

Permit ID: 6-4030-00002/00066

Renewal Number: 3

Modification Number: 1 12/09/2021

**Facility Identification Data** 

Name: CORNING INCORPORATED - CANTON PLANT

Address: MCADOO RD|334 CO RTE 16

CANTON, NY 13617

Owner/Firm

Name: CORNING INCORPORATED

Address: HP-ME-02-06 CORNING, NY 14831, USA

Owner Classification: Corporation/Partnership

**Permit Contacts** 

Division of Environmental Permits:

Name: JESSICA J HART

Address: NYSDEC - REGION 6

317 WASHINGTON ST WATERTOWN, NY 13601

Phone:

Division of Air Resources: Name: ROBERT A JACOBS Address: NYSDEC - REGION 6

317 WASHINGTON ST WATERTOWN, NY 13601

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Air Permitting Contact:

Name: AMANDA RICHARDSON Address: EHS Mgr Corning Inc

334 Co Rte 16 Canton, NY 13617 Phone:3153793265

### Permit Description Introduction

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

#### **Summary Description of Proposed Project**

Corning Canton intends to use 187.03 tons of NOx ERCs from the shutdown of Corning Inc Fallbrook Plant that were approved by NYSDEC on July 18, 2003. The remainder of required



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ERCs have been secured by Corning and the Use of Emission Reduction Credits (ERC) Form has been submitted to the NYSDEC on April 16, 2021. These credits are from Holcim (US) Inc.

#### **Attainment Status**

CORNING INCORPORATED - CANTON PLANT is located in the town of DEKALB in the county of ST LAWRENCE.

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

#### Criteria Pollutant

#### **Attainment Status**

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Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10μ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	TRANSPORT REGION (NON-ATTAINMENT)
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

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#### **Facility Description:**

Due to increased customer demand for specialty products, the Corning facility intends to increase production through the expansion of the specialty glass manufacturing capacity. The proposed project will consist of adding new glass furnaces, gas fired annealing furnaces, a new electronic calcining furnace and new raw material storage tanks. The project will be subjected to PSD for NO2 and NNSR for NOx (as an ozone precursor). The furnaces will utilize oxy-fuel firing as LAER for NOx and the annealers will use FGR and good combustion practices. As a result of this project, Process 100 is split into Processes 100 and 125.

Corning Canton intends to use 187.03 tons of NOx ERCs from the shutdown of Corning Inc 0 Fallbrook Plant that were approved by NYSDEC on July 18, 2003. The remainder of required ERCs have been secured by Corning and the Use of Emission Reduction Credits (ERC) Form has been submitted to the NYSDEC on April 16, 2021. These credits are from Holcim (US) Inc.

#### **Permit Structure and Description of Operations**

The Title V permit for CORNING INCORPORATED - CANTON PLANT

is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous

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

<sup>\*\*</sup> NOx has a separate ambient air quality standard in addition to being an ozone precursor.



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properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

combustion - devices which burn fuel to generate heat, steam or power

incinerator - devices which burn waste material for disposal

control - emission control devices

process - any device or contrivance which may emit air contaminants

that is not included in the above categories.

CORNING INCORPORATED - CANTON PLANT is defined by the following emission unit(s):

Emission unit U00AIR - This emission unit consists of 4 air handling heater units firing natural gas and are rated at 7.6 mmBtu/hr. The units heat the makeup air for the building and exhaust into the building.

Process: AIR is located at Building MAIN PLANT - This process consists of 4 make-up air heaters rated at 7.6 mmBtu/hr

Emission unit U00004 - This unit consists of the sealing and annealling furnace sources for glass production.

Emission unit U00004 is associated with the following emission points (EP): C1643, C1644, C1645, C1658

Process: 400 is located at Building MAIN PLANT - This process handles the sealing and annealing of glass components.

Process: 401 This process involves frit application and sealing glass components.

Emission unit 000005 - This unit addresses furnace operations in Processes 500 and 505. This unit also includes calcium fluoride crystal inspection, operations in Process 503, and the Radome operations in Process 506.

Emission unit 000005 is associated with the following emission points (EP): C0059, C0060, C0061, C1650, C1651, C1653, C1654, C1655, C1656, C1657, C1659, C1664, C1668, C1669, C1670

Process: 500 This process includes the growth operations involved with the calcium fluoride crystal process and addresses S7 furnaces.



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Process: 503 This process includes the inspection of crystals using a laser.

Process: 505 This process involves the use of furnaces to reform glass and remove impurities.

Process: 506 This process includes Radome operations.

Emission unit U00007 - This unit consists of miscellaneous emission sources that do not align with other existing emission units.

Process: 705 is located at Building MAIN PLANT - This process includes new annealing furnaces, one emergency generator and building heating sources that were permitted as part of the Canton Expansion Project.

Emission unit U00001 - This unit consists of forming furnaces for glass production.

