Condition 14: Requirement to Provide Information**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (4)**

**Item 14.1:**

The owner and/or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

**Condition 1-1: Right to Inspect**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (8)**

**Replaces Condition(s) 16**

**Item 1-1.1:**

The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:

(i) enter upon the permittee's premises where a facility subject to the permitting requirements of this Subpart is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(ii) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(iii) inspect at reasonable times any emission sources, equipment (including monitoring and air pollution control equipment), practices, and operations regulated or required under the permit; and

(iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

**Condition 23: Off Permit Changes**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.4 (f) (6)**

**Item 23.1:**

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping,



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reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the administrator and the department with written notification as required below in advance of the proposed changes within a minimum of seven days. The facility owner or operator, and the department shall attach each such notice to their copy of the relevant permit.

(i) For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(ii) The permit shield described in section 6 NYCRR 201-6.4 shall not apply to any change made pursuant to this paragraph.

**Condition 10: Required Emissions Tests**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 202-1.1**

**Item 10.1:**

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

**Condition 11: Accidental release provisions.**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40 CFR Part 68**

**Item 11.1:**

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;

b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:

1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,

2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center  
C/O CSC

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8400 Corporate Dr  
Carrollton, Md. 20785

**Condition 12: Recycling and Emissions Reduction**  
Effective between the dates of 07/18/2013 and 07/17/2018

**Applicable Federal Requirement: 40CFR 82, Subpart F**

**Item 12.1:**

The permittee shall comply with all applicable provisions of 40 CFR Part 82.

**The following conditions are subject to annual compliance certification requirements for Title V permits only.**

**Condition 13: Emission Unit Definition**  
Effective between the dates of 07/18/2013 and 07/17/2018

**Applicable Federal Requirement: 6 NYCRR Subpart 201-6**

**Item 13.1(From Mod 1):**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-BATCH

Emission Unit Description:

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

Building(s): BATCH  
OUTSIDE  
TUNNEL

**Item 13.2(From Mod 1):**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-CLEAN

Emission Unit Description:

This emission unit includes all on-site cold cleaning units subject to Part 226.

Building(s): MAIN

**Item 13.3(From Mod 1):**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-COMBU

Emission Unit Description:

This emission unit includes miscellaneous combustion sources including, small space heaters, small diesel engine, small boilers, small flare, and water heaters. All units are either natural gas fired, propane fired, or diesel fired. Emissions from these sources, although

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otherwise exempt from permitting, are accounted for in facility-wide emission limits.

Building(s): BATCH  
MAIN  
OUTSIDE

**Item 13.4(From Mod 1):**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-CUTTG

Emission Unit Description:

This emission unit includes the glass cutting areas on the float line and coating line in the fabrication area. VOC emissions result from cutting oil used in the glass cutting areas.

Building(s): MAIN

**Item 13.5(From Mod 1):**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-FURNC

Emission Unit Description:

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 annealinglehr and associated SO<sub>2</sub> scrubber system.

Building(s): MAIN

**Item 13.6(From Mod 1):**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-POWER

Emission Unit Description:

This emission unit includes the two emergency back-up diesel fired generators. Each generator is limited to 200 hours of operation per year.

Building(s): MAIN

**Item 13.7(From Mod 1):**

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-SCRUB

Emission Unit Description:

This emission unit includes the glass annealinglehr and associated SO<sub>2</sub> wet scrubber system. The emission unit will be removed after Dry Scrubber, control ID# DS001, is commissioned. Installation of the Dry Scrubber will eliminate operation of Wet Scrubber ID#L0001.

Building(s): OUTSIDE



**Condition 1-2: Compliance Certification**  
Effective between the dates of 04/11/2017 and 07/17/2018

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-2.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 1-2.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The following terms used in this permit are defined terms per Consent Decree (United States of America and State of Iowa vs. Guardian Industries, Civil No. 15-13426). Terms used in this permit that are defined in the Clean Air Act (CAA) or in regulations promulgated pursuant to or authorized by the CAA shall have the meanings assigned to them in the CAA or such regulations, unless otherwise defined below. Terms not defined below, but found in the Consent Decree remain applicable as required under the terms of the Decree. EPA-approved modifications/amendments to the Consent Decree will apply automatically to this permit. Whenever the terms set forth below are used in this permit, the following definitions shall apply:

“Abnormally Low Production Rate” shall mean a glass production rate for the Furnace that is at or below 270 tons per day, which reflects 35 percent of the permitted production rate.

“Abnormally Low Production Rate Day” shall mean any Operating Day where glass production at the Furnace occurs at or below the Abnormally Low Production Rate for at least one continuous hour.

“Ammonia Slip” shall mean emissions of unreacted ammonia that result from incomplete reaction of NOX and the reagent.

“Calendar Year” shall mean the period commencing on January 1 and ending on December 31 of the same year.

“Canal Change” shall mean the replacement of a refractory device used to transfer the molten glass from the Furnace to the forming process. Canal Change includes the stoppage of molten glass into the forming process, replacement and installation of a new canal, heat-up of the canal, and restart of production.

“CEMS” shall mean Continuous Emission Monitoring System.

“CEMS Certification” or “CEMS re-Certification” shall mean



the certification of a CEMS as required by 40 C.F.R. § 60.13, 40 C.F.R. Part 60 Appendix B (Performance Specification 2), and 40 C.F.R. Part 60 Appendix F (Quality Assurance Procedures).

“CEMS Certification Event” shall mean any event that triggers the requirement to complete a first CEMS Certification or subsequent CEMS re-Certification.

“Cold Tank Repair” shall refer to the process of stopping glass production, stopping the flow of fuel, fully cooling down the Furnace, replacing some or all of the refractory in the Furnace, the crown and/or the regenerators (if applicable), and beginning a new campaign by starting up the Furnace again by firing fuel again and starting the production of glass. Cold Tank Repair does not include any refractory repairs conducted when the Furnace is still hot, and repairs solely required for restart of a Furnace which has temporarily ceased Operation due to economic reasons.

“Continuous Operating Year” shall mean a Calendar Year during which the Furnace Operates on every Day of that Calendar Year.

“Control Device” shall mean the SCR (Control ID SCR01), Dry Scrubber (Control ID DS001), or Particulate Device (Control ID ESP01).

“Control Device Startup” shall mean the period of time from the initial commencement of operation of a Control Device until operation of the device is stable and the device has achieved normal operating conditions. A Control Device Startup shall not exceed thirty (30) Days. Control Device Startup does not include subsequent startups of the Control Device, unless the subsequent startup of the Control Device occurs during a restart after a downtime of more than six months.

“Daily Glass Production” shall mean the Tons of glass produced per Day from the Furnace (commonly known as “pulled”) as measured by the measurement method or the weight method. It will be the composite of approximately 18 samples at approximately 80 minute intervals which are averaged to give a daily production rate.

“Day” shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this permit, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day. A Day starts at 12:00 a.m. and ends at 11:59 p.m.

“Dry Scrubber” and “DS” shall mean a pollution control system, sometimes referred to as a sorbent injection system, which involves the addition of an alkaline material into the gas stream to react with the acid gases. The acid gases react with the alkaline sorbents to form solid salts. There is no moisture added in the reaction chamber or reaction area. DSs include traditional add-on



DS and ceramic filter systems. For the purposes of this permit, Dry Scrubber and DS currently mean (Control ID DS001).

“EPA” shall mean the United States Environmental Protection Agency and any of its successor departments or agencies.

“Furnace” shall mean the unit comprised of a refractory-lined vessel in which raw materials are charged and melted at high temperature to produce molten glass.

“Furnace Startup” shall mean the period of time during which the Furnace’s refractory is heated from ambient temperature to Operating temperature. A Furnace Startup shall last no more than 30 Days and includes the slow heating of the Furnace refractory, initially with portable burners and transitioning to main burners once the Furnace reaches a temperature at which they can commence operation. Furnace Startup also includes the initial filling of the Furnace, following the heat-up, with cullet and/or raw materials, to a level at which production launch can commence.

“Guardian” shall mean Guardian Industries Corp.

“H<sub>2</sub>SO<sub>4</sub>” shall mean sulfuric acid mist.

“Inlet” shall mean the concentration of NO<sub>X</sub> (in ppmv corrected to 7% O<sub>2</sub> unless the permit states otherwise) measured prior to the SCR.

“Installation of Controls” shall include:

- i. The installation of the SCR, Dry Scrubber, or PD or other Particulate Device;
- ii. The installation of any alternative controls or alternative Primary Control Technology approved under the terms of the Consent Decree.

“Maintenance” shall mean activities necessary to keep the Control Devices in continuous normal operating condition and/or as described in the Consent Decree.

“Malfunction” shall mean, consistent with 40 C.F.R. § 60.2, any sudden, infrequent, and not reasonably preventable failure of a Control Device to operate in a normal or usual manner, but shall not include failures that are caused in part by poor maintenance or careless operation.

“NO<sub>X</sub>” shall mean the sum of oxides of nitrogen in the flue gas, collectively expressed as NO<sub>2</sub>.

“Operate,” “Operation,” “Operating” and “Operated” shall mean any time when fuel is fired in the Furnace.

“Operating Day” shall mean any day where any fuel is fired in the Furnace.

“Outlet” shall mean the NO<sub>X</sub> concentration (in ppmv corrected to 7% O<sub>2</sub> unless the permit states otherwise) measured after the SCR.

“Particulate Device” and “PD” shall mean a control device



that uses filtration technology to reduce Particulate Matter emissions, including, but not limited to, electrostatic precipitators, baghouses, and ceramic filter systems. For the purposes of this permit, Particulate Device and PD currently mean (Control ID ESP01)

“Particulate Matter” and “PM” shall mean any finely divided solid or liquid material, other than uncombined water, as measured using EPA Test Method 5 (40 C.F.R. Part 60 Appendix A-3).

“Primary Control Technology” for NOX, SO2, PM and H2SO4 shall mean any new process design, equipment or operating methodology that allows for the emissions limits to be met without the installation of a Control Device.

“Removal Efficiency” for NOX shall mean the percent reduction in concentration of NOX achieved by the Furnace’s Control Device. This percent reduction shall be calculated by subtracting the Outlet concentration of NOX (corrected to 7% O2) from the Inlet concentration of NOX (corrected to 7% O2), dividing the difference by the Inlet concentration and then multiplying the result by 100.

“Selective Catalytic Reduction” and “SCR” shall mean a pollution control device that reacts ammonia (NH3) or urea with NOX to form nitrogen (N2) and water (H2O) using a catalyst to speed the reaction. SCRs include traditional add-on SCRs and catalyst-impregnated ceramic filters. For the purposes of this permit, Selective Catalytic Reduction and SCR currently mean (Control ID SCR01).

“SO2” shall mean the pollutant sulfur dioxide.

“Ton” and “Tons” shall mean short ton (equal to 2000 pounds) or short tons.

“24-hour Block Average” shall be calculated by averaging all valid one hour emissions data outputs (concentrations or pounds) for a given Operating Day and using the Daily Glass Production on that Operating Day where applicable.

“30-day Rolling Average Emission Rate” shall be expressed as pounds of pollutant emitted per Ton of glass produced and calculated at a Furnace in accordance with the following formula and subparagraphs i and ii below:

$$30\text{-day average lb E/Ton} = \frac{[\text{CODE (lbs)} + \text{P29DE (lbs)}]}{[\text{CODProd (Tons)} + \text{P29DProd (Tons)}]}$$

Where: 30-day average (lb E/Ton) = The 30-day Rolling Average Emission Rate

E = emissions of NOx or SO2.

COD = Current Operating Day where the relevant 30-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least 1 full hour of emissions data.





CODE = The daily emissions as measured by a CEMS on the COD, in pounds.

CODProd = Daily Glass Production on the COD in Tons of glass.

P29D = The Previous 29 Operating Days where the relevant 30-day Rolling Average Emission Rate is the applicable limit and the CEMS measures at least 1 full hour of emissions data.

P29DE = The sum of the daily NO<sub>x</sub> or SO<sub>2</sub> emissions as measured by a CEMS during the P29D, in pounds.

P29DProd = The sum of the Daily Glass Production during the P29D, in Tons of glass.

i. A new 30-day Rolling Average Emission Rate shall be calculated for each new Operating Day where the 30-day Rolling Average Emission Rate is the applicable standard and the CEMS measures at least 1 full hour of emissions data. Any Operating Day where the newly calculated 30-day Rolling Average Emission Rate exceeds the limit is a separate one Day violation; and

ii. As specified in this permit, certain Abnormally Low Production Rate Days, Furnace and/or Control Device Startup Days, Malfunction Days, and Maintenance Days may be excluded from the 30-day Rolling Average Emission Rate.

“30-day Rolling Average NO<sub>x</sub> Removal Efficiency” shall be calculated each Day where the 30-day Rolling Average NO<sub>x</sub> Removal Efficiency is the applicable standard and the CEMS measures at least 1 full hour of emissions data. It is calculated by summing the Removal Efficiency 24-hour Block Averages from the Furnace for each Operating Day and previous twenty-nine (29) Operating Days when the 30-day Rolling Average NO<sub>x</sub> Removal Efficiency was the applicable standard and the CEMS measured at least 1 full hour of emissions data and then dividing by 30. A new 30-day Rolling Average NO<sub>x</sub> Removal Efficiency shall be calculated for each new Operating Day. Any Operating Day where the newly calculated 30-day Rolling Average NO<sub>x</sub> Removal Efficiency is less than the Removal Efficiency limit is a separate one-day violation.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 1-3: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-3.1:**

The Compliance Certification activity will be performed for the Facility.



**Item 1-3.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

NYSDEC agrees that Guardian Industries Corp rights and responsibilities under paragraphs 32-38 of the Consent Decree (United States of America and State of Iowa vs. Guardian Industries, Civil No. 15-13426) shall remain in effect after the implementation of this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 20: Progress Reports Due Semiannually  
Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.4 (d) (4)**

**Item 20.1:**

Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by the department. Such progress reports shall contain the following:

(i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

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

**Condition 1-4: Compliance Certification  
Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.4 (f)**

**Replaces Condition(s) 22**

**Item 1-4.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 1-4.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Operational Flexibility Plan

Plan Objective



The objective of this Plan is to maximize operational flexibility by building capability into the Guardian Geneva Float Glass Facility Title V Permit for the facility to make administrative and/or minor changes following a pre-established protocol as allowed for in 6 NYCRR, Part 201-6.4(f).

