

Facility DEC ID: 9294000049

PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 9-2940-00049/00022
Mod 0 Effective Date: 03/03/2016 Expiration Date: 03/02/2026
Mod 1 Effective Date: 03/30/2020 Expiration Date: 03/02/2026

Permit Issued To: SAINT-GOBAIN CERAMICS & PLASTICS INC
1 NEW BOND RD
PO BOX 15008
WORCESTER, MA 01606-2614

Contact: Chris Ciccarelli
6600 WALMORE RD
NIAGARA FALLS, NY 14304
(716) 731-8220

Facility: SAINT-GOBAIN CERAMICS & PLASTICS INC
6600 WALMORE ROAD
NIAGARA FALLS, NY 14304

Contact: Chris Ciccarelli
6600 WALMORE RD
NIAGARA FALLS, NY 14304
(716) 731-8220

Description:
Saint-Gobain Ceramics & Plastics Inc is a manufacturing facility located in the city of Niagara Falls, NY. The facility produces abrasive grains for grinding wheels and sand papers. The basic processes are mixing, gelation, drying, calcining (800 C), sintering (1300 C), grading, and packaging. The facility is organized into two emission units: 1-DRYER and 1-DSTCL.

This permit modification (Ren 0 Mod1) adds additional calciners (2), targa ovens (2), and a proposed new dipping process.

Nitric acid and nitrogen dioxide are released during the production of abrasive grains. The facility is subject to the requirements of 6NYCRR Part 212. In order to determine compliance with the regulation Saint-Gobain conducted a facility-wide Part 212 analysis using AERMOD modeling to determine the fence line impacts in accordance with DAR-10 Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis. The modeling results were submitted on February 27, 2020 and showed compliance with Part 212 when using existing air pollution control equipment. Modeling inputs included

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emissions calculations from the proposed additional calciners (2) and targa ovens (2), and a proposed new dipping process to be added as of this modification (Ren 0 Mod 1).

Emission unit 1-DRYER consists of the mixing, gelation, drying, calcining, and sintering steps for the production of ceramic materials and associated emission control equipment. Included are the S-4 dryer, the NOx Tower, the Targa Dryers, the Drum dryer and the HTB Dryer. The calcining step generates particulates, nitrogen oxide emissions which are treated in a four-stage scrubbing system identified as a NOx tower which scrubs NOx emissions and recovers nitric acid for re-use in the gelation step. Emissions of air pollutants such as nitric acid, nitrogen oxides, and particulates from the targa dryers, HTB dryer, and drum dryer are treated with packed bed and impingement scrubbers.

Emission unit 1-DSTCL consists of the pneumatic conveyor system SLY dust collector, central vacuum dust collector, emission point , and developmental center Gen-3 kiln. Particulate emissions from this emission unit are controlled using baghouses.

Particulate emissions from the facility are regulated under 6 NYCRR Parts 212-1.6(a) and 212-2.4(b). The facility is restricted from creating emissions which have an average opacity during any six consecutive minutes of 20% or greater. The facility also has a particulate emission limit of 0.050 grains per dry standard cubic foot of exhaust gas. Saint-Gobain must assure compliance with these particulate standards by following standard operating procedures and manufacturer's recommended maintenance requirements, and by performing visible emissions observations of all emissions points.

The calciners process a synthetic boehmite, therefore it was determined they were not subject to the New Source Performance Standards 40 CFR 60 UUU for Calciners.

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: LISA M CZECHOWICZ
NYSDEC - REGION 9
270 MICHIGAN AVE
BUFFALO, NY 14203-2915

Authorized Signature: _____ Date: ____ / ____ / ____

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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.

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DEC GENERAL CONDITIONS
****** General Provisions ******
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 3: Applications for permit renewals, modifications and transfers
Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:

The permittee must submit a renewal application at least 180 days before expiration of permits for both Title V and 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 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

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supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 1-1.2:

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 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 9 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
 Region 9 Headquarters
 Division of Environmental Permits
 270 Michigan Avenue
 Buffalo, NY 14203-2915
 (716) 851-7165

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ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

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1 NEW BOND RD
PO BOX 15008
WORCESTER, MA 01606-2614

Facility: SAINT-GOBAIN CERAMICS & PLASTICS INC
6600 WALMORE ROAD
NIAGARA FALLS, NY 14304

Authorized Activity By Standard Industrial Classification Code:
2819 - INDUSTRIAL INORGANIC CHEMICALS

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EU=1-DRYER

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EU=1-DRYER,EP=00010

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EU=1-DRYER,EP=00012

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FEDERALLY ENFORCEABLE CONDITIONS

Mod 1/FINAL

**** Facility Level ****

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6 NYCRR 200.5

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

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

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

Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

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

Item C: Maintenance of Equipment - 6 NYCRR 200.7

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

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required to operate such device effectively.

