PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 5-4115-00234/00002
Effective Date: 06/17/2020 Expiration Date: 06/16/2030

Permit Issued To: Greenfield Manufacturing, Inc.
25 Freedom Way
Saratoga Springs, NY 12866

Contact: Duane Palmateer
25 Freedom Way
Saratoga Springs, NY 12866
(518) 581-2368

Facility: GREENFIELD MANUFACTURING INC
25 Freedom Way
Saratoga Springs, NY 12866

Description:
Greenfield Manufacturing, Inc. is a specialty chemical manufacturing company specializing in "green" and sustainable chemical products. The company manufacturers water-based coatings and renewable coatings, lubricants, lubricant additives and adhesive products. Greenfield Manufacturing offers toll manufacturing, down packing, and packaging capabilities to outside companies.

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: BETH A MAGEE
NYSDEC - WARRENSBURG SUBOFFICE
232 GOLF COURSE RD
WARRENSBURG, NY 12885-1172

Authorized Signature: _________________________________ Date: ___ / ___ / _____
Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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

<table>
<thead>
<tr>
<th>PAGE</th>
<th>DEC GENERAL CONDITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Provisions</td>
</tr>
<tr>
<td>4  1</td>
<td>Facility Inspection by the Department</td>
</tr>
<tr>
<td>4  2</td>
<td>Relationship of this Permit to Other Department Orders and Determinations</td>
</tr>
<tr>
<td>4  3</td>
<td>Applications for permit renewals, modifications and transfers</td>
</tr>
<tr>
<td>5  4</td>
<td>Permit modifications, suspensions or revocations by the Department</td>
</tr>
<tr>
<td>5  5</td>
<td>Submission of application for permit modification or renewal-REGION 5 SUBOFFICE - WARRENSBURG</td>
</tr>
</tbody>
</table>
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 separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:
The permittee must submit a renewal application at least 180 days before the expiration of permits for 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 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 5
SUBOFFICE - WARRENSBURG
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 5 Sub-office
Division of Environmental Permits
232 Golf Course Road
Warrensburg, NY 12885-1172
(518) 623-1281
Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: Greenfield Manufacturing, Inc.
25 Freedom Way
Saratoga Springs, NY 12866

Facility: GREENFIELD MANUFACTURING INC
25 Freedom Way
Saratoga Springs, NY 12866

Authorized Activity By Standard Industrial Classification Code:
2851 - PAINTS AND ALLIED PRODUCTS
2899 - CHEMICAL PREPARATIONS, NEC

Permit Effective Date: 06/17/2020
Permit Expiration Date: 06/16/2030
PAGE LOCATION OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS
Facility Level
6 1 6 NYCRR 201-3.1 (a): Exempt and Trivial Activities Applicability
6 2 6 NYCRR 211.2: Visible Emissions Limited
6 3 40CFR 63, Subpart ZZZZ: Engines at Area sources of HAP

STATE ONLY ENFORCEABLE CONDITIONS
Facility Level
8 4 ECL 19-0301: Contaminant List
8 5 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
9 6 6 NYCRR Subpart 201-5: Emission Unit Definition
10 7 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
10 8 6 NYCRR 201-5.3 (c): CLCPA Applicability
10 9 6 NYCRR 201-5.3 (c): Compliance Demonstration
11 10 6 NYCRR 211.1: Air pollution prohibited
11 11 6 NYCRR 212-1.5 (g): Maintain all process emission sources, including the associated air pollution control and monitoring equipment
11 12 6 NYCRR 212-1.6 (a): Compliance Demonstration
12 13 6 NYCRR 212-2.1 (b): Compliance Demonstration
13 14 6 NYCRR 212-2.1 (b): Compliance Demonstration
15 15 6 NYCRR 212-2.1 (b): Compliance Demonstration
16 16 6 NYCRR 212-2.1 (b): Compliance Demonstration
17 17 6 NYCRR 212-2.4 (b): Compliance Demonstration