This plan does not address those types of changes that would invoke the Part 201-6.6(d) "Significant Permit Modification". Rather, it addresses changes that qualify, as minor modifications pursuant to the criteria specified by 6 NYCRR, Part 201-6.6(c)(1)(i) and (ii):

- (1) Do not violate any applicable requirement;
- (2) Do not involve significant changes to existing monitoring, reporting, or record keeping requirements in the permit and are not otherwise a significant change in the permit.

#### Protocol for Changes

(1) Certain changes which meet the criteria under (i) - (iii) below may be conducted without prior approval of the Department and shall not require modification of the permit. The facility owner and/or operator must however maintain records of the date and description of such changes and make such records available for review by

Department representatives upon request.

i) changes that do not cause emissions to exceed any emission limitation contained in regulations or applicable requirements under this Chapter;

(ii) changes which do not cause the subject emission unit, emission source, process, or emission point to become subject to any additional regulations or requirements under this Chapter;

(iii) changes that do not seek to establish or modify a federally-enforceable emission cap or limit.

(2) In addition to the record keeping required under (1) above, the permittee must notify the Department in writing at least 30 calendar days in advance of making changes involving:

(i) the installation or relocation of any emission source, process, or emission point within a facility;

(ii) the emission of any air pollutant not previously

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authorized or emitted in accordance with a permit issued by the Department;

(iii) the installation or alteration of any air cleaning installation, device or control equipment.

(3) The Department may require a permit modification, in order to impose new applicable requirements or special permit conditions if it determines that changes proposed pursuant to notification under (2) above do not meet the criteria under (1) or the change may have a significant air quality impact. In such cases the Department may require that the permittee not undertake the proposed change until it completes a more detailed review of the potential air quality impacts and/or applicable requirements. The Department shall respond to the permittee in writing with such a determination within 15 days of receipt of the 30 day advance notification from the permittee. The Department's determination shall include a listing of information necessary to further review the proposed change.

**Reporting**

On an annual basis, the facility must submit a summary of all changes made under the Protocol for Changes during that year. This summary is to be submitted as part of the annual compliance certification pursuant to 6 NYCRR 201-6.4(e).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2018.

Subsequent reports are due every 12 calendar month(s).

**Condition 24: Facility Permissible Emissions**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR Subpart 201-7**

**Item 24.1:**

The sum of emissions from the emission units specified in this permit shall not equal or exceed the following

Potential To Emit (PTE) rate for each regulated contaminant:

CAS No: 000630-08-0 (From Mod 1) PTE: 199,520 pounds

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per year

Name: CARBON MONOXIDE

**Condition 1-5: Capping Monitoring Condition**  
Effective between the dates of 04/11/2017 and 07/17/2018

**Applicable Federal Requirement:6 NYCRR Subpart 201-7**

**Replaces Condition(s) 25**

**Item 1-5.1:**

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

40 CFR 52.21

**Item 1-5.2:**

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

**Item 1-5.3:**

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.

**Item 1-5.4:**

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

**Item 1-5.5:**

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

**Item 1-5.6:**

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

**Item 1-5.7:**

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES



Monitoring Description:

In order to limit emissions of carbon monoxide below the significance thresholds of 40 CFR 52 Prevention of Significant Deterioration (PSD), the total facility-wide Carbon Monoxide (CO) emissions shall not exceed 90 tons per year on a twelve month rolling basis. Records shall be kept to demonstrate compliance with this limit.

Until the completion of the Control Device Startup, these records shall be based on CEM data for the furnace (Method 10), hours of operation and equipment specific emission factors for the diesel-fired equipment, and AP-42 factors and non-furnace gas usage data for the miscellaneous gas and propane fired sources. Records of the furnace CEMs data shall include mass emissions totaled over each 24-hour period (the total of hourly averages 12:00 midnight to the following midnight).

Upon completion of startup of Control Device Startup the CO emission factors (from AP-42) are noted as follows:

propane: 7.5 lb/1000 gal  
natural gas: <0.1 lb/ton of glass produced

For the miscellaneous gas and propane fired sources, Guardian shall use the CO emission factors (from AP-42) as follows:

propane: 7.5 lb/1000 gal  
natural gas: 84 lb/mmcf  
or revised factors based on the most current version of AP-42.

On a monthly basis, emissions from all of the sources shall be totalled and compiled with previous eleven months of emissions to maintain the twelve month rolling total emissions for the facility. Records shall be maintained on site for five years and made available to the Department.

Within 180 days of Control Device Startup, furnace Stack Testing in compliance with provisions of the Consent Decree will be completed in order to verify adherence to the above listed AP-42 emission factor of <0.1 lb/ton of glass produced. A secondary emission test must be completed within 8 to 12 months of the initial performance test or within a time period as approved by the Department.

Guardian shall notify the Department at least 30 days prior to the required testing and shall submit a test report to the Department within 30 days of completing the

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test.

Reference Test Method: Method 10, AP-42
Monitoring Frequency: MONTHLY
Averaging Method: 12 MONTH AVERAGE - ROLLED MONTHLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 26: Notification
Effective between the dates of 07/18/2013 and 07/17/2018

Applicable Federal Requirement:6 NYCRR 202-1.2

Item 26.1:

A person who is required by the commissioner to submit a stack test report shall notify the commissioner, in writing, not less than 30 days prior to the test, of the time and date of the test. Such notification shall also include the acceptable procedures to be used to stack test including sampling and analytical procedures. Such person shall allow the commissioner, or his representative, free access to observe stack testing being conducted by such person.

Condition 27: Air pollution prohibited
Effective between the dates of 07/18/2013 and 07/17/2018

Applicable Federal Requirement:6 NYCRR 211.1

Item 27.1:

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. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 28: NOx Emission Reduction Credits
Effective between the dates of 07/18/2013 and 07/17/2018

Applicable Federal Requirement:6 NYCRR Subpart 231-2

Item 28.1:

In order to satisfy emission offset requirements, 984.3 tons of NOx Emission Reduction Credits (ERCs) were certified and transferred to Guardian. The required NOx emission reduction credits (ERCs) were provided by the following sources:

Facility Name / NYSDEC ID Emission Point(s)
Quantity of ERCs



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Lumber Inc. / 3-5148-00239 30.65	00001
Karg Brothers / 5-1708-00012 00004(B) 22.32	00003, 00004(A), &
Pan American Tanning Corp./ 5-1705-00025 10.42	00001(A), 00001(B), & 00003(A)
Outokumpu American Brass / 9-1402-00021 48.00	00011
Nestle Chocolate / 7-3504-00021 42.80	00001
Pennzoil-Rouseville Refinery, Penn. 100.00	035, 036, & 037  / DEP# 61-302-023
Garlock Inc. / 8-5436-00007 42.00	10003, & 10001
Oneida County RRF / 6-3013-00029 68.20	00001, 00002, 00003,
& 00004 Moench Tanning Co. / 9-0472-00007 17.40	00100, & 00200
NYSEG, Hickling Station / 8-4638-00011 136.00	00001
Cibro / 4-0101-00070 00008 67.81	00004, 00005, 00006,
Binghamton Cogen Plant / 7-0302-00079 170.00	00001
Caparo Steel Company, Penn boilers and 104.00	Shutdown package  BW boilers
#1-3 International Home Foods, Penn 69.70	S04, S05
The Columbia Corp. - Chatham Plant / 55.00	00001
4-1026-00006/00007	





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An additional 25 tons of NO<sub>x</sub> ERCs, provided by SUNY Brockport (8-2652-00024) (24.0 tons) and NYSOMRDD, W. Seneca DC (9-0468-00025) (1.0 ton) and reserved for Guardian, are to be returned to NYS Dept of Economic Development in the event that Guardian permanently ceases operation of this facility and surrenders this permit.

**Condition 29: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21, Subpart A**

**Item 29.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 29.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

A summary of the emission limits and operating restrictions of this permit must be posted in the appropriate facility control areas and must be plainly visible (without obstruction) to the operators of the facility.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 12 calendar month(s).

**Condition 30: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Item 30.1:**

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 30.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

In order to maintain compliance with Best Available Control Technology (BACT) requirements, the total facility-wide NO<sub>x</sub> emissions shall be limited to 855.9 tons

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per year on a twelve month rolling basis. Records shall be kept to demonstrate compliance with this limit.

These daily records will be based on CEM data for the furnace (Method 7E), hours of operation and equipment specific emission factors for the diesel-fired equipment, and AP-42 factors and non-furnace gas usage data for the miscellaneous gas and propane fired sources. Records of furnace CEMs data shall include mass emissions totaled over each 24-hr period (the total of hourly averages 12:00 midnight to the following midnight).

For the miscellaneous gas and propane fired sources, Guardian shall use the NO<sub>x</sub> emission factors (from AP-42) as follows:

propane: 13 lb/1000 gal

natural gas: 100 lb/mmcf

or revised factors based on the most current version of AP-42.

On a monthly basis, emissions from all of the sources shall be totalled and compiled with previous eleven months of emissions to maintain the twelve month rolling total emissions for the facility. Records shall be maintained on site for five years and made available to the Department.

Reference Test Method: METHOD 7E, AP-42

Monitoring Frequency: MONTHLY

Averaging Method: 12 MONTH AVERAGE - ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 31:     Applicability**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 63, Subpart ZZZZ**

**Item 31.1:**

Facilities that have reciprocating internal combustion engines must comply with applicable portions of 40 CFR 63 subpart ZZZZ.

**Condition 32:     Mandatory greenhouse gas reporting**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40 CFR Part 98**

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**Item 32.1:**

40 CFR Part 98 establishes mandatory greenhouse gas (GHG) reporting requirements for owners and operators of certain facilities that directly emit GHG as well as for certain fossil fuel suppliers and industrial GHG suppliers. For suppliers, the GHGs reported are the quantity that would be emitted from combustion or use of the products supplied.

Owners and operators of facilities and suppliers that are subject to 40 CFR Part 98 must follow the requirements of subpart A and all applicable subparts of 40 CFR Part 98. If a conflict exists between a provision in subpart A and any other applicable subpart, the requirements of the applicable subpart shall take precedence.

**\*\*\*\* Emission Unit Level \*\*\*\***

**Condition 33: Emission Point Definition By Emission Unit  
Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR Subpart 201-6**

**Item 33.1(From Mod 1):**

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-BATCH

Emission Point: BH003

Height (ft.): 8 Diameter (in.): 6

NYTMN (km.): 4749.9 NYTME (km.): 339.1 Building: OUTSIDE

Emission Point: X0001

Height (ft.): 30 Diameter (in.): 16

NYTMN (km.): 4749.9 NYTME (km.): 339.1 Building: OUTSIDE

Emission Point: X0002

Height (ft.): 30 Diameter (in.): 16

NYTMN (km.): 4749.9 NYTME (km.): 339.1 Building: OUTSIDE

Emission Point: X0003

Height (ft.): 30 Diameter (in.): 16

NYTMN (km.): 4749.9 NYTME (km.): 339.1 Building: BATCH

**Item 33.2(From Mod 1):**

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-COMBU

Emission Point: MISC1

Height (ft.): 35 Diameter (in.): 6

NYTMN (km.): 4749.9 NYTME (km.): 339.1 Building: MAIN

**Item 33.3(From Mod 1):**

The following emission points are included in this permit for the cited Emission Unit:

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Emission Unit: U-FURNC

Emission Point: F0001

Height (ft.): 298

Diameter (in.): 102

NYTMN (km.): 4749.9

NYTME (km.): 339.1

Building: MAIN

**Item 33.4(From Mod 1):**

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-SCRUB

Emission Point: L0001

Height (ft.): 28

Diameter (in.): 11

NYTMN (km.): 4749.9

NYTME (km.): 339.1

Building: OUTSIDE

**Item 33.5(From Mod 0):**

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-BATCH

Emission Point: BH001

Height (ft.): 175

Diameter (in.): 10

NYTMN (km.): 4749.9

NYTME (km.): 339.1

Building: BATCH

Emission Point: BH002

Height (ft.): 150

Diameter (in.): 10

NYTMN (km.): 4749.9

NYTME (km.): 339.1

Building: BATCH

Emission Point: C0001

Height (ft.): 17

Diameter (in.): 12

NYTMN (km.): 4749.9

NYTME (km.): 339.1

Building: OUTSIDE

**Item 33.6(From Mod 0):**

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-POWER

Emission Point: G0001

Height (ft.): 25

Diameter (in.): 18

NYTMN (km.): 4749.9

NYTME (km.): 339.1

Building: MAIN

Emission Point: G0002

Height (ft.): 25

Diameter (in.): 18

NYTMN (km.): 4749.9

NYTME (km.): 339.1

Building: MAIN

**Condition 34: Process Definition By Emission Unit**

Effective between the dates of 07/18/2013 and 07/17/2018

Applicable Federal Requirement:6 NYCRR Subpart 201-6

**Item 34.1(From Mod 1):**



This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-BATCH

Process: MAT

Source Classification Code: 3-05-014-10

Process Description:

This process represents cullet and raw material unloading, weighing, transfer, and industrial cleaning operations.

Emission Source/Control: BAGBH - Control  
Control Type: FABRIC FILTER

Emission Source/Control: CULLC - Control  
Control Type: FABRIC FILTER

Emission Source/Control: DOLOC - Control  
Control Type: FABRIC FILTER

Emission Source/Control: HVACC - Control  
Control Type: FABRIC FILTER

Emission Source/Control: LIMEC - Control  
Control Type: FABRIC FILTER

Emission Source/Control: NEPHC - Control  
Control Type: FABRIC FILTER

Emission Source/Control: PADCO - Control  
Control Type: FABRIC FILTER

Emission Source/Control: SALCC - Control  
Control Type: FABRIC FILTER

Emission Source/Control: SND1C - Control  
Control Type: FABRIC FILTER

Emission Source/Control: SND2C - Control  
Control Type: FABRIC FILTER

Emission Source/Control: SODAC - Control  
Control Type: FABRIC FILTER

Emission Source/Control: SPARC - Control  
Control Type: FABRIC FILTER

Emission Source/Control: SSDBV - Control  
Control Type: FABRIC FILTER

Emission Source/Control: SSSBV - Control  
Control Type: FABRIC FILTER

Emission Source/Control: UNLDC - Control



- Control Type: FABRIC FILTER
- Emission Source/Control: BAGUS - Process
- Emission Source/Control: CSIL1 - Process
- Emission Source/Control: CSIL2 - Process
- Emission Source/Control: CULPU - Process
- Emission Source/Control: DOLOM - Process
- Emission Source/Control: HIVAC - Process
- Emission Source/Control: LIMES - Process
- Emission Source/Control: NEPHS - Process
- Emission Source/Control: SALTC - Process
- Emission Source/Control: SAND1 - Process
- Emission Source/Control: SAND2 - Process
- Emission Source/Control: SODAA - Process
- Emission Source/Control: SPARE - Process
- Emission Source/Control: SSD01 - Process
- Emission Source/Control: SSS01 - Process
- Emission Source/Control: UNLDS - Process

**Item 34.2(From Mod 1):**

This permit authorizes the following regulated processes for the cited Emission Unit:

- Emission Unit: U-CLEAN
- Process: DEG Source Classification Code: 4-01-003-35
- Process Description:
  - This process represents fugitive emissions from cold cleaning operations.
- Emission Source/Control: CLEAN - Process

**Item 34.3(From Mod 1):**

This permit authorizes the following regulated processes for the cited Emission Unit:

- Emission Unit: U-COMBU
- Process: DSL Source Classification Code: 2-02-001-02
- Process Description:
  - This process represents the small diesel fired water pump



Emission Source/Control: COMBU - Combustion

**Item 34.4(From Mod 1):**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-COMBU  
Process: NAT Source Classification Code: 1-05-001-06  
Process Description:  
This process covers miscellaneous natural gas fired combustion sources, including space heaters & hot water heaters.