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

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

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

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

Item E: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item F: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

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

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

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request.

Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item H: Proof of Eligibility for Sources Defined as Trivial

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Activities - 6 NYCRR 201-3.3 (a)

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

Item I: Required Emission Tests - 6 NYCRR 202-1.1

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

Item J: Open Fires Prohibitions - 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.

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)

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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.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 13: Visible Emissions Limited
Effective between the dates of 03/03/2016 and 03/02/2026

Applicable Federal Requirement:6 NYCRR 211.2

Item 13.1:

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 1-1: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable Federal Requirement:6 NYCRR 211.2

Item 1-1.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 1-1.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Except as permitted by a specific part of Title 6 of the NYCRR 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 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.

Reference Test Method: Reference Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-2: Compliance Demonstration

Effective between the dates of 03/30/2020 and 03/02/2026

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

Item 1-2.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 1-2.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions from any process emission source for which an application was received by the department after July 1, 1973 are restricted as follows:

No facility owner or operator shall cause or allow emissions of particulate that exceed 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis, except in instances where determination of permissible emission rate using process weight for a specific source category emitting solid particulate is based upon Table 5 and Table 6 of Subdivisions 212-2.5(a) and (b) of this Part.

Parameter Monitored: PM-10

Upper Permit Limit: 0.050 grains per dscf

Reference Test Method: Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**** Emission Unit Level ****

Condition 1-3: Compliance Demonstration

Effective between the dates of 03/30/2020 and 03/02/2026

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

Item 1-3.1:

The Compliance Demonstration activity will be performed for:

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Emission Unit: 1-DSTCL

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 1-3.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Each process emission source associated with this emission unit: the pneumatic conveyor system (emission point 00005), central vacuum(emission point 00011), and developmental center Gen-3 kiln(cyclone-emission point 00004) shall not emit particulates in excess of 0.050 gr/dscf.

The dust collectors associated with these process sources shall be maintained and operated to ensure compliance with the grain concentration limitation.

The dust collector (s) are to be maintained according to the facility maintenance program. As part of the maintenance plan, the permittee must develop and implement corrective action procedures to be followed in the case of the observation of visible emissions from the baghouse, or the indication through the periodic baghouse system inspections that the system is not operating properly. The permittee will investigate, in a timely manner, any instance where there is cause to believe that particulate emissions above 0.050 gr/dscf are occurring or have occurred. The permittee must initiate corrective action as soon as practicable after the occurrence of the observation or event indicating a problem. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected. These instances include but are not limited to process upsets, control device malfunctions or problems, abnormal visible emissions, complaints, etc.

At a minimum, the permittee shall conduct the following activities and maintain records of the results of the activities:

1. Daily monitoring of the pressure drop across each baghouse. The operational range for the baghouses is between 1.00 and 8.00 inches of water.
2. Weekly confirmation that the baghouse dust is being

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removed from the baghouse and cyclone hoppers through visual inspection, or equivalent means of ensuring the proper functioning of removal mechanisms;

3. Monthly check of bag cleaning mechanisms for proper functioning through visual inspection or equivalent means;

4. Quarterly confirmation of the physical integrity of the baghouse structure through visual inspection of the baghouse interior for air leaks;

5. Quarterly, inspect filters for leaks,

6. Semi-annual inspection of fans for wear, material buildup, and corrosion through visual inspection, vibration detectors, or equivalent means,

7. Semi-annual inspection of the cyclone collector to detect corrosion, wear, or holes in the equipment and make repairs as necessitated.

The Department reserves the right to require the performance of a Method 5 emissions test to determine compliance with the particulate emission limit.

Records of these verifications, investigations and corrective actions will be kept on-site for a period of five years.

Parameter Monitored: PRESSURE DROP

Lower Permit Limit: 1.00 inches of water

Upper Permit Limit: 8.00 inches of water

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

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: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)

Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records.

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Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

Item C: **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 only enforceable.