Emission unit U00001 is associated with the following emission points (EP):

C1646, C1647, C1648, C1649

Process: 100 is located at Building MAIN PLANT - This process includes the operation of glass forming furnaces subject to PSD / NSR BACT / LAER and specific NOx, PM, and PM10 emission limits.

Process: 125 is located at Building MAIN PLANT - This process includes the operation of glass forming furnaces subject to PSD / NSR BACT / LAER.

Process: 150 This process includes the operation of glass forming furnaces subject to NSR/PSD and Fume Reactor Units.

Process: 175 is located at Building MAIN PLANT - This process includes the operation of glass forming furnaces subject to PSD / NSR BACT / LAER.

Emission unit U00002 - This unit consists of glass etching areas.

Emission unit U00002 is associated with the following emission points (EP): C1608, C1641

Process: 200 is located at Building MAIN PLANT - This process includes glass etching.

Emission unit 000006 - This emission unit contains emergency stationary generators. Emission Unit 0-00006 contains exempt emergency generators subject to either 40CFR 63 Subpart ZZZZ or 40CFR 60 Subpart IIII.

Emission unit 000006 is associated with the following emission points (EP): C0050, C0052, C0053, C1666, CU090, CU091



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Process: 600 This process consists of existing CI and SI Emergency RICE subject to 40 CFR 63 Subpart ZZZZ.

Process: 601 is located at Building MAIN PLANT - This process consists of CI Emergency RICE subject to 40 CFR 60 Subpart IIII.

#### Title V/Major Source Status

CORNING INCORPORATED - CANTON PLANT is subject to Title V requirements. This determination is based on the following information:

Corning Incorporated Canton Plant is subject to Title V requirements. The facility is major for Nitrogen Oxides.

#### **Program Applicability**

The following chart summarizes the applicability of CORNING INCORPORATED - CANTON PLANT with regards to the principal air pollution regulatory programs:

#### **Regulatory Program**

#### **Applicability**

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

#### NOTES:

PSD Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR 231-5, 231-6) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61, 6 NYCRR 200.10) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments



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of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

MACT Maximum Achievable Control Technology (40 CFR 63, 6 NYCRR 200.10) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

NSPS New Source Performance Standards (40 CFR 60, 6 NYCRR 200.10) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212-3, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH, 6 NYCRR 200.10) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

#### **Compliance Status**

Facility is in compliance with all requirements.

#### **SIC Codes**

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

SIC Code Description



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3229 PRESSED AND BLOWN GLASS, NEC

#### SCC Codes

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

SCC Code Description

1-03-007-99	EXTERNAL COMBUSTION BOILERS -
	COMMERCIAL/INDUSTRIAL
	COMMERCIAL/INSTITUTIONAL BOILER - PROCESS
	GAS
	Other Not Classified
1-05-001-06	EXTERNAL COMBUSTION BOILERS - SPACE HEATERS
	INDUSTRIAL SPACE HEATER
	Natural Gas
2-02-001-02	INTERNAL COMBUSTION ENGINES - INDUSTRIAL
	INDUSTRIAL INTERNAL COMBUSTION ENGINE -
	DISTILLATE OIL(DIESEL)
	Reciprocating
3-03-009-34	PRIMARY METAL PRODUCTION
	PRIM METAL PROD-STEEL MFG(SEE 303015 FOR
	INTEGRATED IRON & STEEL MACT)
	Heat Treating Furnaces: Annealing
3-05-014-01	MINERAL PRODUCTS
	MINERAL PRODUCTS - GLASS MANUFACTURE
	FURNACE/GENERAL**
3-05-014-08	MINERAL PRODUCTS
	MINERAL PRODUCTS - GLASS MANUFACTURE
	Pressed and Blown Glass: Forming/Finishing
3-05-014-10	MINERAL PRODUCTS
	MINERAL PRODUCTS - GLASS MANUFACTURE
	Raw Material Handling (All Types of Glass)
3-05-014-11	MINERAL PRODUCTS
3 03 011 11	MINERAL PRODUCTS - GLASS MANUFACTURE
	GENERAL **
3-05-014-15	MINERAL PRODUCTS
3 33 311 13	MINERAL PRODUCTS - GLASS MANUFACTURE
	Glass Etching w/ Hydrofluoric Acid Solution
	Grass Eccuring w/ mydrolluoric Acid Solution