Emission Source/Control: COMBU - Combustion

**Item 34.5(From Mod 1):**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-COMBU  
Process: PRO Source Classification Code: 1-02-010-02  
Process Description:  
This process represents miscellaneous LPG (propane) fired combustion sources, including 2 propane vaporizers and 1 emergency test flare.

Emission Source/Control: COMBU - Combustion

**Item 34.6(From Mod 1):**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-CUTTG  
Process: CUT Source Classification Code: 4-02-009-20  
Process Description:  
This process represents the use of cutting oil for scoring and cutting glass at multiple locations.

Emission Source/Control: CUTTG - Process

**Item 34.7(From Mod 1):**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-FURNC  
Process: FUR Source Classification Code: 3-05-014-03  
Process Description:  
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.

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Emission Source/Control: DS001 - Control  
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: ESP01 - Control  
Control Type: ELECTROSTATIC PRECIPITATOR

Emission Source/Control: FUR3R - Control  
Control Type: 3R NOX REDUCTION TECHNOLOGY

Emission Source/Control: SCR01 - Control  
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: F0001 - Process

**Item 34.8(From Mod 1):**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-FURNC  
Process: SCB Source Classification Code: 3-99-999-92  
Process Description:

This process provides controlled glass cooling in the electric annealing lehr. SO<sub>2</sub> is injected at the lehr's front to improve glass characteristics. Replaces process SCR after DS001 Dry Scrubber is placed on line.  
Note: lehr emissions will be directed through, but not controlled by the SCR or ESP.

Emission Source/Control: DS001 - Control  
Control Type: DRY SPRAY ABSORPTION

Emission Source/Control: ALEHR - Process

**Item 34.9(From Mod 1):**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-POWER  
Process: GEN Source Classification Code: 2-01-001-02  
Process Description:

This process represents emergency back-up electrical power generation using two diesel fired generators.

Emission Source/Control: G0001 - Combustion  
Design Capacity: 2,000 kilowatts

Emission Source/Control: G0002 - Combustion  
Design Capacity: 2,000 kilowatts

**Item 34.10(From Mod 1):**

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-SCRUB





Process: SCR Source Classification Code: 3-05-014-07  
Process Description:

This process represents the controlled cooling of the glass in an electric annealing lehr. SO<sub>2</sub> is injected at the front of the lehr to improve the glass characteristics. This process will be replaced by Process SCB upon installation/commissioning of the Dry Scrubber DS001, with removal of Wet Scrubber L0001 to follow.

Emission Source/Control: L0001 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: LEHR1 - Process

**Condition 1-6: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 212-1.6 (a)**

**Item 1-6.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-BATCH  
Process: MAT

**Item 1-6.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The permittee will conduct observations of visible emissions from Emission Points BH001, BH002, BH003, C0001, X0001, X0002, and X0003 using Method 22 on a monthly basis while the process is in operation. The permittee will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard.

The permittee shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continue, the permittee will conduct a Method 9 assessment

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within the next operating day of the sources associated with the potential noncompliance to determine the degree of opacity and will notify the NYSDEC if the method 9 test indicates that the opacity standard is not met.

Records of visible emissions observations (or any follow-up Method 9 tests), investigations and corrective actions will be kept on-site and made available to the Department upon request.

Parameter Monitored: OPACITY  
Upper Permit Limit: 20 percent  
Reference Test Method: EPA Method 22 and Method 9  
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
Averaging Method: 6 MINUTE AVERAGE  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 1-7: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 212-2.4 (b)**

**Item 1-7.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-BATCH  
Process: MAT

Regulated Contaminant(s):  
CAS No: 0NY075-00-0 PARTICULATES

**Item 1-7.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions of solid particulates from raw material and cullet handling emission sources, vented to Emission Points: BH001, BH002, BH003, X0001, X0002, X0003, and C0001, are limited to a combined total of 1.4 lb/hr of PM, 1.4 lb/hr of PM-10 and 1.4 lb/hr of PM 2.5 particulates.

To ensure compliance with these provisions and Part 212-2 standards for particulate emissions, the control devices associated with each of the applicable emission sources shall be operated to maintain efficiency as specified for 40 CFR 52 Prevention of Significant Deterioration (PSD)



Best Available Control Technology (BACT) requirements. These PSD BACT requirements are included in four separate monitoring conditions cited under 40 CFR 52.21(j) in this permit.

The Department reserves the right to perform or require the performance of a Method 5 emissions evaluation at any time.

Upper Permit Limit: 1.4 pounds per hour  
Reference Test Method: EPA RM 5, EPA RM 201A & EPA RM 202  
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 37: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement: 40CFR 52.21(j), Subpart A**

**Item 37.1:**  
The Compliance Certification activity will be performed for:

Emission Unit: U-BATCH Emission Point: BH001  
Process: MAT

Regulated Contaminant(s):  
CAS No: 0NY075-00-0 PARTICULATES  
CAS No: 0NY075-00-5 PM-10

**Item 37.2:**  
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

In order to maintain compliance with Prevention of Significant Deterioration (PSD) Best Available Control Requirements (BACT) requirements, the dust collectors, associated with applicable sources listed below, shall be operated whenever material is transferred at a silo.

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ES/ Control Device  
UNLDS/ UNLDC  
SPARE/ SPARC  
DOLOM/DOLOC  
LIMES/  
LIMEC  
SALTC/S  
ALCC  
NEPHS/NEPHC  
SAND1/SND1C  
SAND2/SND2C  
SODAA/SODAC

The dust collectors shall be maintained and operated to provide a minimum of 90% control efficiency. In order to demonstrate compliance with this requirement, pressure drops must be maintained above 1.0 inches of water (when the equipment is in operation), except for the period of initial conditioning of the filter immediately following installation of a new filter.

Pressure drop shall be monitored and recorded at a minimum of once a month for each fabric filter which operated during that month. Immediate corrective action shall be taken upon observation of any problem with a dust collector. Records, including the pressure drop readings, maintenance and filter changes and any other corrective measures, shall be kept on site and made available to the Department upon request.

Manufacturer Name/Model Number: 9 RAW MATERIAL HANDLING SILO DUST COLLECTORS

Parameter Monitored: PRESSURE CHANGE

Lower Permit Limit: 1.0 inches of water

Monitoring Frequency: MONTHLY

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 38: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Item 38.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-BATCH

Emission Point: BH002

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Process: MAT

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

CAS No: 0NY075-00-5 PM-10

**Item 38.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

In order to satisfy Prevention of Significant Deterioration (PSD) Best Available Control Requirements (BACT) requirements, the dust collector (Control Device CULLC), associated with the cullet silos (ES CSIL1 and ES CSIL2), shall be operated whenever material is transferred at one of the cullet silos.

The dust collector shall be maintained and operated to provide a minimum of 90% control efficiency. In order to demonstrate compliance with this requirement, pressure drop across the dust collector shall be maintained above 1.0 inches of water (when the equipment is operating), except for the period of initial conditioning of the filter immediately following installation of a new filter.

Pressure drop across the fabric filter shall be monitored and recorded at a minimum of once a month. Immediate corrective action shall be taken upon observation of any problem with the dust collector. Records, including pressure drop reading, maintenance and filter changes and any corrective actions, shall be kept on site and made available to the Department upon request.

Manufacturer Name/Model Number: CULLET SILO DUST COLLECTOR

Parameter Monitored: PRESSURE CHANGE

Lower Permit Limit: 1.0 inches of water

Monitoring Frequency: MONTHLY

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED  
VALUE AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 39: Compliance Certification**

**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement: 40CFR 52.21(j), Subpart A**

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**Item 39.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-BATCH                      Emission Point: BH003  
Process: MAT                                      Emission Source: HIVAC

Regulated Contaminant(s):  
CAS No: 0NY075-00-0      PARTICULATES  
CAS No: 0NY075-00-5      PM-10

**Item 39.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The Hi-Vac Industrial Vacuum System shall be operated with the use of the filter system (ES HVACC) in order to control emissions of particulates. The filter system shall be maintained according to the manufacturer's recommendations. The vacuum will automatically shut down and the filter bags will be automatically cleaned (mechanically shaken) when the pressure drop across the filter bags reaches the manufacturer's setp point. Automatic cleaning also occurs whenever the system is shut down manually. Records of filter changes or other maintenance to the vacuum system shall be kept on site and made available to the Department upon request.

Manufacturer Name/Model Number: POLYESTER FELT FILTER SYSTEM

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 40:      Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Item 40.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-BATCH                      Emission Point: C0001  
Process: MAT

Regulated Contaminant(s):  
CAS No: 0NY075-00-0      PARTICULATES  
CAS No: 0NY075-00-5      PM-10

**Item 40.2:**

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Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

In order to maintain compliance with Prevention of Significant Deterioration (PSD) Best Available Control Requirements (BACT) requirements, the dust collector (Control Device PADCO) shall be operated whenever the cullet return system (CULPU) is operational. The dust collector shall be maintained and operated to provide a minimum of 90% control efficiency. In order to demonstrate compliance with this requirement, pressure drops must be maintained above 1.0 inch of water, except for the period of initial blinding of the filter immediately following installation of a new filter.

The pressure drop across the cartridge filters shall be recorded weekly. Immediate corrective action shall be taken upon observation of any problem with the dust collector. Records, including pressure drop readings, maintenance and filter changes, and any corrective actions, shall be kept on site and made available to the Department upon request.

Manufacturer Name/Model Number: CULLET RETURN SYSTEM DUST COLLECTOR

Parameter Monitored: PRESSURE CHANGE

Lower Permit Limit: 1.0 inches of water

Monitoring Frequency: WEEKLY

Averaging Method: RANGE - NOT TO FALL OUTSIDE OF STATED  
RANGE AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-8: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 212-2.4 (b)**

**Item 1-8.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-BATCH                      Emission Point: X0001  
Process: MAT

Regulated Contaminant(s):  
CAS No: 0NY075-00-0      PARTICULATES

**Item 1-8.2:**

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Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The facility owner or operator shall not cause or allow emissions of particulates that, when combined with solid particulates from raw material and cullet handling emission sources vented to Emission Points: BH001, BH002, BH003, X0001, X0002, X0003, and C0001, exceed a total of 1.4 lb/hr of PM, 1.4 lb/hr of PM-10 and 1.4 lb/hr of PM 2.5 particulates.

In order to demonstrate compliance with this particulate requirement when the equipment is operational, pressure drops across each filter must be maintained above a minimum standard (inches of water) as recommended by the equipment manufacturer, except for the period of initial conditioning of the filter immediately following installation of a new filter.

Pressure drop shall be monitored and recorded at minimally once per month for each fabric filter which operated during that month. Immediate corrective action shall be taken upon observation of any problems associated with the control device. Records, including the pressure drop readings, maintenance, filter changes and other corrective measures taken, shall be retained on site for a minimum of five years, and made available to the Department upon request.

Note: Design specifications and pressure drop ranges all for associated Control Devices will be provided to NYSDEC prior to installation.

Parameter Monitored: PRESSURE CHANGE

Lower Permit Limit: TBD inches of water

Monitoring Frequency: MONTHLY

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED  
VALUE AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-9: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 212-2.4 (b)**



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**Item 1-9.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-BATCH                      Emission Point: X0002  
Process: MAT

Regulated Contaminant(s):  
CAS No: 0NY075-00-0      PARTICULATES

**Item 1-9.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The facility owner or operator shall not cause or allow emissions of particulates that, when combined with solid particulates from raw material and cullet handling emission sources vented to Emission Points: BH001, BH002, BH003, X0001, X0002, X0003, and C0001, exceed a total of 1.4 lb/hr of PM, 1.4 lb/hr of PM-10 and 1.4 lb/hr of PM 2.5 particulates.

In order to demonstrate compliance with this particulate requirement when the equipment is operational, pressure drops across each filter must be maintained above a minimum standard (inches of water) as recommended by the equipment manufacturer, except for the period of initial conditioning of the filter immediately following installation of a new filter.

Pressure drop shall be monitored and recorded at minimally once per month for each fabric filter which operated during that month. Immediate corrective action shall be taken upon observation of any problems associated with the control device. Records, including the pressure drop readings, maintenance, filter changes and other corrective measures taken, shall be retained on site for a minimum of five years, and made available to the Department upon request.

Note: Design specifications and pressure drop ranges all for associated Control Devices will be provided to NYSDEC prior to installation.



Parameter Monitored: PRESSURE CHANGE  
Lower Permit Limit: TBD inches of water  
Monitoring Frequency: MONTHLY  
Averaging Method: MINIMUM - NOT TO FALL BELOW STATED  
VALUE AT ANY TIME  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 1-10: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 212-2.4 (b)**

**Item 1-10.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-BATCH                      Emission Point: X0003  
Process: MAT

Regulated Contaminant(s):  
CAS No: 0NY075-00-0              PARTICULATES

**Item 1-10.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The facility owner or operator shall not cause or allow emissions of particulates that, when combined with solid particulates from raw material and cullet handling emission sources vented to Emission Points: BH001, BH002, BH003, X0001, X0002, X0003, and C0001, exceed a total of 1.4 lb/hr of PM, 1.4 lb/hr of PM-10 and 1.4 lb/hr of PM 2.5 particulates.