Condition 7: Contaminant List
Effective between the dates of 03/03/2016 and 03/02/2026

Applicable State Requirement:ECL 19-0301

Item 7.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 007697-37-2
Name: NITRIC ACID

CAS No: 0NY075-00-0
Name: PARTICULATES

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

CAS No: 0NY210-00-0

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Name: OXIDES OF NITROGEN

Condition 8: Malfunctions and start-up/shutdown activities
Effective between the dates of 03/03/2016 and 03/02/2026

Applicable State Requirement:6 NYCRR 201-1.4

Item 8.1:

(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 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 9: Emission Unit Definition
Effective between the dates of 03/03/2016 and 03/02/2026

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 9.1(From Mod 1):

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

Permit ID: 9-2940-00049/00022

Facility DEC ID: 9294000049

Emission Unit: 1-DRYER

Emission Unit Description:

This emission unit consists of the mixing, gelation, drying, calcining, and sintering steps for the production of ceramic materials and associated emission control equipment. Included are the S-4 dryer, the NOx Tower, the Targa Dryers, the Drum dryer, the Dipper Process, and the HTB Dryer.

Building(s): BLDG 1

Item 9.2(From Mod 1):

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

Emission Unit: 1-DSTCL

Emission Unit Description:

This emission unit consists of the pneumatic conveyor system SLY dust collector emission point 00005, central vacuum dust collector, emission point 00011, and developmental center Gen-3kiln to emission point 00004.

Building(s): BLDG 1

Condition 11: Renewal deadlines for state facility permits
Effective between the dates of 03/03/2016 and 03/02/2026

Applicable State Requirement:6 NYCRR 201-5.2 (c)

Item 11.1:

The owner or operator of a facility having an issued state facility 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.

Condition 12: Compliance Demonstration
Effective between the dates of 03/03/2016 and 03/02/2026

Applicable State Requirement:6 NYCRR 201-5.3 (c)

Item 12.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 12.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation

Permit ID: 9-2940-00049/00022

Facility DEC ID: 9294000049

Region 9
 270 Michigan Ave.
 Buffalo, NY 14203

Reporting Requirements: ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2017.
 Subsequent reports are due every 12 calendar month(s).

Condition 1-4: CLCPA Applicability
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 201-6.5 (a)

Item 1-4.1:
 Pursuant to The New York State Climate Leadership and Community Protection Act (CLCPA) and Article 75 of the Environmental Conservation Law, emission sources shall comply with regulations to be promulgated by the Department to ensure that by 2030 statewide greenhouse gas emissions are reduced by 40% of 1990 levels, and by 2050 statewide greenhouse gas emissions are reduced by 85% of 1990 levels.

Condition 1: Air pollution prohibited
Effective between the dates of 03/03/2016 and 03/02/2026

Applicable State Requirement:6 NYCRR 211.1

Item 1.1:
 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 1-5: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 212-2.1

Item 1-5.1:
 The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: 1-DRYER
 Process: DIP

Emission Unit: 1-DRYER
 Process: HTB

Permit ID: 9-2940-00049/00022

Facility DEC ID: 9294000049

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN
CAS No: 007697-37-2 NITRIC ACID

Item 1-5.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

A packed bed wet scrubber is associated with the HTB dryer and new dipper process (emission point 00013). The scrubber shall be operated such that pressure drop across the scrubber will be monitored and maintained between 1.50 and 8.00 inches of water.

Operation and maintenance records are to be maintained on site for minimum period of five years and made available upon request by NYSDEC.

Parameter Monitored: PRESSURE DROP

Lower Permit Limit: 1.50 inches of water

Upper Permit Limit: 8.00 inches of water

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD - SEE MONITORING
DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-6: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 212-2.1

Item 1-6.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 1-DRYER
Process: DIP

Emission Unit: 1-DRYER
Process: HTB

Regulated Contaminant(s):
CAS No: 007697-37-2 NITRIC ACID

Item 1-6.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Permit ID: 9-2940-00049/00022

Facility DEC ID: 9294000049

A packed bed wet scrubber is associated with the HTB dryer and new dipper process (emission point 00013). The scrubber shall be operated such that Liquid flow rate in the scrubber will be monitored and maintained between 250 – 500 gpm.

Operation and maintenance records are to be maintained on site for minimum period of five years and made available upon request by NYSDEC.