Emission Unit Level
18 18 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
19 19 6 NYCRR Subpart 201-5: Process Definition By Emission Unit
FEDERALLY ENFORCEABLE CONDITIONS

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,
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**
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)
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 1: Exempt and Trivial Activities Applicability**  
**Effective between the dates of 06/17/2020 and 06/16/2030**

**Applicable Federal Requirement:** 6 NYCRR 201-3.1 (a)

**Item 1.1:**
If the facility owner and/or operator performs any of the exempt and trivial activities listed in 6 NYCRR Part 201-3.2(c) or 201-3.3(c), such activities are exempt from the permitting provisions of 6 NYCRR Part 201-5, but not from other Parts of 6 NYCRR Chapter III, or from applicable permitting requirements of local air pollution control agencies.

**Condition 2: Visible Emissions Limited**  
**Effective between the dates of 06/17/2020 and 06/16/2030**

**Applicable Federal Requirement:** 6 NYCRR 211.2

**Item 2.1:**
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 3: Engines at Area sources of HAP**  
**Effective between the dates of 06/17/2020 and 06/16/2030**

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

**Item 3.1:**
Internal combustion engines, constructed or re-constructed on or after June 12, 2006, that meet the requirements of 40 CFR 60 Subpart III or Subpart JJJJ meet the requirements of 40 CFR 63 Subpart ZZZZ.
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.
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 4: Contaminant List
Effective between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement:ECL 19-0301

Item 4.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 007783-06-4
Name: HYDROGEN SULFIDE

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

Condition 5: Malfunctions and start-up/shutdown activities
Effective between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement:6 NYCRR 201-1.4
Item 5.1:
(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, 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 6: Emission Unit Definition
Effective between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 6.1:
The facility is authorized to perform regulated processes under this permit for:

Emission Unit: A-00001
Emission Unit Description:
Multiple products are produced and packaged. The emission points in Building A are general ventilation from the process area. Lubricant additive products are produced in Building B with the emissions controlled with
Condition 7: Renewal deadlines for state facility permits
Effective between the dates of 06/17/2020 and 06/16/2030

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

Item 7.1:
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 8: CLCPA Applicability
Effective between the dates of 06/17/2020 and 06/16/2030

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

Item 8.1:
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 9: Compliance Demonstration
Effective between the dates of 06/17/2020 and 06/16/2030

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

Item 9.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 9.2:
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
Region 5
232 Golf Course Rd.
Warrensburg, NY 12885
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 10: Air pollution prohibited
Effectively between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement: 6 NYCRR 211.1

Item 10.1:
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 11: Maintain all process emission sources, including the associated air pollution control and monitoring equipment
Effectively between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement: 6 NYCRR 212-1.5 (g)

Item 11.1:
At all times, the facility owner or operator must operate and maintain all process emission sources, including the associated air pollution control and monitoring equipment, in a manner consistent with safety, good air pollution control practices, good engineering practices and manufacturers’ recommendations for minimizing emissions.

Condition 12: Compliance Demonstration
Effectively between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement: 6 NYCRR 212-1.6 (a)

Item 12.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

- Emission Unit: A-00001  Emission Point: 00001
- Emission Unit: A-00001  Emission Point: 00002
- Emission Unit: A-00001  Emission Point: 00003
- Emission Unit: A-00001  Emission Point: 00004

Item 12.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

Since normal operation of the sources does not result in visible emissions the permittee will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard.

The permittee shall immediately investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continues after attempting corrective measures, the permittee will conduct a Method 9 assessment within the next operating day to determine the degree of opacity. The Department shall be notified immediately, if the method 9 test indicates that the opacity standard is not met.

Records of visible emissions observations (or any follow-up Method 9 tests), investigations and corrective actions will be kept on-site. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition it shall provide written notice to the permittee stating the inadequacies. The permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 13: Compliance Demonstration
Effective between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement: 6 NYCRR 212-2.1 (b)

Item 13.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:
Air Pollution Control Permit Conditions

Item 13.2:
Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:
The hydrogen sulfide (H2S) limit for this emission point is .034 pounds per hour. Proper operation of the scrubber is an indicator of acceptable emissions and includes but is not limited to maintaining the proper scrubber solution recirculation rate, sodium hypochlorite and sodium hydroxide concentrations, adequate scrubber solution blowdown, and recommended static pressure drop allowance.