In order to demonstrate compliance with this particulate requirement when the equipment is operational, pressure drops across each filter must be maintained above a minimum standard (inches of water) as recommended by the equipment manufacturer, except for the period of initial conditioning of the filter immediately following installation of a new filter.

Pressure drop shall be monitored and recorded at minimally

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once per month for each fabric filter which operated during that month. Immediate corrective action shall be taken upon observation of any problems associated with the control device. Records, including the pressure drop readings, maintenance, filter changes and other corrective measures taken, shall be retained on site for a minimum of five years, and made available to the Department upon request.

Note: Design specifications and pressure drop ranges all for associated Control Devices will be provided to NYSDEC prior to installation.

Parameter Monitored: PRESSURE CHANGE  
Lower Permit Limit: TBD inches of water  
Monitoring Frequency: MONTHLY  
Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 41: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR Part 226**

**Item 41.1:**  
The Compliance Certification activity will be performed for:

Emission Unit: U-CLEAN  
Process: DEG

Regulated Contaminant(s):  
CAS No: 0NY998-00-0 VOC

**Item 41.2:**  
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES  
Monitoring Description:

Requirements for Cold Cleaning Degreasers

A. Equipment Specifications  
The following types of control equipment must be used when conducting cold cleaning degreasing, solvent metal cleaning when the internal volume of the unit is greater than 2 gallons:  
(1) A cover which can be operated easily.  
(2) An internal drainage facility (under cover), if practical. When cleaning a part that isn't practical to



drain under cover, the part shall be drained in a way which minimizes emissions of VOC.

(3) A control system that limits VOC emissions to those achievable with equipment having a freeboard ratio greater than or equal to 0.5, or a water cover when the solvent is insoluble in and heavier than water. This does not apply to remote reservoir degreasers.

(4) Solvent with a vapor pressure of 1.0 mm Hg, or less, at 20 C.

**B. Operating Requirements:**

When cold cleaning, the clean parts must be drained at least 15 seconds or until dripping ceases.

**C. General Requirements:**

A Person conducting solvent metal cleaning must:

(1) Store solvent in covered containers and transfer or dispose of waste solvent in such a manner that less than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere.

(2) Maintain equipment to minimize leaks and fugitive emissions.

(3) Display at the equipment location a conspicuous summary of proper operating procedures consistent with minimizing emissions of VOCs.

(4) Keep the degreaser cover closed except when:

(a) parts are being placed into or being removed from the degreaser;

(b) adding or removing solvent from the degreaser;

(c) no solvent is in the degreaser; or

(d) when manually cleaning metal parts in the cold cleaning degreaser.

(5) Create and retain a record of solvent consumption for five years. This record must be made available to the Department upon request.

(6) Not clean sponges, fabric, wood, leather, paper products and other absorbent materials in a degreaser.

(7) If using a cold cleaning degreaser that is subject to paragraph 226.3(a)(4), retain a record of the following three items for five years and provide these records to the Department upon request. An invoice, a bill of sale, a certificate covering multiple sales, a Material Safety Data Sheet (MSDS), or other appropriate documentation acceptable to the Department may be used to comply with this requirement.

(a) the name and address of the solvent supplier;

(b) the type of solvent including the product or vendor identification number; and

(c) the vapor pressure of the solvent measured in mm Hg at 20 °C (68 °F).

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**D. Record Keeping Requirements:**

Deviations from these requirements shall be recorded in a log maintained for this purpose within the corresponding operating area and shall be appropriately identified in the semi-annual monitoring report. In addition, the log must note whether the cold cleaner is equipped with an internal drain as specified in item A(2) above.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 42: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 227-1.3**

**Item 42.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-COMBU

**Item 42.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. The Department reserves the right to perform or request the performance of a Method 9 compliance test at any time.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 43: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Item 43.1:**

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The Compliance Certification activity will be performed for:

Emission Unit: U-COMBU

**Item 43.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

In order to satisfy Best Available Control Technology (BACT) requirements, these sources shall be maintained and operated in accordance with manufacturer's guidelines. All diesel fueled sources shall burn diesel with a maximum sulfur content of 0.05% by weight.

Monitoring Frequency: PER DELIVERY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-11: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 212-3.1 (a)**

**Item 1-11.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-CUTTG

Process: CUT

Regulated Contaminant(s):

CAS No: 008012-95-1 MINERAL OIL

**Item 1-11.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

Emissions of volatile organic compounds (VOC) from the glass cutting stations (Emission Source CUTTG) are subject to the Part 212-3 Reasonably Available Control Technology (RACT) requirements for major facilities. Within 60 days of the effective date of this permit, Guardian shall submit for NYSDEC approval a RACT demonstration for VOC emissions from this process.

Guardian shall limit the total use of mineral spirits at the glass cutting stations (Emission Source CUTTG) to less than 15,000 gallons per year on a twelve month rolling



basis.

The use of mineral spirits shall be monitored and recorded monthly and incorporated into a rolling twelve month total. Records shall be kept on site and made available to the Department upon request.

Parameter Monitored: MINERAL OIL  
Upper Permit Limit: 15000 gallons per year  
Monitoring Frequency: MONTHLY  
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 1-12: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.4 (f) (2)**

**Item 1-12.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

**Item 1-12.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within 60 days of completion of Control Device Startup Guardian shall submit a complete Operational Flexibility Notification to NYSDEC to update the permit with respect to required equipment technical data, operating status of installed equipment, and applicability of pertinent regulations associated with this permit Modification.

The facility shall not use the Operational Flexibility protocol to make physical changes or changes in the method of operation of existing emissions sources that would require a new or modified federally enforceable cap either to avoid major NSR requirements or to address and comply with other Clean Air Act requirements, such as RACT. Such changes must be addressed via the significant permit modification provisions.

The Department may require a permit modification, in order to impose new applicable requirements or additional permit conditions if it determines that changes proposed pursuant to the notification that the changes may have a



significant air quality impact or be otherwise potentially significant.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 1-13: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 212-1.6 (a)**

**Item 1-13.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Process: FUR

**Item 1-13.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

No facility owner or operator shall 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.

In an effort to minimize the likelihood of opacity exceedances caused by the running of 3R, or any other cause, Guardian shall adhere to the following maintenance schedule:

- Burner tip and block cleaning every 2 weeks  
This maintenance item consists of pulling all of the burners out of the furnace, one at a time, and wire brushing or replacing the stainless steel tip, depending on the condition. The block that the burner sits in will also be cleaned to free it of any debris or build up. A bad burner tip or build up can affect flame geometry and combustion causing poor mixing of the gas and air. This produces a reduced condition exhaust stream that is high in carbon (soot), which increases the opacity percentage.

This project takes about an hour to complete.

- Regenerator (checker) burning three times per year (approximately every 4 months)  
The regenerator's key function is to capture heat from the exhaust stream and use it to preheat combustion air before it is used in the process. It achieves this through a





honeycomb of refractory bricks with a large amount of surface area called checkers. Over the course of months, material from the exhaust stream condenses and solidifies on the bricks, which cause the flues to choke off and become inefficient at transferring heat. This causes the checker pack to cool down, which limits the effectiveness of the 3R process and causes opacity to increase until the pack heats back up.

Burning the checkers will consist of reheating the built up materials to the point that they liquefy and run out of the flue. This will allow the checker pack flues to open back up and become more efficient in transferring and retaining heat. This process takes 1 week to complete.

- Regenerator bottom clean out three times per year (approximately every 4 months)

During the process of checker burning, a large amount of debris collects in the base of the generators and needs to be cleaned out.

There is also an accumulation of batch particulate from furnace carryover that collects in the base of the regenerators and needs to be cleaned out. This process can take up to two weeks depending on the amount of buildup.

- Annual port neck cleaning

The port neck is the area of the glass-melting furnace that connects the melting tank to the upper section of the regenerators. Similar to the regenerators, the port neck accumulates build up through batch carryover and needs to be cleaned out to prevent choked off combustion airflow. Poor airflow creates poor combustion, which increases opacity. This job requires long water-cooled rakes to go into the furnace port necks and remove the debris. There are 12 furnace port necks. Each port will be cleaned at least once a year. The total aggregate time to clean all ports is about 2 weeks per year.

- Annual flue cleaning and vacuuming

Flues are areas where a large amount of post combustion material collects and restricts the exhaust flow. These parts of the glass melting furnace connect the regenerator bottom to the stack (made up of six connecting and one super flue). Opacity is caused by a small amount of the built up material breaking free or delaminating under normal furnace conditions and is carried out the stack (possible causes of the stack gas velocity or volume changes include combustion air adjustments and barometric pressure changes).

Annual flue cleaning and vacuuming is a way to reduce the



amount of material in the flues and reduce the risk of material delamination in the flues. Cleaning the flues will be scheduled to ensure that each flue is cleaned at least every 12 months. The total aggregate time to clean all flues is about two weeks per year.

Guardian shall maintain records of these furnace maintenance projects on site, which are available to the Department, for a period of 5 years.

This permit condition shall remain effective until Guardian has completed the Control Device Startup.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-14: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Replaces Condition(s) 47**

**Item 1-14.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Process: FUR

**Item 1-14.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Until completion of Control Device Startup, Guardian shall maintain, calibrate, and operate certified continuous emission monitoring (CEM) and recording systems to measure NO<sub>x</sub>, CO, and O<sub>2</sub> in the exhaust stack of the furnace. The CEMs shall be operated whenever the furnace is in operation, except during quality control checks or routine maintenance on the CEMs.

The CEMs must continuously monitor and record the hourly NO<sub>x</sub> and CO emissions concentrations (in parts per million (ppm) during each Operating Day at the Furnace continuously. At the end of each Operating Day, the data acquisition and handling system shall divide the total daily emissions in pounds per Day for valid CEMS hourly data by the total Tons of glass produced during the



Operating Day (reduced proportionally based on the valid CEMS data hours) to describe the pound per Ton emission rate for the Operating Day. The resulting number shall be recorded in units of pounds of pollutant per Ton of glass produced for the applicable Operating Day.

To ensure the accuracy of the CEMS, the CEMS shall be installed, calibrated, certified, maintained, and operated in accordance with 40 C.F.R. § 60.13, 40 C.F.R. Part 60, Appendix B (Performance Specification 2), and 40 C.F.R. Part 60, Appendix F (Quality Assurance Procedures). All quality assurance procedures required by 40 CFR 60, Appendix F and 40 CFR 51, Appendix M (opacity) and as described in Draft Air Guide 34 shall be conducted in accordance with the most current approved CEM Quality Assurance Plan (original June 21, 1999, revised January 22, 2001). Corrective actions must be taken if the system or any individual monitor fails to meet the required specifications.

Upon completion of startup of the Selective Catalytic Reduction system (Control ID SCR01), Guardian may cease the continuous monitoring of carbon monoxide. Upon completion of startup of the Electrostatic Precipitator system (control ID ESP01), Guardian may cease the continuous monitoring of opacity.

Upon completion of the Control Device Startup, the NO<sub>x</sub> and O<sub>2</sub> CEMS shall be operated on both the Inlet and Outlet of the SCR. Guardian shall develop and submit for Departmental approval a revised CEM Quality Assurance Plan to reflect the additional NO<sub>x</sub> monitoring location.

Guardian shall notify the Department at least 30 days prior to conducting any required testing and shall submit a test report to the Department within 30 days of completing a test.

Guardian shall maintain electronic or paper files on site of all measurements, daily zero and span checks, CEM system performance evaluations and repairs and maintenance to the system. On a quarterly basis, Guardian shall submit a written report to EPA and the Department which includes 1) a summary of all emission limit violations, 2) a summary of CEM operations, including downtime and out-of-control periods, 3) a summary of the CEM quarterly audit results, and 4) description of any significant changes in the process, control equipment, or CEM system

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Manufacturer Name/Model Number: Thermo-Environmental Instruments Model 42C or Equivalent

Monitoring Frequency: CONTINUOUS

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-15: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Replaces Condition(s) 46**

**Item 1-15.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Process: FUR

Regulated Contaminant(s):

CAS No: 007446-09-5      SULFUR DIOXIDE

CAS No: 007664-93-9      SULFURIC ACID

**Item 1-15.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The process sulfur ratio and salt cake ratio shall be controlled such that sulfur compound emissions are minimized. The process salt cake to sand ratio is limited to 10 lbs of salt cake to 1000 lbs of sand. The sulfur retained in the glass is analyzed and incorporated into the sulfur balance model on a 30 day rolling average basis. In addition, the cullet ratio in the batch shall be maximized by recycling all cullet generated by the furnace back into the batch.

In order to demonstrate compliance with these requirements, the Sulfur Balance Model shall be maintained electronically on site and shall include: raw materials input to the furnace, salt cake/sand ratio, processes sulfur ratio, sulfur retain in the glass, cullet ratio, glass production rate, and predicted levels of SO<sub>2</sub>, Particulates, and Sulfuric Acid in both lb/hr and lb/ton units. These records shall be maintained to show daily compliance and updated no less frequently than on a weekly basis.

This permit condition shall remain effective until Guardian has completed the Control Device Startup.



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Monitoring Frequency: DAILY  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 48: Applicability of General Provisions of 40 CFR 60 Subpart A  
Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 60, NSPS Subpart A**

**Item 48.1:**

This Condition applies to Emission Unit: U-FURNC  
Process: FUR

**Item 48.2:**

This emission source is subject to the applicable general provisions of 40 CFR 60. The facility owner is responsible for complying with all applicable technical, administrative and reporting requirements.

**Condition 1-16: Compliance Certification  
Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:40CFR 60.11(d), NSPS Subpart A**

**Item 1-16.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC  
Process: FUR

**Item 1-16.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Good Air Pollution Control Practices.  
At all times, including periods of furnace startup, maintenance, a control device startup, a shutdown, a malfunction, and during abnormally low production rate days, owners and operators of this facility shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions in accordance with 40 CFR 60.11(d). Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Department and the Administrator which may include, but is

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not limited to Ammonia Slip, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-17: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:40CFR 60.293, NSPS Subpart CC**

**Replaces Condition(s) 49**

**Item 1-17.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Process: FUR

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

**Item 1-17.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For purposes of regulating Particulate emissions from the furnace, Guardian shall comply with the requirements of NSPS Subpart CC for glass melting furnaces "with modified-processes", according to 40 CFR 60.293. Any waiver of these requirements must be approved by USEPA.