Parameter Monitored: FLOW RATE
 Lower Permit Limit: 250 gallons per minute
 Upper Permit Limit: 500 gallons per minute
 Monitoring Frequency: CONTINUOUS
 Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-7: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 212-2.1

Item 1-7.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

- | | |
|------------------------|-----------------------|
| Emission Unit: 1-DRYER | Emission Point: 00003 |
| Emission Unit: 1-DRYER | Emission Point: 00010 |
| Emission Unit: 1-DRYER | Emission Point: 00012 |

Item 1-7.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
 Monitoring Description:

Impingement plate scrubbers are associated with the drum dryer (emission point 00012), the five targa ovens, (emission point 00010) and the S-4 dryer(emission point 00003). Maintenance procedures for the scrubbers are as follows:

1. Perform general maintenance procedures consistent with good engineering practice and manufacturer’s recommendations.
2. Annually, the permittee shall conduct an internal inspection for abrasion, corrosion or buildup on fans, ducts, and pipes.

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Facility DEC ID: 9294000049

3. Annually, the permittee shall conduct cleaning and inspection of the internal plates on the impingement scrubbers.

Operation and maintenance records are to be maintained on site for minimum period of five years and made available upon request by NYSDEC.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-8: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement: 6 NYCRR 212-2.1

Item 1-8.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 1-DRYER
Process: DIP

Emission Unit: 1-DRYER
Process: HTB

Item 1-8.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

A packed bed wet scrubber is associated with the HTB dryer and new dipper process (emission point 00013).
Maintenance procedures for the scrubber is as follows:

Perform general maintenance procedures consistent with good engineering practice and manufacturer's recommendations.

Annually, the permittee shall conduct an internal inspection for abrasion, corrosion or buildup on fans, ducts, and pipes.

Annually, the permittee shall conduct cleaning and inspection of the mist eliminator pad and install a replacement pad, if necessary.

Operation and maintenance records are to be maintained on site for minimum period of five years and made available upon request by NYSDEC.

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Facility DEC ID: 9294000049

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

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

**Condition 14: Emission Point Definition By Emission Unit
Effective between the dates of 03/03/2016 and 03/02/2026**

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 14.1(From Mod 1):

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

Emission Unit: 1-DRYER

Emission Point: 00001
 Height (ft.): 40 Diameter (in.): 12
 NYTMN (km.): 4780.1 NYTME (km.): 180.3 Building: BLDG 1

Emission Point: 00003
 Height (ft.): 40 Diameter (in.): 54
 NYTMN (km.): 4780.1 NYTME (km.): 180.3 Building: BLDG 1

Emission Point: 00010
 Height (ft.): 21 Length (in.): 6 Width (in.): 8
 NYTMN (km.): 4780.1 NYTME (km.): 180.3 Building: BLDG 1

Emission Point: 00012
 Height (ft.): 42 Diameter (in.): 54
 NYTMN (km.): 4780.1 NYTME (km.): 180.3 Building: BLDG 1

Emission Point: 00013
 Height (ft.): 50 Diameter (in.): 42
 NYTMN (km.): 4780.1 NYTME (km.): 180.3 Building: BLDG 1

Item 14.2(From Mod 1):

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

Emission Unit: 1-DSTCL

Emission Point: 00004
 Height (ft.): 38 Diameter (in.): 12
 NYTMN (km.): 4780.1 NYTME (km.): 180.3 Building: BLDG 1

Emission Point: 00005
 Height (ft.): 40 Diameter (in.): 13
 NYTMN (km.): 4780.1 NYTME (km.): 180.3 Building: BLDG 1

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Emission Point: 00011
Height (ft.): 12 Diameter (in.): 4
NYTMN (km.): 4780.1 NYTME (km.): 180.3 Building: BLDG 1

Condition 15: Process Definition By Emission Unit
Effective between the dates of 03/03/2016 and 03/02/2026

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 15.1(From Mod 1):

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

Emission Unit: 1-DRYER
Process: DDR Source Classification Code: 3-05-150-02
Process Description:

Steam heated drum dryer to dry green product. Scrubber used to remove nitric acid and dust and then exhausts to emission point 00012.

Emission Source/Control: DRYSC - Control
Control Type: IMPINGEMENT PLATE SCRUBBER

Emission Source/Control: DDRYR - Process

Item 15.2(From Mod 1):

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

Emission Unit: 1-DRYER
Process: DIP Source Classification Code: 3-05-150-02
Process Description:

The grain is sent through a bath of liquids on a perforated belt (dipped) and then exits the belt into a gas-fired rotary dryer. The dryer exits to the packed bed wet scrubber associated with emission point EP00013.