The scrubber solution recirculation flow rate shall be maintained at a minimum of 30 gpm. The facility owner or operator shall monitor and record scrubber solution recirculation flow rate at least once every 60 minutes, when process emissions are vented to the scrubber. Any abnormal operations of the scrubber shall immediately be corrected.

Records of observations including, but not limited to, scrubber solution recirculation flow rate, as well as, investigations and corrective actions shall be kept on-site and made available to the Department upon request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition it shall provide written notice to the permittee stating the inadequacies. The permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: RECIRCULATION RATE
Lower Permit Limit: 30 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 14: Compliance Demonstration
Effective between the dates of 06/17/2020 and 06/16/2030
Applicable State Requirement: 6 NYCRR 212-2.1 (b)

**Item 14.1:**
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

- Emission Unit: A-00001
- Process: 002
- Emission Source: SCRUB
- Regulated Contaminant(s):
  - CAS No: 007783-06-4 HYDROGEN SULFIDE

**Item 14.2:**
Compliance Demonstration shall include the following monitoring:

- Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
- Monitoring Description:
The hydrogen sulfide (H2S) limit for this emission point is .034 pounds per hour. Proper operation of the scrubber is an indicator of acceptable emissions and includes but is not limited to maintaining the proper scrubber solution recirculation rate, sodium hypochlorite and sodium hydroxide concentrations, adequate scrubber solution blowdown, and recommended static pressure drop allowance.

Based on a 10% sodium hydroxide concentration, the scrubber solution shall be maintained at a minimum pH of 11. The owner or operator shall monitor and record the pH and solution strength before and after each batch to ensure adequate H2S removal. The scrubber solution shall be replenished/replaced with fresh solution as necessary. Any abnormal operations of the scrubber shall immediately be corrected.

Records of observations including, but not limited to, pH measurements, scrubber solution analyses, and chemical addition, as well as, investigations and corrective actions shall be kept on-site and made available to the Department upon request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition it shall provide written notice to the permittee stating the inadequacies. The permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

**Parameter Monitored: PH**
**Lower Permit Limit: 11 pH (STANDARD) units**
Permit ID: 5-4115-00234/00002         Facility DEC ID: 5411500234

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 15: Compliance Demonstration
Effective between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement: 6 NYCRR 212-2.1 (b)

Item 15.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: A-00001
Process: 001

Emission Unit: A-00001
Process: 002

Item 15.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The facility owner or operator shall not allow emissions of an air contaminant to violate the requirements specified in Table 3- Degree of Air Cleaning Required for Criteria Air Contaminants, or Table 4 – Degree of Air Cleaning Required for Non-Criteria Air Contaminants under 6 NYCYRR Part 212-2.3, as applicable, for the environmental rating assigned by the Department.

The facility owner or operator shall verify the parameters used to demonstrate compliance with Table 3 and Table 4 annually. These parameters shall include, but are not limited to, engineering emission estimates, mass balances, process flows, production records, control equipment parameters, manufacturer’s or published emission factors. Any significant changes in these parameters or any method of operations which could conceivably increase the mass emission rate (MER), increase the emission rate potential (ERP), decrease the air cleaning control efficiency, or be cause to alter the environmental rating of any contaminant shall be considered a modification to the permit. Any modification will require reevaluation to ensure compliance with Part 212, 257-5 or other applicable requirements. The Department shall be notified immediately of any modification made without first obtaining the necessary approval or a permit modification.
In addition, the facility owner or operator will investigate, in a timely manner, any instances (e.g., malfunctions and process upsets) where there is reason to believe that there is or has been emission rates above those that are listed on the application. In such cases, the facility owner or operator shall make necessary corrections, and verify that the potential excess emission problem has been corrected. Records of observations, investigations and corrective actions shall be kept on-site and available upon request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition it shall provide written notice to the permittee stating the inadequacies. The permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