### **Facility Emissions Summary**

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents



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a federally enforceable emissions cap or limitation for that contaminant. The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
000106-99-0	1,3-BUTADIENE	0.12	TIE tons/yr	Actual 105/yi	rictual tolls/yl
000091-57-6	2-METHYL	0.02			
000071 57 0	NAPHTHALENE	0.02			
000108-10-1	2-PENTANONE, 4- METHYL	5639			
000056-49-5	3-	0.0015			
	METHYLCHOLA NTHRENE				
000057-97-6	7,12- DIMETHYLBENZ[ A]ANTHRACENE	0.0134			
000083-32-9	ACENAPHTHENE	0.0015			
000208-96-8	ACENAPHTHYLE NE	0.0015			
000075-07-0	ACETALDEHYDE	3.66E-7			
000107-02-8	ACROLEIN	1.14E-7			
000120-12-7	ANTHRACENE	0.002			
007440-38-2	ARSENIC	0.167			
007440-39-3	BARIUM	4.7			
000071-43-2	BENZENE	1.75			
000098-82-8	BENZENE, (1- METHYLETHYL)	40.4			
000056-55-3	BENZO(A)ANTHR ACENE	0.0015			
000050-32-8	BENZO(A)PYREN E	0.001			
000205-99-2	BENZO[B]FLUOR ANTHENE	0.0015			
000191-24-2	BENZO[G,H,I]PER YLENE	0.001			
000207-08-9	BENZO[K]FLUOR ANTHENE	0.0015			
007440-41-7	BERYLLIUM	0.01			
000106-97-8	BUTANE	2244			
007440-43-9	CADMIUM	0.919			
000124-38-9	CARBON DIOXIDE	131147530			
0NY750-00-0	CARBON DIOXIDE		121389		
000620 00 0	EQUIVALENTS	60200			
000630-08-0	CARBON MONOXIDE	68200			
007782-50-5	CHLORINE	0.38			
007440-47-3	CHROMIUM	1.17			
000218-01-9	CHRYSENE	0.0015			
007440-48-4	COBALT	0.0701			
007440-50-8	COPPER	0.9			
000053-70-3	DIBENZ[A,H]ANT HRACENE				
025321-22-6	DICHLOROBENZ ENE	1			
000074-84-0	ETHANE	3313			
000111-76-2	ETHANOL, 2- BUTOXY-	154.11			
000100-41-4	ETHYLBENZENE	480.38			



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000206-44-0	FLUORANTHENE	0.0025
000086-73-7	FLUORENE	0.00234
000050-00-0	FORMALDEHYDE	62.7
000110-54-3	HEXANE	1924
000822-06-0	HEXANE, 1,6-	13.5
	DIISOCYANATO-	
007647-01-0	HYDROGEN	7530.72
	CHLORIDE	
007664-39-3	HYDROGEN	7846
	FLUORIDE	
000193-39-5	INDENO[1,2,3-	0.0015
	CDIPYRENE	
007439-92-1	LEAD	0.404
007439-96-5	MANGANESE	0.318
007439-97-6	MERCURY	0.217
000074-82-8	METHANE	37920
007439-98-7	MOLYBDENUM	1.2
000091-20-3	NAPHTHALENE	0.509
007440-02-0	NICKEL METAL	1.75
007.1.0 02 0	AND INSOLUBLE	1170
	COMPOUNDS	
010024-97-2	NITROUS OXIDE	245.6
0NY210-00-0	OXIDES OF	1423711
****	NITROGEN	
250	PAH/POM -	1.42
	UNSPECIFIED	
	HAP-VOC	
	POLYCYCLIC	
	ORGANIC	
	MATTER	
0NY075-00-0	PARTICULATES	98651
000109-66-0	PENTANE	2779
000085-01-8	PHENANTHRENE	0.0142
000108-95-2	PHENOL	221.5
0NY075-02-5	PM 2.5	15260
0NY075-00-5	PM-10	76187
000074-98-6	PROPANE	1710
000115-07-1	PROPYLENE	45.58
000129-00-0	PYRENE	0.00418
007782-49-2	SELENIUM	0.02
001310-73-2	SODIUM	12
	HYDROXIDE	
007446-09-5	SULFUR DIOXIDE	79500
007664-93-9	SULFURIC ACID	0.5
000108-88-3	TOLUENE	2.84
0NY100-00-0	TOTAL HAP	21548
007440-62-2	VANADIUM	2.5
0NY998-00-0	VOC	43496
001330-20-7	XYLENE, M, O &	2.8E-6
	P MIXT.	
007440-66-6	ZINC	31

#### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

# Item A: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b) The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section



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503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

#### Item B: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(a)(4)

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

#### Item C: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)

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

#### Item D: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)

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

### Item E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)

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

### Item F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)

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

#### Item G: Property Rights - 6 NYCRR 201-6.4(a)(6)

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

#### Item H: Severability - 6 NYCRR Part 201-6.4(a)(9)

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

#### Item I: Permit Shield - 6 NYCRR Part 201-6.4(g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as



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of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

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

#### Item J: Reopening for Cause - 6 NYCRR Part 201-6.4(i)

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

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 2 01-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

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



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#### Item K: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

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

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

#### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

#### Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

- (a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
  - (2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;
  - (3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
  - (4) The facility owner or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (b) In any enforcement proceeding, the facility owner or operator



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seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement. item 02