Emission Source/Control: HTBSC - Control
Control Type: SCRUBBER - PACKED BED

Emission Source/Control: HTBDR - Process

Item 15.3(From Mod 1):

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

Emission Unit: 1-DRYER
Process: HTB Source Classification Code: 3-05-150-02
Process Description:

The HTB tunnel dryer is used to dry green product. A scrubber is used to remove nitric acid and dust from the air stream which exhausts to emission point 00013.

Emission Source/Control: HTBSC - Control
Control Type: SCRUBBER - PACKED BED

Permit ID: 9-2940-00049/00022

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Emission Source/Control: HTBDR - Process

Item 15.4(From Mod 1):

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

Emission Unit: 1-DRYER

Process: NOX

Source Classification Code: 3-05-150-02

Process Description:

Hydrated alumina “boehmite” is converted into a granular material in the seeded gel process. Emissions from the calcining operation which removes nitric acid and water associated with the boehmite are treated in a four stage scrubbing operation. Emissions from the eighteen Harper calciners, each with an associated drop box for initial particulate control, are directed to four (4) packed towers for control of particulate, nitrogen oxides and nitric acid emissions and then to atmosphere through emission point 00001.

Emission Source/Control: NOXS - Control

Control Type: SCRUBBER - PACKED BED

Emission Source/Control: NOXS3 - Control

Control Type: SCRUBBER - PACKED BED

Emission Source/Control: NOXS4 - Control

Control Type: SCRUBBER - PACKED BED

Emission Source/Control: NOX-T - Control

Control Type: WET SCRUBBER

Emission Source/Control: KILNS - Process

Item 15.5(From Mod 1):

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

Emission Unit: 1-DRYER

Process: SDR

Source Classification Code: 3-05-150-02

Process Description:

The S-4 gas tunnel dryer is used to dry green product and is equipped with an impingement plate scrubber for the control of nitrogen oxide and nitric acid emissions and particulates. (emission point 00003)

Emission Source/Control: S4DRS - Control

Control Type: IMPINGEMENT PLATE SCRUBBER

Emission Source/Control: S-4DR - Process

Item 15.6(From Mod 1):

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

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Emission Unit: 1-DRYER

Process: TAR

Source Classification Code: 3-05-150-02

Process Description:

This process consists of five Targa dryers for drying of extruded alumina gel. Emissions are directed to an impingement plate scrubber for the control of particulate, nitrogen oxide and nitric acid emissions. (emission point 00010) There is also a Torit dust collector associated with this unit however it vents inside. There are several pick-up points associated with the two dust collectors along the Targa drying line.

Emission Source/Control: TARSC - Control

Control Type: IMPINGEMENT PLATE SCRUBBER

Emission Source/Control: TARGA - Process

Item 15.7(From Mod 1):

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

Emission Unit: 1-DSTCL

Process: CVD

Source Classification Code: 3-05-150-02

Process Description:

Central vacuum system used to collect residual which is filtered out of the airstream and directed to a baghouse and then to emission point 00011.

Emission Source/Control: CVDC1 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CVACU - Process

Item 15.8(From Mod 1):

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

Emission Unit: 1-DSTCL

Process: KLN

Source Classification Code: 3-05-150-02

Process Description:

Developmental rotary kilns (2) used to sinter product, NOx removed with catalytic unit and vented to fabric filter and emission point 00004.

Emission Source/Control: CDCDV - Control

Control Type: CENTRIFUGAL

Emission Source/Control: CPC84 - Control

Control Type: CATALYTIC REDUCTION

Emission Source/Control: 1KLN3 - Process

Item 15.9(From Mod 1):

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Facility DEC ID: 9294000049

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

Emission Unit: 1-DSTCL

Process: SLY

Source Classification Code: 3-05-150-01

Process Description:

Pneumatic conveyer for transporting raw materials which are filtered out of the airstream and vented to a Sly dust collector.

Emission Source/Control: SLYDC - Control

Control Type: FABRIC FILTER

Emission Source/Control: PNEUM - Process

Condition 1-9: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement: 6 NYCRR 212-2.1

Item 1-9.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DRYER

Item 1-9.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Nitric acid and nitrogen dioxide are released during the production of abrasive grains at the facility.