At all times, the facility owner or operator shall operate and maintain all process emission sources and control equipment in a manner consistent with safe, good, air pollution control practices, good engineering practices, and manufacturer’s recommendations for minimizing emissions.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 16: Compliance Demonstration
Effective between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement: 6 NYCRR 212-2.1 (b)

Item 16.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: A-00001  Emission Point: 00004

Regulated Contaminant(s):
CAS No: 007783-06-4 HYDROGEN SULFIDE

Item 16.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
In accordance with 6 NYCRR 257-5, in any one-hour period, the average ambient air concentration of hydrogen sulfide shall not exceed 0.01 ppm (14 μg/m3), by volume.
Based on AerScreen modeling, an H2S mass emission rate (MER) of .034 pounds per hour, (including other measured sulfides) demonstrates compliance with the ambient air quality standard. The facility owner or operator shall not exceed this MER.

Stack testing shall be performed within 60 days of startup and additionally at the Department's discretion. A stack test protocol shall be submitted at least 30 days prior to the stack test date.

Upper Permit Limit: .034  pounds per hour
Reference Test Method: Method 15
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: Arithmetic average of stack test runs
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 17: Compliance Demonstration**
**Effective between the dates of 06/17/2020 and 06/16/2030**

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

**Item 17.1:**
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

- Emission Unit: A-00001  Emission Point: 00001
- Emission Unit: A-00001  Emission Point: 00002
- Emission Unit: A-00001  Emission Point: 00003
- Emission Unit: A-00001  Emission Point: 00004

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

**Item 17.2:**
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
Emissions of solid particulates are limited to less than 0.050 grains of particulates per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis. The Department reserves the right to require the performance of a Method 5 emissions evaluation at any time.

The permittee will conduct annual compliance
verifications. These verifications include review of pertinent information relating to particulate emissions of the source, including but not limited to production rate, process material, air flow rate, control equipment parameters, visible emissions, etc. The permittee will confirm that during source operation all pertinent parameters (whether used to directly calculate particulate emission rate, or as surrogates) are within ranges that ensure compliance with the particulate emission rate.

Additionally, 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. These instances include but are not limited to process upsets, control device malfunctions or problems, abnormal visible emissions, complaints, etc. The permittee shall determine the cause of any exceedance, make the necessary correction, and verify that the excess emissions problem has been corrected.

Records of these verifications, investigations and corrective actions will be kept on-site and available upon request. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition it shall provide written notice to the permittee stating the inadequacies. The permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.050 grains per dscf
Reference Test Method: Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: Arithmetic average of stack test runs
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**** Emission Unit Level ****

Condition 18: Emission Point Definition By Emission Unit
Effective between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 18.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: A-00001
Condition 19: Process Definition By Emission Unit
Effective between the dates of 06/17/2020 and 06/16/2030

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 19.1:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: A-00001
Process: 001 Source Classification Code: 3-01-014-01
Process Description:
Products are produced by batch in blending vessels with capacity up to 5000 gallons. This process also includes down packing and packaging capabilites for various products.

Emission Source/Control: DOWN1 - Process
Emission Source/Control: DOWN2 - Process
Emission Source/Control: REACT - Process
Design Capacity: 3,000 gallons
Emission Source/Control: RECTA - Process
Design Capacity: 2,000 gallons
Emission Source/Control: TANK1 - Process
Design Capacity: 3,400 gallons
Emission Source/Control: TANK2 - Process
Design Capacity: 5,000 gallons

Item 19.2:
This permit authorizes the following regulated processes for the cited Emission Unit:
Emission Unit: A-00001  
Process: 002  
Source Classification Code: 3-01-014-01  

Process Description:
Products are produced by batch and reacted in a mixing vessel with capacity up to 2500 gallons under elevated temperatures and vacuum. A wet caustic scrubber is part of this process.

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

Emission Source/Control: RECTR - Process  
Design Capacity: 2,500 gallons