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

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

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

#### **Regulatory Analysis**

Location Facility/EU/EP/P	Regulation rocess/ES	Condition	Short Description
 FACILITY	ECL 19-0301	59	Powers and Duties of the Department with respect to air
FACILITY	40CFR 60-IIII	52	pollution control Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
FACILITY	40CFR 63-ZZZZ	53	Reciprocating Internal Combustion
FACILITY	40CFR 64	1 -12	Engine (RICE) NESHAP COMPLIANCE ASSURANCE MONITORING
FACILITY	40CFR 68	19	Chemical accident prevention provisions
FACILITY	40CFR 82-F	20	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	60, 1 -22	equipment. Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	11	Recycling and Salvage



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FACILITY	6NYCRR 201-1.8	12	Prohibition of reintroduction of collected contaminants to the
FACILITY	6NYCRR 201-3.2(a)	13	air Exempt Activities -
FACILITY	6NYCRR 201-3.3(a)	14	Proof of eligibility Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	21, 55, 56	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	15	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	16	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	Records of Monitoring, Sampling and Measurement
FACILITY	6.4(c)(3)(ii	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	22	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)	23, 1 -1	Operational Flexibility
FACILITY	6NYCRR 201-6.4(f)(6)	17	Off Permit Changes
FACILITY	6NYCRR 201-6.4(g)	24, 25, 26, 1 -2	Permit Shield
FACILITY	6NYCRR 201-6.5(a)	61	State Enforceable Requirements
FACILITY	6NYCRR 201-7	28	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1.1	18	Required emissions tests.
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	62	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	35	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 212-1.6(a)	36	Limiting of Opacity
FACILITY	6NYCRR 212-2.1(a)	1 -23	HTACs applicable to
U-00001/-/175	6NYCRR 212-2.1(a)	1 -27, 1 -28	Table 212-2.3 Table 4 HTACs applicable to
FACILITY	6NYCRR 212-2.1(b)	1 -7	Table 212-2.3 Table 4 Conditions should be
- <del>-</del>			cited under Table 3 or Table 4, 212-2.3 (a) or (b)
FACILITY	6NYCRR 212-2.3(b)	64, 65, 66	State Air Program Non-Criteria air



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U-00001/-/175	6NYCRR 212-2.3(b)	1 -29, 1 -30	contaminants subject Table 4 State Air Program Non-Criteria air contaminants subject Table 4
FACILITY	6NYCRR 212-2.4(b)	39, 1 -24, 1 -25	Control of Particulate from New and Modified Process
U-00001/-/100/K0002	6NYCRR 212-2.4(b)	1 -26	Emission Sources Control of Particulate from New and Modified Process
FACILITY	6NYCRR 212-3.1(a)(2)	40	Emission Sources RACT applicability for facilities outside of Lower Orange Co and NYC Metro area
FACILITY	6NYCRR 212-3.1(f)	41	Owners or operators of applicable emission points commences construction after
FACILITY	6NYCRR 215.2	9	August 15, 1994 Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2(g)	42	Sulfur-in-Fuel Limitations
U-00AIR	6NYCRR 227-2	1 -21	Reasonably available control technology for NOx
FACILITY	6NYCRR 228-1.3(a)	43	Surface Coating General Requirements- Opacity
FACILITY	6NYCRR 228-1.3(b)(2)	44	General Requirements - Record Keeping
FACILITY	6NYCRR 228-1.3(c)	45	Surface Coating General Requirements- Prohibitions
FACILITY	6NYCRR 228-1.3(d)	46	Surface Coating General Requirements- Handling, storage and
U-00001/-/150	6NYCRR 231-11.2(b)	1 -16	disposal Reasonable Possibility requirements for insignificant mods - less than 50% with
U-00001/-/150	6NYCRR 231-11.2(c)	1 -17	excluded emissions Reasonable Possibility requirements for insignificant mods - greater than 50% with
FACILITY	6NYCRR 231-6	1 -8, 1 -9, 1 -10	excluded emissions Mods to Existing Major Facilities in Nonattainment and Attainment Areas of
FACILITY	6NYCRR 231-6.5	49	the State in the OTR Lowest achievable emission rate, LAER
U-00001	6NYCRR 231-6.5	1 -13	Lowest achievable



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			emission rate, LAER
U-00001/-/100	6NYCRR 231-6.5	1 -14	Lowest achievable emission rate, LAER
U-00001/-/125/S0006	6NYCRR 231-6.5	1 -15	Lowest achievable emission rate, LAER
U-00001/-/150/S0070	6NYCRR 231-6.5	1 -18	Lowest achievable emission rate, LAER
U-00001/-/175	6NYCRR 231-6.5	1 -19	Lowest achievable emission rate, LAER
U-00007/-/705	6NYCRR 231-6.5	1 -20	Lowest achievable emission rate, LAER
FACILITY	6NYCRR 231-6.6	1 -11	Emission offset requirements

#### **Applicability Discussion:**

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

#### ECL 19-0301

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

#### 6 NYCRR 200.6

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

#### 6 NYCRR 200.7

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

#### 6 NYCRR 201-1.4

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

#### 6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

#### 6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

#### 6 NYCRR 201-3.2 (a)

An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.