This permit condition will no longer apply after completion of the Control Device Startup

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-18: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**



**Applicable Federal Requirement:40CFR 60.293(c), NSPS Subpart CC**

**Replaces Condition(s) 50**

**Item 1-18.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC  
Process: FUR

**Item 1-18.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Opacity from the furnace shall not exceed 11% on a six consecutive minute average basis. A continuous opacity monitoring system (COMS) shall be calibrated, maintained, and operated at all times the furnace is operated in order to monitor compliance with the opacity limit. Guardian shall report as excess emissions all of the six minute periods during which the average opacity, as measured by the COMS exceeds 11%.

This permit condition will no longer apply after completion of the Control Device Startup.

Manufacturer Name/Model Number: SICK OPTIC OMD 41-02 or equivalent

Parameter Monitored: OPACITY

Upper Permit Limit: 11 percent

Reference Test Method: 40 CR 60 Performance Specification 1

Monitoring Frequency: CONTINUOUS

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-19: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 212-2.1 (b)**

**Item 1-19.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001

Regulated Contaminant(s):

CAS No: 000630-08-0                      CARBON MONOXIDE  
CAS No: 007664-93-9                      SULFURIC ACID

**Item 1-19.2:**

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Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The glass melting furnace emits several air contaminants which are not high toxicity air contaminants (HTACs). These contaminants include sulfuric acid and carbon monoxide. Per NYSDEC DAR-1 (dated 2/28/2014), sulfuric acid is a B-rated compound, while carbon monoxide has not been assigned an environmental rating. Emissions of carbon monoxide from this process are subject to the requirements of Part 212-2.3(a) Table 3 (Degree of Air Cleaning Required for Criteria Air Contaminants). Emissions of sulfuric acid from this process are subject to the requirements of Part 212-2.3(b) Table 4 (Degree of Air Cleaning Required for Non-Criteria Air Contaminants). Dispersion modeling must be performed to demonstrate that the maximum offsite air concentration of each contaminant is less than the applicable annual and short term guidance concentrations (AGCs and SGCs). Guardian shall perform air dispersion modeling for emissions of sulfuric acid and carbon monoxide from all Part 212-regulated sources at the facility. The results of this modeling shall be submitted to the NYSDEC within 60 days of the effective date of this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 1-20: Compliance Certification Effective between the dates of 04/11/2017 and 07/17/2018

Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')

Item 1-20.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC Emission Point: F0001 Process: FUR

Item 1-20.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Guardian shall operate each Furnace passing all stack gases (except during Furnace Startup; Control Device Startup; Malfunction of the SCR, DS, or PD; or maintenance of the SCR, DS, or PD) through a SCR.

Guardian shall operate each Furnace passing all stack



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gases (except during Furnace Startup; Control Device Startup; Malfunction of the DS or PD; or maintenance of the DS or PD) through a DS.

Guardian shall operate each Furnace passing all stack gases (except during Furnace Startup; Control Device Startup; Malfunction of the PD; or maintenance of the PD) through a PD.

Records of investigations and corrective actions necessary to correct deviations of the above listed regulations shall be kept on-site and made available to the Department upon request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 1-21: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-21.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001  
Process: FUR

Regulated Contaminant(s):  
CAS No: 007446-09-5                      SULFUR DIOXIDE

**Item 1-21.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Abnormally Low Production Rate Days  
Commencing on the first Operating Day after completing the Control Device Startup, Guardian shall comply with the following requirements:

When the Furnace (Emission Source F0001) is Operating at an Abnormally Low Production Rate, Guardian may exclude the SO<sub>2</sub> emissions generated from the Furnace during that Operating Day(s) from the 30-day Rolling Average Emissions Rate for SO<sub>2</sub>.

During the Day(s) excluded from the 30-day Rolling Average Emissions Rate, a SO<sub>2</sub> CEMS shall be used to demonstrate compliance with the following pound per Day limit on a 24-hour Block Average:

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$$\text{SO}_2 \text{ Abn} = 1.2 \frac{\text{lb SO}_2}{\text{ton}} \times \frac{P}{0.35}$$

Where:

SO2 Abn = SO2 emission limit (in pounds per Day) for a Furnace during Day(s) when an Abnormally Low Production Rate is occurring

occurring

P=Furnace-specific production threshold (defined as 35% of 770 tons of glass produced per day) = 270 tons

Manufacturer Name/Model Number: CEMS

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 925.7 pounds per day

Reference Test Method: CEMS

Monitoring Frequency: CONTINUOUS

Averaging Method: 24 HOUR BLOCK AVERAGE

Reporting Requirements: CONTINUOUS

**Condition 1-22: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-22.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

**Item 1-22.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Commencing on the first Operating Day after the Control Device Startup for the Selective Catalytic Reduction system (Control ID SCR01) and Dry Scrubber (Control ID DS001), Guardian shall comply with the following requirements:

Guardian shall install, calibrate, certify, maintain, and operate the NOx CEMS (to monitor both the Inlet and Outlet of the SCR) and SO2 CEMS. The first CEMS Certification shall be required no later than the installation of the controls specified above. Events that will trigger subsequent CEMS Certification (or CEMS re-Certification) include any Furnace startup or Control Device Startup. Guardian shall commence such CEMS re-certification no

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later than thirty (30) days after Furnace Startup commences or a Control Device Startup period concludes. If a Furnace Startup and a Control Device Startup happen at the same time, then the CEMS re-certification shall not be conducted until the first Operating Day after the later startup event concludes.

Guardian shall not perform CEMS Certification or CEMS re-Certifications during Abnormally Low Production Rate Days, Furnace Startup, Control Device Startup, Malfunction of any Control Device, or Maintenance of any Control Device. By no later than the first Operating Day after any CEMS Certification Event concludes at a Furnace, a new CEMS Certification or CEMS re-Certification shall be performed. If a CEMS Certification Event occurs, the requirement to demonstrate compliance continuously with the NOX or SO2 emission limit will be suspended until CEMS Certification or CEMS re-Certification is complete (provided that the seven-day test required for CEMS Certification is commenced on the first Operating Day following the conclusion of the CEMS Certification Event).Guardian shall notify the Department at least 30 days prior to conducting any required testing and shall submit a test report to the Department within 30 days of completing a test.

Manufacturer Name/Model Number: CEMS  
Monitoring Frequency: CONTINUOUS  
Reporting Requirements: QUARTERLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 3 calendar month(s).

**Condition 1-23: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-23.1:**  
The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001  
Process: FUR

**Item 1-23.2:**  
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES  
Monitoring Description:  
Commencing on the first Operating Day after the Control Device Startup for the Dry Scrubber, Guardian shall comply



with the following requirements:

Guardian shall maintain, calibrate, and operate certified continuous emission monitoring (CEM) and recording systems to measure SO<sub>2</sub> in the exhaust stack of the Furnace. The CEMs shall be operated whenever the Furnace or lehr is in operation, except during quality control checks or routine maintenance on the CEMs.

The CEMs must continuously monitor and record the hourly SO<sub>2</sub> emission concentrations (in parts per million (ppm)) during each Operating Day at the Furnace and calculate and record one hour average SO<sub>2</sub> emission rates in lb/hr. At the end of each Operating Day, the data acquisition and handling system shall divide the total daily emissions in pounds per Day for valid CEMS hourly data by the total Tons of glass produced during the Operating Day (reduced proportionally based on the valid CEMS data hours) to describe the pound per Ton emission rate for the Operating Day. The resulting number shall be recorded in units of pounds of pollutant per ton of glass produced for the applicable Operating Day.

To ensure the accuracy of the CEMS, the CEMS shall be installed, calibrated, certified, maintained, and operated in accordance with 40 C.F.R. § 60.13, 40 C.F.R. Part 60, Appendix B (Performance Specification 2), and 40 C.F.R. Part 60, Appendix F (Quality Assurance Procedures). All quality assurance procedures required by 40 CFR 60, Appendix F shall be conducted in accordance with the most current approved CEM Quality Assurance Plan. Corrective actions must be taken if the system or any individual monitor fails to meet the required specifications.

Guardian shall develop and submit for Departmental approval a CEM Quality Assurance Plan for the SO<sub>2</sub> monitoring system. Guardian shall maintain electronic or paper files on site of all measurements, daily zero and span checks, CEM system performance evaluations and repairs and maintenance to the system. On a quarterly basis, Guardian shall submit a written report to EPA and the Department which includes 1) a summary of all emission limit violations, 2) a summary of CEM operations, including downtime and out-of-control periods, 3) a summary of the CEM quarterly audit results, and 4) description of any significant changes in the process, control equipment, or CEM system.

Manufacturer Name/Model Number: CEMS  
Monitoring Frequency: CONTINUOUS

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Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-24: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-24.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

**Item 1-24.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Recordkeeping During Furnace Startup.

Guardian must keep the following records during Furnace Startup.

- a. The amount of salt cake added to the batch materials in pounds per ton of total batch material (including cullet);
- b. The total natural gas usage in the Furnace (in million standard cubic feet);
- c. The excess oxygen percentage (as measured and recorded by the oxygen sensor in the crown of each Furnace regenerator at least once per shift); and
- d. A description of whether thermal blankets or similar techniques were used during this period.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-25: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-25.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

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Process: FUR

**Item 1-25.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Source/Stack Testing.

All source/stack tests required by the Consent Decree shall be conducted in accordance with the requirements of the specified Test Method and shall be performed under representative Operating conditions or applicable state requirements for the Furnace being tested. Each test shall be comprised of at least three (3) valid one-hour stack test runs. Guardian shall discard any invalid test runs, such as those that are compromised because of sample contamination. If a test run is discarded, Guardian shall replace it with an additional valid test run. Guardian shall report the results of the discarded test runs to EPA and NYSDEC and shall provide all information necessary to document why the test run was not valid. Source/stack testing shall not be conducted during Abnormally Low Production Rate Days, a Furnace Startup, a Control Device Startup, a Malfunction of the Furnace or relevant Control Device, or Maintenance of the Furnace or relevant Control Device.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 1-26: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-26.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC  
Process: FUR

Emission Point: F0001

Regulated Contaminant(s):

CAS No: 007446-09-5      SULFUR DIOXIDE

**Item 1-26.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Commencing on the first Operating Day after completing the Control Device Startup, emissions of sulfur dioxide



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from Emission Point F0001 shall not exceed a 30-day Rolling Average Emission Rate of 1.2 lb SO2 per Ton of glass produced. This compliance limit applies at all times except during the following time periods:

- Furnace Startup ( as set forth in this permit);
- Control Device Startup or Malfunction of the Dry Scrubber (Control ID DS001) or Particulate Device (Control Device ESP01)( as set forth in this permit);
- Maintenance of the Dry Scrubber (Control ID DS001) or PD (Control ID ESP01) ( as set forth in this permit); or
- Abnormally Low Production Rate Days ( as set forth in this permit).

Guardian shall demonstrate compliance with the 30-day Rolling Average Emission Rate using a SO2 CEMS.

Manufacturer Name/Model Number: CEMS

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 1.2 pounds per ton

Reference Test Method: CEMS

Monitoring Frequency: CONTINUOUS

Averaging Method: 30 DAY ROLLING AVERAGE, ROLLED DAILY

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-27: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-27.1:**  
The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001  
Process: FUR

Regulated Contaminant(s):  
CAS No: 007446-09-5              SULFUR DIOXIDE

**Item 1-27.2:**  
Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:  
SO2 Limit During Maintenance of the Dry Scrubber or PD  
Commencing on the first Operating Day after completing the Control Device Startup, Guardian shall comply with the following requirements.  
For any Operating Day where Maintenance activities are performed on the Dry Scrubber (Control ID DS001) or PD

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(Control ID ESP01), Guardian may exclude the emissions generated during that Operating Day (or Days) from the 30-day Rolling Average Emission Rate for SO2. During the Day(s) excluded from the 30-day Rolling Average Emission Rate, a SO2 CEMS shall be used to demonstrate compliance with the following pound per day SO2 limit on a 24-hour Block Average:

$$\begin{aligned}
& \text{MH} \times \text{A} \quad \text{NH} \times \{1.2 \times \\
& \text{P}/0.35\} \\
\text{SO2 Scrub Main} = & \frac{\text{-----}}{24} + \frac{\text{-----}}{24}
\end{aligned}$$

Where:

SO2 Scrub Main = SO2 emission limit (in pounds per Day) for the Furnace during Maintenance of the Dry Scrubber or Particulate Device

A = SO2 w/o DS = SO2 emission limit using Dry Scrubber during an event where the Dry Scrubber is not operating, in pounds per Day

P = Furnace-specific production threshold as defined in Table 7 and paragraph 40 (as 35% X 770 Tons of glass produced per Day = 270 Tons per Day).

MH = Hours of Maintenance

NH = Normal Hours = 24 – MH

Manufacturer Name/Model Number: CEMS  
Parameter Monitored: SULFUR DIOXIDE  
Upper Permit Limit: 3,662 pounds per day  
Reference Test Method: CEMS  
Monitoring Frequency: CONTINUOUS  
Averaging Method: 24 HOUR BLOCK AVERAGE  
Reporting Requirements: QUARTERLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 3 calendar month(s).

**Condition 1-28: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-28.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001  
Process: FUR

Regulated Contaminant(s):  
CAS No: 007446-09-5                      SULFUR DIOXIDE



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**Item 1-28.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

SO2 Limit During Furnace Startup.

For no more than the 30 days allowed for Furnace Startup, the Furnace exhaust may bypass the Dry Scrubber (Control ID DS001) to avoid having the operating inlet temperature of the Dry Scrubber fall below its operational range.

During the Days that Furnace exhaust bypasses the DS, Guardian shall burn no more than five (5) million standard cubic feet of natural gas in that Furnace per Day. When technically feasible and available, Guardian will operate the Dry Scrubber on the Furnace exhaust.

Parameter Monitored: NATURAL GAS

Upper Permit Limit: 5 million standard cubic feet per day

Monitoring Frequency: CONTINUOUS

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -  
SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-29: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-29.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

**Item 1-29.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

SO2 Limit During Control Device Startup or Malfunction of the Dry Scrubber or PD

Commencing on the first Operating Day after completing the Control Device Startup, Guardian shall comply with the



following requirements.

For any Operating Day during Control Device Startup or on which a Malfunction of the DS or PD occurs, Guardian may exclude the emissions generated during that Operating Day (or Days) from the 30-day Rolling Average Emission Rate for SO<sub>2</sub>. During the Day(s) excluded from the 30-day Rolling Average Emission Rate, SO<sub>2</sub> emissions from the Furnace (Emission Source F0001) shall be limited to a 24-hour Block Average of 3,662 pounds per Day. A SO<sub>2</sub> CEMS shall be used to demonstrate compliance with this emission limitation.