Nitrogen dioxide is defined as a “criteria air contaminant” and has been assigned an environmental rating of ‘B’. As required by 6NYCRR, Part 212-2.3(a) Table 3; the ambient air concentration of B-rated criteria air contaminants with emission rate potentials under 10 pounds per hour are to remain under the National Ambient Air Quality Standards (NAAQS).

Nitric acid is defined as a “non-criteria air contaminant” and has been assigned an environmental rating of ‘B’. As required by 6NYCRR, Part 212-2.3(b) Table 4; the ambient air concentration of B-rated non-criteria air contaminants with emission rate potentials under 10 pounds per hour are to remain under the annual guideline concentrations (AGC) and short-term guideline concentrations (SGC) per DAR-1.

An evaluation of the potential ambient impacts was conducted utilizing AERMOD modeling to determine the fence

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line impacts in accordance with DAR-10 Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis. The modeling results were submitted on February 27, 2020 and showed that the worst-case fence line impacts were below the NAAQS for nitrogen dioxide and the AGC and SGC for nitric acid when using air pollution control equipment. Modeling inputs included emissions calculations from the proposed additional calciners (2) and targa ovens (2), and the proposed new dipping process to be added as of this modification.

Saint-Gobain will operate and maintain control equipment and maintain records as established elsewhere in this permit.

Monitoring Frequency: ANNUALLY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-10: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 212-2.1

Item 1-10.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DRYER Emission Point: 00001
 Process: NOX

Item 1-10.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

NOx Tower Operation Plan:

The sixteen Harper calciners,each with an associated drop box for initial particulate control, remove nitric acid and water associated with the seeded gel process. Emissions are treated in a four stage scrubbing operation (packed towers) to control nitrogen oxides, recover nitric acid and for additional particulate control before exhausting to atmosphere through emission point 00001.

Nitrogen oxide is formed when nitric acid is heated to drive off the acid and water in the presence of air. The NOx passes through the scrubbing system forming nitrogen oxide. The oxygen reacts with NO to form NO2 which is absorbed in water to form nitric acid. Hydrogen peroxide, an oxidizing agent, is introduced by means of a dosing system to maximize the conversion of these NOx compounds

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(NO and NO₂) to nitric acid.

The concentration of nitrogen oxide at the outlet of the tower system is monitored and recorded on a daily circular chart. A reading of 150 ppm will trigger a 32 % hydrogen peroxide metered dosing system to convert the NO_x to nitric acid.

The packed tower scrubber preventative maintenance shall include, at a minimum, inspection and daily recording of:

- a. visible liquid leaks;
- b. system gas leaks;
- c. abrasion, corrosion or buildup on fans, ducts, pipes;

Yearly, the facility shall conduct an internal inspection of the packed scrubber for signs of:

1. corrosion and erosion
2. solids deposits in packed beds or tray orifices
3. solids accumulation in mist eliminators
4. worn packing

All instruments, monitoring devices and control equipment will be calibrated, maintained, and operated according to the manufacturers' specifications. Calibration drift shall be determined monthly.

Additionally, the permittee will investigate, in a timely manner, any instance where there is cause to believe that the required control efficiency is not being met. These instances include but are not limited to process upsets, control device malfunctions or problems, visible emissions, or complaints. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected. Each excursion of operation outside the operational ranges except during startup and shut down periods, including date and time, cause, and corrective action taken, shall be recorded and kept on site.

Inspection checks shall be maintained in logs (written or electronic), along with any corrective action taken when deviations occur. All deviations from normal operating ranges are to be noted and included in these logs and on request submitted to the NYSDEC Region 9 office under a truthfulness and accuracy statement.

Records of these verifications, investigations and corrective actions will be kept on-site in a format acceptable to the Department for a period of 5

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Facility DEC ID: 9294000049

years.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-11: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 212-2.1

Item 1-11.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DRYER Emission Point: 00003

Regulated Contaminant(s):
 CAS No: 0NY210-00-0 OXIDES OF NITROGEN
 CAS No: 007697-37-2 NITRIC ACID

Item 1-11.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

An impingement plate scrubber is associated with the S-4 dryer (emission point 00003). The scrubber shall be operated such that liquid flow rate in the scrubbers will be monitored and maintained between 8 and 16 gpm.

Operation and maintenance records are to be maintained on site for minimum period of five years and made available upon request by NYSDEC.