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#### 6 NYCRR 201-3.3 (a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

#### 6 NYCRR Subpart 201-6

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

#### 6 NYCRR 201-6.4 (a) (4)

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

#### 6 NYCRR 201-6.4 (a) (7)

This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

#### 6 NYCRR 201-6.4 (a) (8)

This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

#### 6 NYCRR 201-6.4 (c)

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

#### 6 NYCRR 201-6.4 (c) (2)

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



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#### 6 NYCRR 201-6.4 (c) (3) (ii)

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

#### 6 NYCRR 201-6.4 (d) (4)

This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

#### 6 NYCRR 201-6.4 (e)

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

#### 6 NYCRR 201-6.4 (f) (6)

This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

#### 6 NYCRR 201-6.4 (g)

Permit Exclusion Provisions - specifies those actions, such as administrative orders, suits, claims for natural resource damages, etc that are not affected by the federally enforceable portion of the permit, unless they are specifically addressed by it.

#### 6 NYCRR 202-1.1

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

#### 6 NYCRR 202-2.1

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

#### 6 NYCRR 202-2.5

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

#### 6 NYCRR 211.2

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

#### 6 NYCRR 215.2

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

#### 40 CFR Part 68

This Part lists the regulated substances and there applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.



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#### 40 CFR Part 82, Subpart F

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

#### **Facility Specific Requirements**

In addition to Title V, CORNING INCORPORATED - CANTON PLANT has been determined to be subject to the following regulations:

#### 40 CFR Part 60, Subpart IIII

Subpart IIII applies to new and reconstructed compression ignition reciprocating internal combustion engines. Sources subject to Subpart IIII must comply with emission standards for hydrocarbons, nitrogen oxides, carbon monoxide, and particulate matter.

#### 40 CFR Part 63, Subpart ZZZZ

This regulation states requirements for emissions of hazardous air pollutants from stationary reciprocating internal combustion engines.

#### 40 CFR Part 64

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

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

#### 6 NYCRR 201-6.4 (f)

This section describes the potential for certain operational changes to be made by the facility owner or operator without first obtaining a permit modification. Changes made pursuant to this provision must meet all of the criteria described in this section to qualify for consideration as operational flexibility. The Department reserves the right to require the facility owner or operator to obtain a permit modification prior to making any changes at the facility pursuant to this section.



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#### 6 NYCRR 201-6.5 (a)

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

#### 6 NYCRR 211.1

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

#### 6 NYCRR 212-1.6 (a)

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

#### 6 NYCRR 212-2.1 (a)

This provision is for an air contaminant listed in Section 212-2.2 Table 2 - High Toxicity Air Contaminant List (HTAC). The facility owner or operator must either limit the actual annual emissions from all process operations at the facility so as to not exceed the mass emission limit listed for the individual HTAC; or demonstrate compliance with the air cleaning requirements for the HTAC as specified in Subdivision 212-2.3(b), Table 4.

#### 6 NYCRR 212-2.1 (b)

This provision applies to any air contaminant not listed on the High Toxicity Air Contaminant List (HTAC) and states the facility owner or operator shall not allow emissions of an air contaminant to violate the requirements specified in Subdivision 212-2.3(a), Table 3 - or Table 4.

### 6 NYCRR 212-2.3 (b)

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



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#### 6 NYCRR 212-2.4 (b)

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

### 6 NYCRR 212-3.1 (a) (2)

This provision states that owners and/or operators of facilities located outside of the the Lower Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, and Woodbury or New York City metropolitan area with an annual potential to emit of 100 tons or more of NOx or 50 tons or more of VOCs must comply with the requirements of this section.

#### 6 NYCRR 212-3.1 (f)

This provision states that owners and/or operators of emission points located at applicable facilities and commence construction after August 15, 1994 must submit a RACT demonstration for nitrogen oxides and VOC emissions with each application for a permit to operate. RACT must be implemented on these emission points when operation commences. A RACT analysis is not required for new emission points with NOx and VOC emission rate potentials less than 3.0 pounds per hour and actual emissions in the absence of control equipment less than 15.0 pounds per day at facilities located outside of the Lower Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, and Woodbury and New York City metropolitan area.

#### 6 NYCRR 225-1.2 (g)

Sulfur-in-fuel limitations for the purchase of distillate oil on or after July 1, 2014.

#### 6 NYCRR 228-1.3 (a)

This citation prohibits owners or operators of emission sources from allowing emissions to the outdoor atmosphere, which reduce the visibility through the atmosphere by 20 percent or greater for any consecutive six-minute period.

#### 6 NYCRR 228-1.3 (b) (2)



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#### 6 NYCRR 228-1.3 (c)

This citation prohibits anyone from facilitating in any way the use of a coating in violation of these regulations.

