



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 9-2940-00175/00001
Effective Date: 04/24/2008 Expiration Date: 04/23/2018

Permit Issued To: UNITED BIOCHEMICALS LLC
6351 INDUCON DR E
SANBORN, NY 14132

Facility: UNITED BIOCHEMICALS, LLC
6357 INDUCON DR E
SANBORN, NY 14132

Description:

Universal Fine Chemicals located in Sanborn, New York is a pharmaceutical manufacturing facility that produces powder buffer chemicals in batch format using chemical reactors, ion exchange beds, centrifuge and dryer. A high efficiency cyclone system are used to collect product/particulate emissions and methanol is removed via the centrifuge and wet scrubber.

This permit contains conditions monitoring particulate emissions subject to 6NYCRR, Part 212.4(c), methanol emissions subject to 6NYCRR, Part 212.4(a), and opacity limitation subject to 6NYCRR, Part 212.6(a).

Particulate emissions are limited to 0.05 grains/dscf and are controlled to 99.9%+ efficiency by the cyclone/fabric filter product collection system- the exhaust from which then passes into the methanol scrubbing system for further particulate reduction.

Methanol emissions, with an emission rate potential of 60 pounds per hour. are required by Table 2 of 6NYCRR, Part 212.9 to be controlled to a minimum of 91%. The packed tower absorber is expected to exceed the minimum removal efficiency.

An Air Guide 1 evaluation of Short Term Annual impacts for methanol emissions demonstrates that they are below the maximum thresholds, 39% of the short-term and less than 1% of the actual annual.

New York State Department of Environmental Conservation
Facility DEC ID: 9294000175



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: DAVID S DENK
 DIVISION OF ENVIRONMENTAL PERMITS
 270 MICHIGAN AVE
 BUFFALO, NY 14203-2915

Authorized Signature: _____ Date: ___ / ___ / _____



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

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

Facility Level

- Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS



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 expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Item 3.3:

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



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

Item 4.1:

The Department reserves the right to 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 14203-2999
(716) 851-7165

New York State Department of Environmental Conservation

Permit ID: 9-2940-00175/00001

Facility DEC ID: 9294000175



Permit Under the Environmental Conservation Law (ECL)

**ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY
PERMIT**

IDENTIFICATION INFORMATION

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6351 INDUCON DR E
SANBORN, NY 14132

Facility: UNITED BIOCHEMICALS, LLC
6357 INDUCON DR E
SANBORN, NY 14132

Authorized Activity By Standard Industrial Classification Code:
2869 - INDUSTRIAL ORGANIC CHEMICALS, NEC

Permit Effective Date: 04/24/2008

Permit Expiration Date: 04/23/2018



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS
Emission Unit Level

EU=0-00001

- 1 6 NYCRR 212.4 (a): Compliance Demonstration
- 2 6 NYCRR 212.4 (c): Compliance Demonstration

EU=0-00001,EP=00001

- 3 6 NYCRR 212.6 (a): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS
Facility Level

- 4 ECL 19-0301: Contaminant List
- 5 6 NYCRR 201-1.4: Unavoidable noncompliance and violations
- 6 6 NYCRR Subpart 201-5: Emission Unit Definition
- 7 6 NYCRR 211.2: Air pollution prohibited

Emission Unit Level

- 8 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 9 6 NYCRR Subpart 201-5: Process Definition By Emission Unit



FEDERALLY ENFORCEABLE CONDITIONS
****** Emission Unit 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,



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: Emergency Defense - 6 NYCRR 201-1.5

An emergency constitutes an affirmative defense to an action brought 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 and/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;
- (3) During the period of the emergency the facility owner and/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 and/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 and/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 F: 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 G: 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 H: 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 I: 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 J: 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 K: 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 L: 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 M: 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: Compliance Demonstration



Effective between the dates of 04/24/2008 and 04/23/2018

Applicable Federal Requirement: 6 NYCRR 212.4 (a)

Item 1.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 0-00001

Regulated Contaminant(s):
CAS No: 000067-56-1 METHYL ALCOHOL

Item 1.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Emissions from the process sources constructed after July 1, 1973 shall not exceed the applicable permissible emission rate as determined from Table 2 for the specified environmental rating.

Methanol is emitted during the production of HEPES, an organic buffering agent used in the pharmaceutical industry. These emissions of methanol from the product dryer have an emission rate potential (ERP) of 60 pounds per hour and an environmental rating of 'B', and are therefore required by 6NYCRR, Part 212.9(b) Table 2 to be controlled by the scrubber to a minimum of 91%. The exhaust from the dryer will pass first through a cyclone product collector and then through a cartridge fabric filter to collect additional product/particulate emissions. The exhaust gas consisting of methanol and remaining particulate will then pass through a packed tower scrubber. Methanol emissions will be controlled by the scrubbing system and exhaust to emission point 00001.

An evaluation of the potential ambient impact of the proposed project was conducted utilizing the DAR-1 screening to determine the fence line impact of methanol emissions compared to the annual guideline concentration (AGC) of 4000 ug/m³ and short-term guideline concentrations (SGC) of 33000 ug/m³. The potential annual impact was 6.8% of the AGC (0.18% of the actual annual) and the maximum short-term impact was 39% of the SGC. Therefore, the level of control is acceptable at the actual methanol emission rate of 5.4 pounds/hour and 1249 pounds per year.

1. The facility will monitor and record the scrubber flow



rate and pressure drop on a daily basis.