Parameter Monitored: FLOW RATE

Lower Permit Limit: 8 gallons per minute

Upper Permit Limit: 16 gallons per minute

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-12: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 212-2.1

Permit ID: 9-2940-00049/00022

Facility DEC ID: 9294000049

Item 1-12.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DRYER Emission Point: 00003

Regulated Contaminant(s):
 CAS No: 007697-37-2 NITRIC ACID

Item 1-12.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

An impingement plate scrubber is associated with the S-4
 dryer (emission point 00003). The scrubber shall be
 operated such that pressure drop across the scrubbers will
 be maintained between 4.0 and 10.5 inches of water.

Operation and maintenance records are to be maintained on
 site for minimum period of five years and made available
 upon request by NYSDEC.

Parameter Monitored: PRESSURE DROP
 Lower Permit Limit: 4.0 inches of water
 Upper Permit Limit: 10.5 inches of water
 Monitoring Frequency: CONTINUOUS
 Averaging Method: AVERAGING METHOD - SEE MONITORING
 DESCRIPTION
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-13: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 212-2.1

Item 1-13.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DRYER Emission Point: 00010

Regulated Contaminant(s):
 CAS No: 007697-37-2 NITRIC ACID

Item 1-13.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

An impingement plate scrubber is associated with the five

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Facility DEC ID: 9294000049

targa ovens (emission point 00010). The scrubber shall be operated such that pressure drop across the scrubbers will be maintained between 2.5 and 8.5 inches of water.

Operation and maintenance records are to be maintained on site for minimum period of five years and made available upon request by NYSDEC.

Parameter Monitored: PRESSURE DROP
 Lower Permit Limit: 2.5 inches of water
 Upper Permit Limit: 8.5 inches of water
 Monitoring Frequency: CONTINUOUS
 Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-14: Compliance Demonstration
Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement: 6 NYCRR 212-2.1

Item 1-14.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DRYER	Emission Point: 00010
Regulated Contaminant(s):	
CAS No: 0NY210-00-0	OXIDES OF NITROGEN
CAS No: 007697-37-2	NITRIC ACID

Item 1-14.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

An impingement plate scrubber is associated with the five targa ovens (emission point 00010). The scrubber shall be operated such that liquid flow rate in the scrubbers will be monitored and maintained between 2 and 6 gpm.

Operation and maintenance records are to be maintained on site for minimum period of five years and made available upon request by NYSDEC.

Parameter Monitored: FLOW RATE
 Lower Permit Limit: 2 gallons per minute
 Upper Permit Limit: 6 gallons per minute
 Monitoring Frequency: CONTINUOUS
 Averaging Method: AVERAGING METHOD - SEE MONITORING

Permit ID: 9-2940-00049/00022

Facility DEC ID: 9294000049

DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-15: Compliance Demonstration

Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 212-2.1

Item 1-15.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DRYER Emission Point: 00012

Regulated Contaminant(s):
CAS No: 007697-37-2 NITRIC ACID

Item 1-15.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

An impingement plate scrubber is associated with the drum dryer (emission point 00012). The scrubber shall be operated such that pressure drop across the scrubbers will be maintained between 2.5 and 8.5 inches of water.

Operation and maintenance records are to be maintained on site for minimum period of five years and made available upon request by NYSDEC.

Parameter Monitored: PRESSURE DROP
Lower Permit Limit: 2.5 inches of water
Upper Permit Limit: 8.5 inches of water
Monitoring Frequency: CONTINUOUS
Averaging Method: AVERAGING METHOD - SEE MONITORING
DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-16: Compliance Demonstration

Effective between the dates of 03/30/2020 and 03/02/2026

Applicable State Requirement:6 NYCRR 212-2.1

Item 1-16.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-DRYER Emission Point: 00012

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

Permit ID: 9-2940-00049/00022

Facility DEC ID: 9294000049

CAS No: 007697-37-2 NITRIC ACID

Item 1-16.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

An impingement plate scrubber is associated with the drum dryer (emission point 00012). The scrubber shall be operated such that liquid flow rate in the scrubbers will be monitored and maintained between 8 and 16 gpm.

Operation and maintenance records are to be maintained on site for minimum period of five years and made available upon request by NYSDEC.

Parameter Monitored: FLOW RATE

Lower Permit Limit: 8 gallons per minute

Upper Permit Limit: 16 gallons per minute

Monitoring Frequency: CONTINUOUS

Averaging Method: AVERAGING METHOD - SEE MONITORING
DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Permit ID: 9-2940-00049/00022

Facility DEC ID: 9294000049