Manufacturer Name/Model Number: CEMS

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 3662 pounds per day

Reference Test Method: CEMS

Monitoring Frequency: CONTINUOUS

Averaging Method: 24 HOUR BLOCK AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-30: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-30.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

Regulated Contaminant(s):

CAS No: 0NY210-00-0

OXIDES OF NITROGEN

CAS No: 007446-09-5

SULFUR DIOXIDE

**Item 1-30.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Guardian shall record:

- 1) the hourly NO<sub>x</sub> emissions (ppm) before and after the SCR as calculated using CEMS data; the hourly SO<sub>2</sub> emissions (lb per hour) as calculated using CEMS data;
- 2) the daily production rate; and
- 3) if applicable, the 30-day rolling average emissions (removal efficiency or rate).

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

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DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-31: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-31.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

**Item 1-31.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Maintenance for Control Devices and Canal Changes:

a. Scheduled or Preventive Maintenance on Control Devices.

Any Operating hour that is exempted from the applicable 30-day Rolling Average Emission Rate because of

Maintenance being performed on a Control Device is subject to the following restrictions and must comply with the following requirements:

Scheduled or preventive Maintenance of Control Devices shall occur and shall be completed while the Furnace connected to the Control Device(s) is not Operating, unless the Furnace connected to the Control Device is scheduled to have a Continuous Operating Year. During a Continuous Operating Year, scheduled or preventive

Maintenance on the Control Devices may be conducted while the Furnace connected to the Control Device(s) is Operating. All Control Device Maintenance occurring during a Continuous Operating Year must also be performed in accordance with the following requirements:

i. Maintenance on all add-on Control Devices shall not exceed 144 hours total per Calendar Year.

ii. Bypassing a SCR for the purpose of preventive Maintenance shall not exceed 144 hours per Calendar Year.

Bypass of the SCR required as a result of bypassing the PD or Dry Scrubber shall count towards the 144 hour



limit.

iii. Bypassing the PD for the purpose of preventive Maintenance shall not exceed 144 hours per Calendar Year. Furthermore, if the PD is bypassed, the associated Dry Scrubber and SCR must be bypassed as well.

iv. Bypassing the Dry Scrubber for the purpose of preventive Maintenance shall not exceed 144 hours per calendar year. Bypass of the Dry Scrubber required as a result of bypassing the PD shall count towards the 144 hour limit. b. Canal Changes.

No more than once every 2 calendar years, Guardian is permitted 96 hours to complete a Canal Change on their downstream equipment. In the event a Canal Change becomes necessary in less than 2 years, Guardian shall notify NYSDEC at least 30 days prior to the Canal Change to provide the opportunity for the NYSDEC to investigate the necessity of Canal Change and object. During this period, the Furnace will operate at Abnormally Low Production Rate, good air pollution control practices will be used at all times, the Dry Scrubber and PD (if technologically feasible for the catalyst-impregnated ceramic filter system) must be operated, and the SCR must be operated unless the inlet temperature or flow to the SCR drops to less than 115% of the minimum operating temperature or flow (as defined by the SCR vendor) for 15 consecutive minutes, and then Guardian may discontinue use of the SCR until temperature and flow stabilize at 115% of the recommended minimums.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-32: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-32.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC  
Process: FUR

Emission Point: F0001

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-32.2:**

Compliance Certification shall include the following monitoring:



Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Alternative Compliance Option for NOx

Guardian may elect to use the following alternative compliance option in lieu of complying with the NOx emission limits, provided that Guardian satisfies the requirements below.

a. If Guardian is able to reduce the 30-day Rolling Average Emission Rate into the SCR to less than 8.0 lb NOx per Ton of glass produced for at least 180 consecutive Days of normal Operation (excluding periods that qualify as Maintenance, Malfunction, Furnace Startup, Control Device Startup, or Abnormally Low Production Rate Days), Guardian may notify NYSDEC that it elects to comply with a 30-day Rolling Average Emission Rate of 1.6 lb NOx per Ton of glass produced (measured after the SCR) in lieu of the final NOx emission limit. Guardian shall comply with a 30-day Rolling Average Emission Rate of 1.6 lb NOx per Ton of glass

produced 60 days after Guardian provides notice to NYSDEC.

After electing to comply with the alternative compliance option in this Paragraph, Guardian may not revert to complying with the final NOx emission limit. If NYSDEC determines that Guardian has not satisfied any of the following criteria, Guardian must continue complying with the applicable final NOx emission limit(s).

b. Guardian's notice must include all 30-day rolling average data for NOx for the 12-month period prior to the date the notice is submitted. Guardian must clearly identify any Days that it believes are exempted from the 30-day Rolling Average Emission Rate and indicate which exemption applies (i.e., Maintenance, Malfunction, Furnace or Control Device Startup, or Abnormally Low Production Rate Days).

c. Guardian's notice must identify any equipment that it installed and explain all actions that it took in order to achieve reduced emissions at the Furnace. Guardian shall continue to operate any equipment and continue all actions necessary to maintain such emissions reductions.

d. Guardian may not elect to comply with an alternative compliance option for a Furnace that has had any exceedances of the final NOx emission limit(s) within the last twelve (12) months prior to this election.

e. Guardian must continue to operate the SCR at all times as required by this permit. However, Guardian may also comply with a NOx limit for Abnormally Low Production Rate Days, which shall be calculated as follows:

Guardian may exclude the NOx emissions generated from the Furnace during an Abnormally Low Production Rate Day (or Days) from the 30-day Rolling Average Emission Rate.

During these days, a CEMS shall be used to demonstrate

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Guardian's compliance on a 24-hour Block Average with the following pound per day limit:

$$\text{NOx Abn} = 1.6 \frac{\text{lb NOx}}{\text{ton}} \times \frac{\text{P}}{\text{ton}}$$

0.35

Where:

NOx Abn= NOx emission limit (in pounds per Day) for Furnace using SCR during Days when an Abnormally Low Production Rate is occurring.

P = Furnace-specific production threshold = 270 Tons of glass produced per Day (35% of a 770 tons/day normal production rate) The value of P cannot exceed 270 Tons of glass produced per Day

The maximum calculated pound per day limit of 1234 lbs of NOx is applicable only during Abnormally Low Production Rate days and exhibits the maximum threshold for 270 Tons of glass produced per Day

Manufacturer Name/Model Number: CEMS
Upper Permit Limit: 1234 pounds per day
Reference Test Method: CEMS
Monitoring Frequency: CONTINUOUS
Averaging Method: 24 HOUR BLOCK AVERAGE
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2017.
Subsequent reports are due every 3 calendar month(s).

Condition 1-33: Compliance Certification
Effective between the dates of 04/11/2017 and 07/17/2018

Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')

Item 1-33.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC Emission Point: F0001
Process: FUR

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 1-33.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
Commencing on the first Operating Day after completing

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the Control Device Startup, Guardian shall comply with the following requirements.

Emissions of sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) from the Emission Point F0001 shall not exceed 1.6 lb of H<sub>2</sub>SO<sub>4</sub> per hour.

Compliance with this emission limitation shall be demonstrated through annual stack tests using EPA Conditional Test Method CTM 13, CTM 13A, CTM 13B or an approved alternative method.

Guardian shall conduct an initial stack test no later than 180 Days after the compliance deadline established by the Consent Decree, and once each Calendar Year thereafter.

Manufacturer Name/Model Number: CEMS

Parameter Monitored: SULFURIC ACID

Upper Permit Limit: 1.6 pounds per hour

Reference Test Method: EPA Test Method CTM 13, CTM 13A, CTM 13B

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-34: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-34.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-34.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

NO<sub>x</sub> Limit During Furnace Startup.

For no more than the 30 Days allowed for Furnace Startup, the Furnace exhaust may bypass the SCR to avoid having the operating inlet temperature of the SCR fall below its operational range.

During these bypass Days Guardian shall burn no more than five (5) million standard cubic feet of natural gas in



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that Furnace per day. When technically feasible and available, Guardian will operate the SCR on the Furnace exhaust.

Parameter Monitored: NATURAL GAS
Upper Permit Limit: 5 million standard cubic feet per day
Monitoring Frequency: CONTINUOUS
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 1-35: Compliance Certification
Effective between the dates of 04/11/2017 and 07/17/2018

Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')

Item 1-35.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC Emission Point: F0001
Process: FUR

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 1-35.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

NOx Limit During Maintenance of the Canals, SCR, Dry Scrubber or PD Commencing on the first Operating Day after completing the Control Device Startup, Guardian shall comply with the following requirements.
For any Operating Day where maintenance activities on the canals, SCR (Control ID SCR01), Dry Scrubber (Control ID DS001) or PD (Control ID ESP01) are performed, Guardian may exclude the Maintenance Day from the 30-day Rolling Average NOx Removal Efficiency. For any day which is excluded from the 30-day Rolling Average NOx Removal Efficiency, a NOx CEMS shall be used to demonstrate compliance on a 24-hour block average with the following pound per day limit:

0.2
NOxSCRMain= (MH x A) / 24 + (NH x A) / 24





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Where: NOxSCRMain = NOx emission limit for the Furnace during maintenance of the canals, SCR, DS or PD, in pounds per Day

A = NOx w/o SCR = NOx emission limit for the Furnace using SCR during an event where the SCR is not operating, in pounds per Day

MH = Hours of Maintenance

NH = Normal Hours = 24 – MH

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-36: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-36.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-36.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

NOx Limit During Control Device Startup or Malfunction of the SCR, Dry Scrubber or PD

Commencing on the first Operating Day after Control Device Startup, Guardian shall comply with the following requirements.

For each Operating Day that the SCR does not operate or is not operating normally because of the Control Device Startup or Malfunction of the SCR, DS, or PD for any period of time, Guardian may exclude that Day's Removal Efficiency from the 30-day Rolling Average NOX Removal Efficiency. During the Days excluded from the 30-day Rolling Average NOX Removal Efficiency, NOx emissions from the Furnace (Emission Source F0001) shall be limited to a 24-hour Block Average of 8,580 pounds per Day. A NOx CEMS shall be used to demonstrate compliance with this emission limitation.



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Manufacturer Name/Model Number: CEMS  
Upper Permit Limit: 8580 pounds per day  
Reference Test Method: CEMS  
Monitoring Frequency: CONTINUOUS  
Averaging Method: 24 HOUR BLOCK AVERAGE  
Reporting Requirements: QUARTERLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 3 calendar month(s).

**Condition 1-37: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-37.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001  
Process: FUR

Regulated Contaminant(s):  
CAS No: 007446-09-5              SULFUR DIOXIDE  
CAS No: 0NY210-00-0              OXIDES OF NITROGEN

**Item 1-37.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For any Operating Day(s) that Guardian excludes from the relevant 30-day Rolling Average NOx Removal Efficiency or 30-day Rolling Average NOx or SO2 Emission Rate, it shall record:

- 1) the date;
- 2) the relevant exception pursuant to which Guardian is excluding the emissions generated during that Operating Day (or Days) (i.e. Abnormally Low Production Rate Day, Furnace Startup, Control Device Startup, Malfunction, or Maintenance);
- 3) a calculation of the applicable emission limit (in pounds of NOx and/or SO2 per Day) according to the equations specified within this permit;
- 4) the emissions recorded by the CEMS (in pounds of NOx and/or SO2 per Day); and
- 5) if it was a Malfunction, an explanation and any corrective actions taken. For any Operating Day(s) excluded for Maintenance of a Control Device or Furnace, Guardian shall also record the total number of hours during which Maintenance occurred.

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Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-38: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.2 (d) (8) (iii) ('b')**

**Item 1-38.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-38.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Commencing on the first Operating Day after completing the Control Device Startup, Guardian shall comply with an 80% 30-day Rolling Average NOx Removal Efficiency. This compliance limit applies at all times except during the following time periods:

- Furnace Startup (as set forth in this permit);
- Control Device Startup or Malfunction of the SCR, DS or PD (as set forth in this permit); or
- Maintenance of the Canals, SCR, Dry Scrubber or PD ( as set forth in this permit).

Guardian shall demonstrate compliance with the 80% 30-day Rolling Average NOx Removal Efficiency using a NOx CEMS.

Manufacturer Name/Model Number: CEMS

Parameter Monitored: OXIDES OF NITROGEN

Lower Permit Limit: 80 percent

Reference Test Method: CEMS

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY ROLLING AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-39: Compliance Certification**





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the emission of uncombined water. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

Within 180 days of control device startup, and annually thereafter, Guardian shall conduct observations of visible emissions from Emission Point F0001 using Method 9 while the process is in operation. The permittee will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continue, the permittee will conduct a Method 9 assessment of the sources associated with the potential noncompliance, within the next Operating Day, to determine the degree of opacity and will notify the NYSDEC if the Method 9 test indicates that the opacity standard is not met.

Records of visible emissions observations (or any follow-up Method 9 tests), investigations and corrective actions will be kept on-site and made available to the Department upon request.

Parameter Monitored: OPACITY  
Upper Permit Limit: 20 percent  
Reference Test Method: EPA Method 9  
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
Averaging Method: 6 MINUTE AVERAGE  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 1-42: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 231-2.5**

**Replaces Condition(s) 53**

**Item 1-42.1:**  
The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001  
Process: FUR

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Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-42.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

For compliance with LAER (231-2.5) and BACT (40 CFR 52.21(j)) requirements, NOx emissions are limited to 1.23 lb/mmbtu on a 30 day rolling basis. This emission limit corresponds to the Higher Heating Value (HHV) of the fuel burned. A continuous emissions monitoring (CEM) system will be used to demonstrate compliance with this limit.

Guardian shall maintain and operate a fuel meter and calorimeter to measure heat input (mmbtu/hr) for purposes of calculating emissions (lb/mmbtu). Records of daily fuel usage (ft3/hr) and calorific value of the gas (mmbtu/ft3) shall also be kept. All records shall be kept on site for five years and made available to the Department upon request.

This permit condition will no longer apply after completion of the Control Device Startup.