#### 6 NYCRR 228-1.3 (d)

This citation directs the owners or operators of coating operations to minimize the emissions of volatile organic compounds to the atmosphere by properly handling, storing and disposing of coatings containing volatile organic compounds.

#### 6 NYCRR 231-11.2 (b)

This subdivision is referred to as the "Reasonable Possibility" provisions. This citation lists the record keeping requirements for insignificant modifications that are less than 50% of the applicable significant project threshold including excluded emissions as defined in Part 231-4.1(b)(40)(i)(c).

#### 6 NYCRR 231-11.2 (c)

This citation lists the record keeping requirements for insignificant modifications that are greater than 50% of the threshold including excluded emissions as defined in 231-4.1(b)(40)(i)(c) of this Part.

#### 6 NYCRR 231-6.5

This section outlines what LAER is and how it is determined.

#### 6 NYCRR 231-6.6

This section states what the emission offset requirements are for a facility subject to this Subpart.

#### 6 NYCRR Subpart 201-7

This regulation sets forth an emission cap that cannot be exceeded by the facility.



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### 6 NYCRR Subpart 227-2

This regulation limits the emission of oxides of nitrogen (NOx) from stationary combustion installations (boilers, combustion turbines and internal combustion engines).

### 6 NYCRR Subpart 231-6

This Subpart applies to modifications to existing major facilities in non-attainment areas and attainment areas of the State within the OTR.

### Compliance Certification Summary of monitoring activities at CORNING INCORPORATED - CANTON PLANT:

Location Facility/EU/EP/Process/ES	Cond N	No. Type of Monitoring
FACILITY	1-12	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	23	record keeping/maintenance procedures
FACILITY	1-2	record keeping/maintenance procedures
FACILITY	24	record keeping/maintenance procedures
FACILITY	25	record keeping/maintenance procedures
FACILITY	26	record keeping/maintenance procedures
FACILITY	1-3	monitoring of process or control device parameters as surrogate
FACILITY	1-4	monitoring of process or control device parameters as surrogate
FACILITY	1-5	record keeping/maintenance procedures
FACILITY	1-6	intermittent emission testing
FACILITY	29	monitoring of process or control device parameters
		as surrogate
FACILITY	34	work practice involving specific operations
0-00006	57	work practice involving specific operations
FACILITY	7	record keeping/maintenance procedures
FACILITY	36	record keeping/maintenance procedures
FACILITY	1-23	record keeping/maintenance procedures
U-00001/-/175	1-27	record keeping/maintenance procedures
U-00001/-/175	1-28	record keeping/maintenance procedures
FACILITY	1-7	record keeping/maintenance procedures
FACILITY	64	record keeping/maintenance procedures
FACILITY	65	record keeping/maintenance procedures
FACILITY	66	record keeping/maintenance procedures
U-00001/-/175	1-29	record keeping/maintenance procedures
U-00001/-/175	1-30	record keeping/maintenance procedures
FACILITY	1-24	monitoring of process or control device parameters as surrogate
FACILITY	1-25	intermittent emission testing
FACILITY	39	intermittent emission testing
U-00001/-/100/K0002	1-26	intermittent emission testing
FACILITY	40	record keeping/maintenance procedures



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FACILITY	41	record keeping/maintenance procedures
FACILITY	42	work practice involving specific operations
U-00AIR	1-21	record keeping/maintenance procedures
FACILITY	43	monitoring of process or control device parameters as surrogate
FACTLITTY	4 4	record keeping/maintenance procedures
FACILITY	45	record keeping/maintenance procedures
FACILITY	46	record keeping/maintenance procedures
U-00001/-/150	1-16	record keeping/maintenance procedures
U-00001/-/150	1-17	record keeping/maintenance procedures
FACILITY	1-8	monitoring of process or control device parameters
		as surrogate
FACILITY	1-9	monitoring of process or control device parameters
		as surrogate
FACILITY	1-10	monitoring of process or control device parameters
		as surrogate
FACILITY	49	monitoring of process or control device parameters
		as surrogate
U-00001	1-13	monitoring of process or control device parameters
		as surrogate
U-00001/-/100	1-14	intermittent emission testing
U-00001/-/125/S0006	1-15	continuous emission monitoring (cem)
U-00001/-/150/s0070	1-18	intermittent emission testing
U-00001/-/175	1-19	intermittent emission testing
U-00001/-/173	1-20	record keeping/maintenance procedures
FACILITY	1-11	record keeping/maintenance procedures

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#### **Basis for Monitoring**

Condition 5-6 NYCRR 201-6.4 (c)(3)(ii): This condition specifies reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken. Compliance with this requirement will be reported semiannually.

Condition 6 - 6 NYCRR 201-6.4 (e): This monitoring condition outlines the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and DEC regional office address where the reports are to be sent.

Condition 7 - 6 NYCRR 202-2.1: This condition requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year. It further outlines where these statements should be mailed.

Condition 23 – 6 NYCRR 201-6.4 (f): This condition outlines the facility "operational flexibility" parameters. It allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. This condition outlines the specific requirements for the facility to complete an operational flexibility change.