2. The facility will monitor the methanol concentration of the filter cake from the centrifuge (which continuously feeds filter cake to the dryer feed hopper) during HEPES production on a per batch basis to determine the dryer inlet methanol concentration and verify methanol ERP.

3. Records are to be kept on-site documenting the batch methanol concentration, scrubber flow rate and pressure drop, and made available to Department representatives on request.

4. At the end of the initial 6 month production period, and annually thereafter, records of the filter cake methanol concentration are to be sent to this Department at 270 Michigan Avenue; Buffalo, New York; 14203 until such time as the Department determines this information is no longer required to be submitted. A review of the data may determine the need for additional source/control testing.

5. Universal Fine Chemicals shall demonstrate the efficiency of the scrubber by conducting a performance test using methods acceptable to the Department. The facility shall submit for approval a proposal to measure the absorber inlet and outlet methanol concentration prior to testing. The test shall be completed no later than 90 days after the initial start-up and the maximum production rate is achieved. This Department is to be notified of the proposed test date 30 days prior.

Parameter Monitored: METHYL ALCOHOL

Lower Permit Limit: 91 percent reduction

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL CHANGE

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2009.

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

Condition 2: Compliance Demonstration
Effective between the dates of 04/24/2008 and 04/23/2018

Applicable Federal Requirement:6 NYCRR 212.4 (c)

Item 2.1:

The Compliance Demonstration activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 9-2940-00175/00001

Facility DEC ID: 9294000175



Emission Unit: 0-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 2.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The cyclone/baghouse system is utilized to collect dried product and to control particulate emissions along with the scrubber. Emissions of solid particulates from emission point 00001 shall not exceed 0.050 grains of particulates per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis (gr/dscf). The baghouse collection efficiency is expected to be 99.9% as supported by to manufacturer's data.

The cartridge filters shall be inspected semi-annually and replaced when necessary. The facility shall establish a written preventative maintenance/inspection program and employee training in the proper operation of all equipment.

The Department may request a performance test at any time to demonstrate compliance with the particulate emission standard.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.05 grains per dscf

Reference Test Method: Method 5

Monitoring Frequency: SEMI-ANNUALLY

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST
METHOD INDICATED

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 3: Compliance Demonstration
Effective between the dates of 04/24/2008 and 04/23/2018

Applicable Federal Requirement:6 NYCRR 212.6 (a)

Item 3.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 0-00001

Emission Point: 00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 3.2:

New York State Department of Environmental Conservation

Permit ID: 9-2940-00175/00001

Facility DEC ID: 9294000175



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 facility shall maintain its control equipment, baghouse and scrubber, in accordance with manufacturer's recommendations and according to good engineering practice. Visual emissions are to be addressed immediately. The facility shall establish a written preventative maintenance/inspection program and employee training in the proper operation of all equipment.

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



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

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1), and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

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

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

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

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state only enforceable.



Condition 4: Contaminant List

Effective between the dates of 04/24/2008 and 04/23/2018

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: 000067-56-1

Name: METHYL ALCOHOL

CAS No: 0NY075-00-0

Name: PARTICULATES

Condition 5: Unavoidable noncompliance and violations

Effective between the dates of 04/24/2008 and 04/23/2018

Applicable State Requirement:6 NYCRR 201-1.4

Item 5.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment 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 commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those



above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets.

Condition 6: Emission Unit Definition
Effective between the dates of 04/24/2008 and 04/23/2018

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: 0-00001

Emission Unit Description:

A reaction vessel, ion exchange beds, carbon bed, evaporator, crystallization reactor, centrifuge and dryer process materials in batch format to produce powder products. The dryer exhaust is routed through the product collection devices (high efficiency cyclone and baghouse) for particulate recovery and through a scrubber to further reduce methanol emissions.

Building(s): Main

Condition 7: Air pollution prohibited
Effective between the dates of 04/24/2008 and 04/23/2018

Applicable State Requirement:6 NYCRR 211.2

Item 7.1:

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.



**** Emission Unit Level ****

Condition 8: Emission Point Definition By Emission Unit
Effective between the dates of 04/24/2008 and 04/23/2018

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 8.1:

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

Emission Unit: 0-00001

Emission Point: 00001

Height (ft.): 22

Diameter (in.): 8

NYTMN (km.): 4791.6

NYTME (km.): 176.5

Building: Main

Condition 9: Process Definition By Emission Unit
Effective between the dates of 04/24/2008 and 04/23/2018

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 9.1:

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

Emission Unit: 0-00001

Process: 001

Source Classification Code: 3-01-060-99

Process Description:

Raw materials are delivered and stored in totes. From totes, materials are transferred into a 1500 gallon reaction vessel. Contents are heated to approx 200 degrees C and then transferred to a 2500 gallon crystallization reactor and methanol is added. Crystallization occurs as the mixture cools to approx. 0 degrees C. The crystallization slurry is continuously pumped to the centrifuge until all of the mixture is de-watered. The resulting centrate is pumped to a 3000 gallon vertical fixed roof waste storage tank while dewatered slugs are transferred to the flash dryer. While drying, product/particulate and exhaust air are vented to a high efficiency cyclone and baghouse for product/particulate collection. Methanol is further collected via a scrubber.

Emission Source/Control: BH001 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CYC01 - Control

Control Type: SINGLE CYCLONE

Emission Source/Control: CBED1 - Process



Emission Source/Control: CENT1 - Process

Emission Source/Control: CTZR1 - Process

Emission Source/Control: CTZR2 - Process