Manufacturer Name/Model Number: THERMO-ENVIRONMENTAL INSTRUMENTS MODEL 42C or equivalent

Upper Permit Limit: 1.23 pounds per million Btus

Reference Test Method: Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY ROLLING AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-43: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 231-2.5**

**Replaces Condition(s) 52**

**Item 1-43.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

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**Item 1-43.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

In order to maintain compliance with 6 NYCRR Part 231-2.5 (LAER), 40 CFR 52.21 (j) (BACT), and 6 NYCRR Part 220-2 (RACT) requirements, Guardian shall maintain NOx emissions at or below 199 lb/hr on a rolling 30 day average basis.

This limit does not apply during periods of Furnace Startup, Control Device Startup, Malfunction, Maintenance of the Canals, Dry Scrubber or PD, and during Abnormally Low Production Rate Days. In order to demonstrate compliance with this limit, Guardian shall operate a continuous emission monitoring (CEM) system. Records shall be kept on site for five years and made available to the Department upon request.

Manufacturer Name/Model Number: THERMO-ENVIRONMENTAL INSTRUMENTS  
MODEL 42C or Equivalent

Upper Permit Limit: 199 pounds per hour

Reference Test Method: Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY ROLLING AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 3 calendar month(s).

**Condition 1-44: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 40CFR 52.21(j), Subpart A**

**Item 1-44.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

Regulated Contaminant(s):

CAS No: 0NY075-00-5 PM-10

**Item 1-44.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Commencing on the first operating day after startup of



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the PD, emissions of PM-10 particulates shall be limited to 0.73 lb/ton of glass produced. Compliance with this emission limitation shall be demonstrated through stack testing using EPA reference Method 201A Appendix M. Guardian shall conduct the initial stack test within 180 days after the compliance deadline established by the Consent Decree, and one additional test within the term of the permit.

Upper Permit Limit: 0.73 pounds per ton

Reference Test Method: EPA RM 201A & EPA RM 202

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-45: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:40CFR 60.292, NSPS Subpart CC**

**Item 1-45.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001

Process: FUR

Regulated Contaminant(s):

CAS No: 0NY075-00-0      PARTICULATES

**Item 1-45.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Commencing on the first Operating Day after completing the Control Device Startup, Guardian shall comply with the following requirements.

Guardian shall Operate the Furnace passing all stack gases (except during Furnace Startup; Control Device Startup; Malfunction of the PD; or Maintenance of the PD) through the PD. Emissions of particulate from the Emission Point F0001 shall be limited to 0.45 lb of PM per Ton of flat glass produced (0.225 g of particulate per kg of flat glass produced). Compliance with this emission limitation shall be demonstrated through annual stack tests and using

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EPA Test Method 5 (40 C.F.R. Part 60, Appendix A-3).

Guardian shall conduct an initial stack test no later than 180 Days after the compliance deadline established by the Consent Decree, and once each Calendar Year thereafter.

Parameter Monitored: PARTICULATES
Upper Permit Limit: .45 pounds per ton
Reference Test Method: Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2017.
Subsequent reports are due every 6 calendar month(s).

Condition 1-46: Compliance Certification
Effective between the dates of 04/11/2017 and 07/17/2018

Applicable Federal Requirement: 6 NYCRR 201-6.4 (d) (1)

Item 1-46.1:
The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC Emission Point: F0001
Process: FUR Emission Source: F0001

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 1-46.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

In order to reduce emissions of PM10 from the furnace (ES F0001), Guardian shall install and operate control technology according to the schedule below.

By July 31, 2018, Guardian shall commission and begin debug of the new control equipment.
By September 1, 2019, Guardian shall begin CTR (glass production shut down).
Guardian shall conduct an initial stack test no later than 180 Days after the compliance deadline established by the Consent Decree. Guardian shall notify the Department of the scheduled testing and submit a test protocol and stack test report in accordance with the requirements of 6 NYCRR Part 202-1.

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Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

**DESCRIPTION**

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-47: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Item 1-47.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Process: FUR

Emission Source: F0001

Regulated Contaminant(s):

CAS No: 007664-93-9

SULFURIC ACID

CAS No: 0NY075-00-0

PARTICULATES

CAS No: 007446-09-5

SULFUR DIOXIDE

**Item 1-47.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Commencing on the first Operating Day after completing the startup period of the SO<sub>2</sub> CEMS, Guardian shall comply with the following requirements:

Compliance with the BACT requirements for emissions of sulfur dioxide shall be demonstrated on a daily basis through the use of continuous emission monitoring data for SO<sub>2</sub>.

Compliance with the sulfuric acid and filterable particulate emission limitations shall be demonstrated through annual stack tests. These records shall be maintained to show daily compliance with the following emission limitations:

Sulfur Dioxide: 1.2 lb/ton on a 30 day rolling average basis

Sulfuric Acid: 1.6 lb/hr

Filterable Particulate: 0.45 lb/ton

Monitoring Frequency: DAILY

Averaging Method: AVERAGING METHOD - SEE MONITORING

**DESCRIPTION**

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

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Subsequent reports are due every 6 calendar month(s).

**Condition 1-48: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 40CFR 52.21(j), Subpart A**

**Replaces Condition(s) 55**

**Item 1-48.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC	Emission Point: F0001
Process: FUR	Emission Source: F0001

Regulated Contaminant(s):	
CAS No: 007664-93-9	SULFURIC ACID
CAS No: 0NY075-00-0	PARTICULATES
CAS No: 007446-09-5	SULFUR DIOXIDE

**Item 1-48.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Compliance with BACT requirements for emissions of sulfur dioxide, sulfuric acid, and particulate listed below, shall be demonstrated on a daily basis through the use of Guardian's Sulfur Balance Model. The Sulfur Balance Model shall be maintained electronically on site and shall include: raw materials input to the furnace, salt cake/sand ratio, processes sulfur ratio, sulfur retain in the glass, cullet ratio, glass production rate, and predicted levels of SO<sub>2</sub>, Particulates, and Sulfuric Acid in both lb/hr and lb/ton units. These records shall be maintained to show daily compliance and updated no less frequently than on a weekly basis. Note that sulfur retain in the glass is analyzed and incorporated into the model on a 30 day rolling average basis.  
Sulfur Dioxide: 2.07 lb/ton and 60 lb/hr  
Sulfuric Acid: 0.17 lb/ton and 5 lb/hr  
Particulate: 0.5 gr/kg (1 lb/ton) and 29.2 lb/hr  
This permit condition shall remain effective until Guardian has commenced startup of the continuous monitoring system for sulfur dioxide.

Monitoring Frequency: DAILY

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).



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Regulated Contaminant(s):  
CAS No: 007446-09-5      SULFUR DIOXIDE

**Item 1-50.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions of Sulfur Dioxide are limited to 2.07 lb/ton and 60 lbs/hr. In order to demonstrate compliance with the sulfur dioxide limits, annual stack tests shall be conducted according to methods and procedures approved by the Department. Guardian shall submit a test report within 30 days of completing the test.

This permit condition will no longer apply after completion of the Control Device Startup.

Upper Permit Limit: 60 pounds per hour

Reference Test Method: Method 6C

Monitoring Frequency: ANNUALLY

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-51: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Replaces Condition(s) 57**

**Item 1-51.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURN      Emission Point: F0001  
Process: FUR      Emission Source: F0001

Regulated Contaminant(s):  
CAS No: 007664-93-9      SULFURIC ACID

**Item 1-51.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions of Sulfuric Acid are limited to 0.17 lb/ton and 5 lbs/hr. In order to demonstrate compliance with the Sulfuric Acid limits, annual stack tests shall be conducted according to methods and procedures approved by the Department. Guardian shall submit a test report within

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30 days of completing the annual test. This permit condition will no longer apply after completion of the Control Device Startup.

Upper Permit Limit: 5 pounds per hour  
Reference Test Method: Method 8 or 8A  
Monitoring Frequency: ANNUALLY  
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 1-52: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Replaces Condition(s) 56**

**Item 1-52.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC	Emission Point: F0001
Process: FUR	Emission Source: F0001

Regulated Contaminant(s):	
CAS No: 000630-08-0	CARBON MONOXIDE

**Item 1-52.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

Carbon monoxide (CO) emissions are limited to 0.1 lb/mmbtu on a 30 day rolling average basis. This emission limit corresponds to the Higher Heating Value (HHV) of the fuel burned. A continuous emissions monitoring (CEM) system will be used to demonstrate compliance with these limits. This permit condition will no longer apply after completion of the Control Device Startup.

Guardian shall maintain and operate a fuel meter and calorimeter to measure heat input (mmbtu/hr) for purposes of calculating emissions. Records of daily fuel usage (ft<sup>3</sup>/hr) and calorific value of the gas (mmbtu/ft<sup>3</sup>) shall be kept. All records shall be kept on site for five years and made available to the Department upon request.

Manufacturer Name/Model Number: TECO Model 48C or equivalent

Upper Permit Limit: 0.1 pounds per million Btus

Reference Test Method: Method 10



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Monitoring Frequency: CONTINUOUS  
Averaging Method: 30 DAY ROLLING AVERAGE, ROLLED DAILY  
Reporting Requirements: QUARTERLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 3 calendar month(s).

**Condition 1-53: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:40CFR 60.293(b)(1), NSPS Subpart CC**

**Replaces Condition(s) 60**

**Item 1-53.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001  
Process: FUR                                      Emission Source: F0001

Regulated Contaminant(s):  
CAS No: 0NY075-00-0      PARTICULATES

**Item 1-53.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

In order to satisfy NSPS requirements of 40 CFR 60 Subpart CC, particulate emissions from the furnace are limited to 0.5 grams per kilogram of glass produced (11b/ton) and 29.2 lb/hr. Annual stack testing to demonstrate compliance with these particulate limits shall be conducted according to test methods and procedures specified in paragraph 60.293(e). Guardian shall submit a test report within 30 days of completing the test.

This permit condition will no longer apply after completion of the Control Device Startup.

Upper Permit Limit: 29.2 pounds per hour  
Reference Test Method: Method 5  
Monitoring Frequency: ANNUALLY  
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 1-54: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**





**Applicable Federal Requirement:6 NYCRR 212-1.6 (a)**

**Item 1-54.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-FURNC Emission Point: F0001  
Process: SCB

**Item 1-54.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The permittee will conduct observations of visible emissions from Emission Point F0001 using Method 22 on a monthly basis while the process is in operation. The permittee will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard.

The permittee shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continue, the permittee will conduct a Method 9 assessment within the next operating day of the sources associated with the potential noncompliance to determine the degree of opacity and will notify the NYSDEC if the method 9 test indicates that the opacity standard is not met.

Records of visible emissions observations (or any follow-up Method 9 tests), investigations and corrective actions will be kept on-site and made available to the Department upon request.

Parameter Monitored: OPACITY  
Upper Permit Limit: 20 percent  
Reference Test Method: EPA Method 22 & Method 9  
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION  
Averaging Method: 6 MINUTE AVERAGE



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Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 61: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Item 61.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-POWER

Regulated Contaminant(s):

CAS No: 007446-09-5      SULFUR DIOXIDE

**Item 61.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The generators shall burn only diesel fuel with a maximum sulfur content of 0.05% by weight.

Monitoring Frequency: PER DELIVERY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 62: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 227-1.3**

**Item 62.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-POWER

Emission Point: G0001

Process: GEN

Emission Source: G0001

**Item 62.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one six-minute



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period per hour of not more than 27 percent opacity. The Department reserves the right to perform or request the performance of a Method 9 compliance test at any time.

Parameter Monitored: OPACITY  
Upper Permit Limit: 20 percent  
Reference Test Method: Method 9  
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)  
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 63: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Item 63.1:**  
The Compliance Certification activity will be performed for:

Emission Unit: U-POWER                      Emission Point: G0001  
Process: GEN                                      Emission Source: G0001

Regulated Contaminant(s):  
CAS No: 000630-08-0      CARBON MONOXIDE  
CAS No: 007446-09-5      SULFUR DIOXIDE  
CAS No: 0NY075-00-0      PARTICULATES  
CAS No: 0NY075-00-5      PM-10  
CAS No: 0NY210-00-0      OXIDES OF NITROGEN

**Item 63.2:**  
Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:  
In order to maintain compliance with 6 NYCRR Part 231-2.5 (LAER) and 40 CFR 52.21 (BACT) requirements, this generator shall be operated with the use of ignition timing retard with a turbo charger and aftercooler. Emission limits are as follows:  
NOx: 2.70 lb/mmbtu and 52.45 lb/hr  
CO: 0.26 lb/mmbtu and 5.09 lb/hr  
SO2: 0.06 lb/mmbtu and 1.16 lb/hr  
PM/PM10: 0.04 lb/mmbtu and 0.75 lb/hr

The generator shall be limited to 200 hours of operation on a rolling twelve month basis. In order to verify compliance with this limit, a log of the hours of operation of the generator and the reason for operation shall be maintained on site. Hours of operation during each month shall be recorded and summed with the previous

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eleven months to calculate the rolling twelve month total.

Work Practice Type: HOURS PER YEAR OPERATION

Manufacturer Name/Model Number: Caterpillar Diesel Generator #1 Model 3516B

Upper Permit Limit: 200 hours

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 64: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 227-1.3**

**Item 64.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-POWER

Emission Point: G0002

Process: GEN

Emission Source: G0002

**Item 64.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one six-minute period per hour of not more than 27 percent opacity. The Department reserves the right to perform or request the performance of a Method 9 compliance test at any time.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 65: Compliance Certification**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable Federal Requirement:40CFR 52.21(j), Subpart A**

**Item 65.1:**

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The Compliance Certification activity will be performed for:

Emission Unit: U-POWER                      Emission Point: G0002  
Process: GEN                                      Emission Source: G0002

Regulated Contaminant(s):  
CAS No: 000630-08-0              CARBON MONOXIDE  
CAS No: 007446-09-5              SULFUR DIOXIDE  
CAS No: 0NY075-00-0              PARTICULATES  
CAS No: 0NY075-00-5              PM-10  
CAS No: 0NY210-00-0              OXIDES OF NITROGEN

**Item 65.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

In order to maintain compliance with 6 NYCRR Part 231-2.5 (LAER) and 40 CFR 52.21 (BACT) requirements, this generator shall be operated with the use of ignition timing retard with a turbo charger and aftercooler. Emission limits are as follows:  
NOx: 2.70 lb/mmbtu and 52.45 lb/hr  
CO: 0.26 lb/mmbtu and 5.09 lb/hr  
SO2: 0.06 lb/mmbtu and 1.16 lb/hr  
PM/PM10: 0.04 lb/mmbtu and 0.75 lb/hr

The generator shall be limited to 200 hours of operation on a rolling twelve month basis. In order to verify compliance with this limit, a log of the hours of operation of the generator and the reason for operation shall be maintained on site. Hours of operation during each month shall be recorded and summed with the previous eleven months to calculate the rolling twelve month total.