Condition 24 – 6 NYCRR 201-6.4 (g): This condition outlines that the applicable requirements included in this permit apply to equipment while in production mode. R&D operations occurring in equipment subject to a cap are still subject to the cap, but no other underlying applicable permitting requirements. Corning will implement good engineering and maintenance practices to



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minimize emissions from R&D operations. This condition also requires that the department be notified 30 days prior to the use of permitted equipment for R&D that would result in the emission of a new contaminant, or an increase of a contaminant. This notification shall also contain an estimation quantifying those emissions and any regulatory limits that still apply.

Condition 25 – 6 NYCRR 201-6.4 (g): This condition verifies that small gas fired boilers at major sources of NOx remain exempt from permitting. Further, this condition requires that small boilers between 1-20 mmbtu/hr must perform an annual tune up and document information regarding this tune up. Documentation must include date of last tune up, and the name, title and affiliation of the person who made the adjustments. This documentation may take the form of bound log books, electronic records, and/or vendor records and receipts. This condition shall be reported upon annually.

Condition 26 – 6 NYCRR 201-6.4 (g): This condition verifies that the emergency generators included in emission unit 0-00006 and the facility's miscellaneous exempt combustion sources are exempt from part 227 NOx RACT requirements as long as the emergency generators (S0034-S0037) are limited to 510 hours per year combined. Additionally, all other emission unit 0-00006 emergency generators are operated less than 500 hours year each. This condition is to be monitored and reported upon annually.

Condition 27 - 6 NYCRR 201-6.4(g): This condition outlines the regulations that do not apply to the facility and why they don't apply. Any changes in the future will require review of the list to either add or subtract requirements.

Condition 28- This condition states the potential to emit of the 3 diesel generators listed in the capping condition #29.

Conditions 1-3, 1-4, 1-5, and 1-6-6NYCRR 201-7-These are the capping conditions including the new and midified sources. Compliance with the caps are written elseware in the permit.

Condition 29 – 6 NYCRR Subpart 201-7: This monitoring condition will limit emissions of sulfur dioxide below 79500 pounds per year by capping hours of operation for the diesel generators to 510 hours per year combined. Corning will maintain operating records including hours of operation and annual emissions for these generators and submit to DEC as required. The emission factor used to determine SO2 compliance will be determined by manufacturer's test data. The only change to this condition from Renewal 2 Modification 0 is the removal of a source.

Condition 34 - 6 NYCRR Subpart 201-7: This monitoring condition requires Corning to maintain records of nitrogen oxides emissions for emission units 0-00005 and 0-00006. The hours of operation for the diesel generators cited in emission unit 0-00006 are limited to 510 hours per year combined and 155 lbs/hr. Corning will maintain operating records for all generators and submit to DEC on a semi annual basis.

Condition 36 - 6 NYCRR 212-1.6(a): This condition requires the facility to observe the emission points from the listed sources at least once per month while in operation, to ensure the emissions



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do not go above 20% opacity on a 6 minute average. While operating properly, there should be little to no visible emissions. Any observations above the normal will require an EPA method 9 test and follow-up investigations and corrective actions. Records are to be kept for all activity.

Condition 1-7 - 212-2.1(b): This condition requires an air dispersion model to show Carbon Monoxide emissions are not above impact thresholds in Part 212. Any increase in ERP of the listed sources of Carbon Monoxide will require the submission of a new analysis of the impacts.

Condition 39–6 NYCRR 212-2.4(b): This condition limits the emissions of solid particulates to less than 0.05 grains of particulates per cubic foot of exhaust gas. This condition is an emissions testing requirement that is to be conducted at the discretion of the Department. This condition is to be monitored and reported upon once during the term of the permit.

Condition 40 - This condition just states the facility must use Reasonably Available Control Technology to control emissions of VOC and NOx. Specific conditions are listed elseware in the permit.

Condition 41 - 6 NYCRR 212-3.1 (f): This condition requires that emission unit U-00001 process 150 glass forming furnaces use oxygen firing to minimize NOx formation to comply with RACT.

Condition 42 - 6 NYCRR 225-1.2 (g): This requirement limits the purchase of fuel oil to oil with a sulfur content of 0.0015% sulfur after July 1, 2014. This requirement requires record keeping for at least five years for each delivery. Further, compliance should be reported on a semi annual basis.

Condition 43- 6 NYCRR 228-1.3(a): This requires the facility to make visible emissions observations on these sources listed and maintain the records for 5 years.

Condition 44: The facility must track any non-compliant, exempt coatings being used at the facility. Usage must not go above 55 gallons for the year. Records must be kept to show compliance for 5 years.

Condition 45: This condition says a facility cannot sell, specify or use non-compliant coatings, and must certify the voc content of the coatings used or offered.

Condition 46- 6 NYCRR Part 228-1.3(d)- This condition outline the requirements of proper operation for the listed sources under part 228. They need to certify compliance semi-annually.

Condition 1-8 – 231-6: this condition limits the emissions of nitrogen oxides to 330.95 tons per year for the emission units and processes listed. They will track emission below 315.42 tpy in order to ensure compliance with the limit. Corning will track emissions on a 12 month rolling basis to demonstrate compliance with this emission limit. Emission factors and calculations are subject to NYSDEC approval. Records for demonstrating compliance with this limit shall be maintained for 5 years. This condition outlines that Corning is a major facility for PSD and this limit is also applicable to the compliance of PSD. This condition shall be monitored monthly and reported upon semi annually.



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Condition 1-9-231-6: NOx emissions are limited to 315.42tpy for the listed sources. Calculations will be used to track compliance on a 12 month rolling total basis.

Condition 1-10-231-6: NOx emissions from Process 100 has been modified to be 310.36 tpy. Compliance will be shown through calculations using emission factors established through stack testing.

Condition 49 – 6 NYCRR 231-6.5: This condition limits NOx emissions based on a LAER determination. Corning has determined that LAER for the glass forming furnaces comprised of emission unit U-00001 process 100 glass forming furnaces which will be in operation at this facility is gas-oxy firing technology using oxygen concentration of 99% or greater. These furnaces are required to use gas-oxy firing technology while in use. Corning canton is also subject to 40 CFR 52.21. Since a LAER determination has been made, the requirements of BACT and RACT have been satisfied.

Condition 52 - 40 CFR 63 Subpart IIII- This facility has sources subject to the requirements of this regulation. This regulation has not been delegated to the DEC.

Condition 53 - 40 CFR 60 Subpart ZZZZ- This facility has sources subject to the requirements of this regulation. This regulation has not been delegated to the DEC.

Condition 1-12 – 40 CFR Part 64: This condition applies to the federal Compliance Assurance Monitoring (CAM) rule, which requires Corning to monitor control devices, capture systems, and/or process parameters to provide a reasonable assurance of compliance with emission limitations or standards. This condition outlines the sources subject to CAM and the specific requirements of the rule that apply.

Condition 57-This conditions requires the tracking of fuel thruput in the generators to ensure they stay beow the NOx cap.

Condition 1-13- 6NYCRR - This condition establishes LAER control on the furnaces is oxy firing to control NOx emissions. This also shows compliance with BACT and RACT.

Conditions 1-14, 1-15, 1-18, 1-19, 6NYCRR-231-6.5- These conditions establish the lb/hr emission limits of NOx for the listed sources.

Condition 1-20 - 6NYCRR 231-6.5- This condition establishes LAER for NOX from the listed source as flue gas recirculation and good combustion techniques.

Condition 1-23 - 6 NYCRR Part 212-2.1(a) - The facility shall maintain records that the mass emission limits for the listed High Toxicity Air Contaminants will not be exceeded on an annual basis. Modeling will be required once the emissions go above the limit.

Condition 64 - 6 NYCRR Part 212-2.3(b) - This condition says if any emissions of the listed hazardous ar pollutants goes above 100 lbs/year, a 212 analysis will be conducted.



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Condition 65 - 6 NYCRR Part 212-2.3(b) - This condition requires Air impact modeling of any any changes to Hydrogen Fluoride emissions from the facility in order to ensure compliance with the standard under 6 NYCRR Part 257-8.

Condition 66 - 6 NYCRR Part 212-2.3(b) - This condition requires stack testing for fluorides once per permit term from the emission sources. The results will be used to show compliance with the monthly ambient air quality standard of 1 ppb.

Condition 1-26- 6 NYCRR 212-2.4(b)- This condition requires representative testing of the listed sources once per permit term in order to show compliance with the permit limit.

A CLCPA document was submitted for this project to show consistancy with CLCPA. Corning evaluated utilizing electric combustion units, combustion of hydrogen and hydrogen-enriched natural gas (HENG) as some possible methods to reduce GHG emissions. None of these alternatives are currently viable for Corning's operations. The HPFS Fused Silica (HPFS) and ULE Ultra-Low Expansion Glass (ULE) glasses manufactured by the facility have very specific quality requirements that cannot be achieved with the alternatives, including the high heat needed to oxidize the raw materials. For the hydrogen fuel options, substantial research and development would be needed to see if it would be compatible with the production process, including seeing if there would be any unwanted reactions occurring in the glass furnaces.

Corning is making changes through their Responsible Growth Campaign, which is an internal company project to reduce their environmental impact. With assistance from the New York State Energy Research & Development Authority (NYSERDA), Corning Canton has contracted a long-term power purchase agreement from a solar array in Tonawanda, NY. The array will address approximately 20% of the Canton plant's electric load. Corning is planning to increase its use of renewable energy by 400% from a 2018 baseline by 2030.

Corning is also involved in two hydropower programs with the New York Power Authority (NYPA) that account for approximately 30% of Canton's electricity.