Work Practice Type: HOURS PER YEAR OPERATION  
Manufacturer Name/Model Number: Caterpillar Diesel Generator #2 Model 3516B  
Upper Permit Limit: 200 hours  
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2014.  
Subsequent reports are due every 6 calendar month(s).

**Condition 1-55: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 6 NYCRR 201-6.4 (f)**

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**Item 1-55.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-SCRUB

**Item 1-55.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within 60 days of completion of Control Device Startup on ID's numbered DS001, SCR01, and ESP01, Guardian shall submit an Operational Flexibility Notification to NYSDEC to update the permit with respect to required equipment technical data, operating status of installed equipment, and applicability of pertinent regulations associated with this permit Modification.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 1-56: Compliance Certification**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement:6 NYCRR 212-1.6 (a)**

**Item 1-56.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-SCRUB

Emission Point: L0001

Process: SCR

**Item 1-56.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The permittee will conduct observations of visible emissions from Emission Point L0001 using Method 22 on a monthly basis while the process is in operation. The permittee will investigate, in a timely manner, any instance where there is cause to believe that visible





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Prevention of Significant Deterioration (BACT), SO2 emissions from the annealing lehr are limited to 0.42 lb/hr. Emissions are to be controlled by the operation of a scrubber whenever the annealing lehr is operating. The scrubber shall be maintained and operated to provide 95% removal efficiency of sulfur dioxide emissions. To ensure the proper removal efficiency, the pH level of the scrubbing solution must be maintained between 9.0 and 11.0. The pH shall be monitored and recorded on a daily basis. Records shall be kept on site and made available to the Department upon request.

This permit condition shall remain effective until Guardian has completed the Control Device Startup.

Manufacturer Name/Model Number: DUALL MODEL F105-28 FUME SCRUBBER  
Parameter Monitored: SULFUR DIOXIDE  
Lower Permit Limit: 9.0 pH (STANDARD) units  
Upper Permit Limit: 11.0 pH (STANDARD) units  
Reference Test Method: Method 6C  
Monitoring Frequency: DAILY  
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2017.  
Subsequent reports are due every 6 calendar month(s).

**Condition 1-58: Compliance Certification**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable Federal Requirement: 40CFR 52.21(j), Subpart A**

**Replaces Condition(s) 67**

**Item 1-58.1:**  
The Compliance Certification activity will be performed for:

Emission Unit: U-SCRUB                      Emission Point: L0001  
Process: SCR

Regulated Contaminant(s):  
CAS No: 007446-09-5                      SULFUR DIOXIDE

**Item 1-58.2:**  
Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL  
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:  
In order to comply with the requirements of 40 CFR 52.21  
Prevention of Significant Deterioration (BACT), SO2



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emissions from the annealing lehr are limited to 0.42 lb/hr. Emissions are to be controlled by the operation of a scrubber whenever the annealing lehr is operating. The scrubber shall be maintained and operated to provide 95% removal efficiency of sulfur dioxide emissions. To ensure the proper removal efficiency, the pressure drop across the scrubber shall be maintained between 0.3 and 3.0" wc.

The pressure differential shall be monitored and recorded on a daily basis. Records shall be kept on site and made available to the Department upon request.

This permit condition shall remain effective until Guardian has completed the Control Device Startup.

Manufacturer Name/Model Number: DUALL MODEL F105-28 FUME SCRUBBER

Parameter Monitored: SULFUR DIOXIDE

Lower Permit Limit: 0.3 inches of water

Upper Permit Limit: 3.0 inches of water

Reference Test Method: Method 6C

Monitoring Frequency: DAILY

Averaging Method: RANGE - NOT TO FALL OUTSIDE OF STATED RANGE AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).



**STATE ONLY ENFORCEABLE CONDITIONS**

**\*\*\*\* Facility Level \*\*\*\***

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability**

**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 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.

**STATE ONLY APPLICABLE REQUIREMENTS**

**The following conditions are state applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.**

**Condition 69: Contaminant List**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable State Requirement:ECL 19-0301**

**Item 69.1:**

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000050-00-0  
Name: FORMALDEHYDE

CAS No: 000071-43-2  
Name: BENZENE

CAS No: 000630-08-0  
Name: CARBON MONOXIDE

CAS No: 007439-92-1  
Name: LEAD

CAS No: 007439-96-5  
Name: MANGANESE

CAS No: 007440-43-9  
Name: CADMIUM

CAS No: 007440-47-3  
Name: CHROMIUM

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CAS No: 007446-09-5  
Name: SULFUR DIOXIDE

CAS No: 007664-93-9  
Name: SULFURIC ACID

CAS No: 008012-95-1  
Name: MINERAL OIL

CAS No: 0NY059-28-0  
Name: NICKEL (NI 059)

CAS No: 0NY075-00-0  
Name: PARTICULATES

CAS No: 0NY075-00-5  
Name: PM-10

CAS No: 0NY210-00-0  
Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0  
Name: VOC

**Condition 70: Malfunctions and start-up/shutdown activities**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable State Requirement:6 NYCRR 201-1.4**

**Item 70.1:**

(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.

(c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working

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hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.

(d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

**Condition 71: Visible Emissions Limited**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable State Requirement:6 NYCRR 211.2**

**Item 71.1:**

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

**Condition 72: Asbestos containing surface coatings prohibited**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable State Requirement:6 NYCRR 221.2**

**Item 72.1:**

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

**\*\*\*\* Emission Unit Level \*\*\*\***

**Condition 73: Compliance Demonstration**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable State Requirement:6 NYCRR 220-2.4 (a)**

**Item 73.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN



**Item 73.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of a glass melting furnace located at a glass plant that is a major facility of oxides of nitrogen (NOx) 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.

Monitoring Frequency: MONTHLY

Averaging Method: Daily block average

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-59: Compliance Demonstration**

**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable State Requirement:6 NYCRR 220-2.4 (b)**

**Replaces Condition(s) 74**

**Item 1-59.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-59.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

In accordance with the approved Reasonably Available Control Technology (RACT) analysis, dated November 29, 2010, the existing NOx reduction technologies which may include some or all of the following: low NOx burners, oxy-firing, and/or type 1 or type 2 3R control in order to maintain NOx emissions at or below 199 lb/hr on a rolling 30 day average basis, is determined to be RACT for the glass melting furnace (ES F0001).

Guardian shall demonstrate compliance with the NOx RACT emission limit by measuring NOx emissions with a CEMS. The CEMS shall comply with the requirements of 6 NCYRR Part

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220-2.4(c). This permit condition will no longer apply after completion of the Control Device Startup.

Manufacturer Name/Model Number: THERMO-ENVIRONMENTAL INSTRUMENTS  
MODEL 42C or equivalent

Upper Permit Limit: 199 pounds per hour

Reference Test Method: Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY ROLLING AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-60: Compliance Demonstration**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable State Requirement: 6 NYCRR 220-2.4 (c)**

**Replaces Condition(s) 75**

**Item 1-60.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 1-60.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: CONTINUOUS EMISSION MONITORING (CEM)

Monitoring Description:

The owner or operator of a glass melting furnace shall install, calibrate, evaluate, operate, and maintain a CEMS, in accordance with the provisions of 40 CFR part 60, appendices A, B and F, for measuring NO<sub>x</sub> and shall record the output of the system. As part of its application for a permit or permit modification, the owner or operator of a glass melting furnace shall submit for department approval a CEMS plan.

The owner or operator of a glass melting furnace shall submit for department approval a CEMS certification protocol at least 60 days prior to CEMS certification testing. The certification protocol shall include the location of and specifications for each instrument or device, as well as procedures for calibration, operation, data evaluation, and data reporting. The procedures in subparagraphs (i) through (v) below shall be used, until completion of the Control Device Startup, for determining compliance with the NO<sub>x</sub> RACT emission limit



established under section 6 NYCRR Part 220-2.3(a).

(i) The owner or operator of a glass melting furnace shall determine compliance daily on a 30 day rolling average basis. The 30 day rolling averages shall be calculated by dividing 30 day total NO<sub>x</sub> emissions by 30 day total glass production. Only days when the furnace operates shall be included in the 30 day rolling averages.

(ii) At a minimum, valid CEMS data shall be obtained for 90 percent of the operating hours in each calendar quarter that the subject facility is operating.

(iii) All valid CEMS data shall be used in calculating emission rates even if the minimum data requirements of subparagraph (ii) above are not met.

(iv) Along with any specific additional data requirements mandated by the department for a particular glass melting furnace, annual recertifications, quarterly accuracy, and daily calibration drift tests shall be performed in accordance with 40 CFR part 60, appendix F.

(v) When NO<sub>x</sub> emissions data are not obtained because of CEMS downtime, or for periods when no valid CEMS data is available emission data shall be obtained by using the 90th percentile value of all CEMS NO<sub>x</sub> emission data collected over the last 180 days. In addition to the requirements of subparagraphs (i) through (iii) below, the owner or operator of a glass melting furnace shall comply with the CEMS recordkeeping and reporting requirements of 40 CFR part 60, subpart A and appendix F.

(i) The owner or operator of a glass melting furnace shall notify the department of the planned initial start-up date of any new CEMS.

(ii) Emissions, monitoring, and operating parameter records or measurements required by this Subpart and any additional parameters required by the department shall be maintained for at least five years and made available to the department upon request.

(iii) On a semi-annual basis, the owner or operator of a glass melting furnace shall tabulate and summarize applicable emissions, monitoring, and operating parameter measurements recorded during the preceding six months, and submit these records to the department. These records shall be submitted in a format acceptable to the department and shall include:

(a) the 30 day rolling average NO<sub>x</sub> emissions as specified under paragraph (4) of this subdivision;

(b) identification of the operating hours when NO<sub>x</sub> emissions data are not included in a calculation of the 30 day rolling average emissions and the reasons for not including that data;

(c) a comparison of the NO<sub>x</sub> emissions to the NO<sub>x</sub> RACT emissions limit(s);

(d) type and amount of fuel burned on a daily basis and



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the as burned heat content of the fuel;  
(e) the total daily NO<sub>x</sub> emissions and total daily glass production; and  
(f) the results of CEMS accuracy assessments as required by 40 CFR part 60, appendix F and any additional data quality information required by the department. Note: The Upper Permit Limit shown below does not apply during Furnace Startup, Control Device Startup, Malfunction, or Maintenance; and Abnormally Low Production Rate Days.

Manufacturer Name/Model Number: THERMO-ENVIRONMENTAL INSTRUMENTS  
MODEL 42C or equivalent

Upper Permit Limit: 199 pounds per hour

Reference Test Method: Method 7E

Monitoring Frequency: CONTINUOUS

Averaging Method: 30-DAY ROLLING AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2017.

Subsequent reports are due every 6 calendar month(s).

**Condition 76: Compliance Demonstration**  
**Effective between the dates of 07/18/2013 and 07/17/2018**

**Applicable State Requirement: 6 NYCRR 220-2.4 (d)**

**Item 76.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

**Item 76.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Protocols, reports, summaries, schedules, and any other information required to be submitted to the department under provisions of this Subpart must be sent (in either hardcopy or electronically) as follows:

(1) one copy to the Division of Air Resources, New York State Department of Environmental Conservation, 625 Broadway, Albany, New York 12233; and

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(2) one copy to Thomas L. Marriott, Regional Air Pollution Control Engineer, New York State Department of Environmental Conservation - Region 8 Office, 6274 East Avon-Lima Road, Avon, NY 14414-9519.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2014.

Subsequent reports are due every 12 calendar month(s).

**Condition 1-61: Compliance Demonstration**  
**Effective between the dates of 04/11/2017 and 07/17/2018**

**Applicable State Requirement:6 NYCRR 212-2.1 (a)**

**Item 1-61.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC                      Emission Point: F0001

Regulated Contaminant(s):  
CAS No: 000050-00-0                      FORMALDEHYDE

**Item 1-61.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The glass melting furnace emits several high toxicity air contaminants (HTACs) which include formaldehyde (based on AP-42 emission factors for glass manufacturing). Per NYSDEC DAR-1 (dated 2/28/2014), formaldehyde is A-rated. Actual annual emissions of formaldehyde exceed the Table 2 mass emission limit (pounds per year) shown for the HTAC in 6 NYCRR 212-2.2 Table 2. Emissions of this compound are not regulated by a Federal NSPS.

Formaldehyde emissions from this process are subject to the requirements of Part 212-2.3(b) Table 4 (Degree of Air Cleaning Required for Non-Criteria Air Contaminants). The emission rate potential for formaldehyde is well below 0.1 lb/hr; therefore, dispersion modeling must be performed to demonstrate that the maximum offsite air concentration is less than the applicable annual and short term guidance concentrations (AGCs and SGCs).

Guardian shall perform air dispersion modeling for emissions of formaldehyde from all Part 212-regulated sources at the facility. The results of this modeling

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shall be submitted to the NYSDEC within 60 days of the effective date of this permit.

Parameter Monitored: FORMALDEHYDE

Upper Permit Limit: 0.1 pounds per hour

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 1-62: Compliance Demonstration**  
Effective between the dates of 04/11/2017 and 07/17/2018

**Applicable State Requirement:6 NYCRR 212-2.1 (a)**

**Item 1-62.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: U-FURNC

Emission Point: F0001

Regulated Contaminant(s):

CAS No: 007439-96-5 MANGANESE

CAS No: 007440-43-9 CADMIUM

CAS No: 007440-47-3 CHROMIUM

CAS No: 0NY059-28-0 NICKEL (NI 059)

CAS No: 000071-43-2 BENZENE

**Item 1-62.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The glass melting furnace emits several high toxicity air contaminants (HTACs) which includes benzene (based on AP-42 emission factors for glass manufacturing) as well as cadmium, chromium, manganese and nickel (which result from naturally-occurring trace metal constituents in the batch materials). Per NYSDEC DAR-1 (dated 2/28/2014), Manganese is B-rated; all other identified HTACs (benzene, nickel, cadmium and chromium) are A-rated.

Actual annual emissions of benzene, cadmium, chromium, manganese, and nickel do not exceed the mass emission limit (pounds per year) shown for each respective HTAC in 6 NYCRR 212-2.2 Table 2. Therefore, the furnace is in compliance with Part 212 for these contaminants.

Monitoring Frequency: ANNUALLY

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION