



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

**IDENTIFICATION INFORMATION**

Permit Type: Air Title V Facility  
Permit ID: 9-2909-00107/00001  
Effective Date: 05/06/2016 Expiration Date: 05/05/2021

Permit Issued To:VANDEMARK CHEMICAL INC  
1 N TRANSIT RD  
LOCKPORT, NY 14094

Facility: VANDEMARK CHEMICAL INC  
1 NORTH TRANSIT RD  
LOCKPORT, NY 14094

Contact: CHRISTOPHER BANACH  
VANDEMARK CHEMICAL INC  
1 NORTH TRANSIT RD  
LOCKPORT, NY 14094  
(716) 433-6764

**Description:**

This permit action is for a Title V permit renewal for Vandemark Chemical Inc., located in Lockport, New York. VanDeMark is a manufacturer of custom chemicals on a batch or semi-continuous basis. Custom chemicals include, but are not limited to, phosgene and phosgene derivatives. The facility is a major source of carbon monoxide having actual emissions greater than 100 tons and is subject to the Title V major source permitting requirements of 40 CFR Part 70 and 6NYCRR, Part 201-6.

Additional contaminants emitted from the facility include but are not limited to nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC), and various hazardous air pollutants such as phosgene, chlorine, chlorobenzene, and hydrogen chloride. Attached to this permit is an operational flexibility protocol to address minor modifications.

This renewal contains previously established emission caps limiting emissions of volatile organic compounds to less than 50 tons during any consecutive twelve month period to avoid applicability to the reasonably available control requirements of 6NYCRR, Part 212-3 (Major Sources of VOC and NO<sub>x</sub>) and 6NYCRR, Part 229 (Volatile Organic Liquid Storage Tanks). The permit also restates the cap limiting emissions of sulfur dioxide during the production of Carbaester to less than the 40 ton deminimus for PSD applicability. VanDeMark has chosen to limit sulfur dioxide emissions from the entire facility to less than 40 tons in order to avoid the need for any future applicability determinations and noticing requirements in the event of the modification or addition of new sources emitting sulfur dioxide.

This permit also includes the addition of a tray dryer/carbon in D-6 for the removal of heptane from polycarbonates (emission point 00025) and general ventilation for centrifuge pack-out in D-1 (emission point 00S19).



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 \*\*\*\***

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

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

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

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

**Item 1.1:**

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

**Item 1.2:**

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

**Item 1.3:**

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

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

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

**Item 2.1:**

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

**Condition 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 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

**New York State Department of Environmental Conservation**

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Facility DEC ID: 9290900107



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

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

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1 N TRANSIT RD  
LOCKPORT, NY 14094

Facility: VANDEMARK CHEMICAL INC  
1 NORTH TRANSIT RD  
LOCKPORT, NY 14094

Authorized Activity By Standard Industrial Classification Code:  
2834 - PHARMACEUTICAL PREPARATIONS  
2869 - INDUSTRIAL ORGANIC CHEMICALS,NEC

Permit Effective Date: 05/06/2016

Permit Expiration Date: 05/05/2021



**LIST OF CONDITIONS**

**FEDERALLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
  - 2 6 NYCRR 201-6.4 (a) (7): Fees
  - 3 6 NYCRR 201-6.4 (c): Recordkeeping and Reporting of Compliance Monitoring
  - 4 6 NYCRR 201-6.4 (c) (2): Records of Monitoring, Sampling, and Measurement
  - 5 6 NYCRR 201-6.4 (c) (3) (ii): Compliance Certification
  - 6 6 NYCRR 201-6.4 (e): Compliance Certification
  - 7 6 NYCRR 202-2.1: Compliance Certification
  - 8 6 NYCRR 202-2.5: Recordkeeping requirements
  - 9 6 NYCRR 215.2: Open Fires - Prohibitions
  - 10 6 NYCRR 200.7: Maintenance of Equipment
  - 11 6 NYCRR 201-1.7: Recycling and Salvage
  - 12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
  - 13 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
  - 14 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
  - 15 6 NYCRR 201-6.4 (a) (4): Requirement to Provide Information
  - 16 6 NYCRR 201-6.4 (a) (8): Right to Inspect
  - 17 6 NYCRR 201-6.4 (f) (6): Off Permit Changes
  - 18 6 NYCRR 202-1.1: Required Emissions Tests
  - 19 40 CFR Part 68: Accidental release provisions.
  - 20 40CFR 82, Subpart F: Recycling and Emissions Reduction
  - 21 6 NYCRR Subpart 201-6: Emission Unit Definition
  - 22 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
  - 23 6 NYCRR 201-6.4 (f) (2): Compliance Certification
  - 24 6 NYCRR 201-7.1: Facility Permissible Emissions
  - \*25 6 NYCRR 201-7.1: Capping Monitoring Condition
  - \*26 6 NYCRR 201-7.1: Capping Monitoring Condition
  - 27 6 NYCRR 211.1: Air pollution prohibited
  - 28 6 NYCRR 212-1.5 (g): Compliance Certification
  - 29 6 NYCRR 236.6 (e) (3): Compliance Certification
  - 30 40CFR 63, Subpart ZZZZ: Compliance Certification
- Emission Unit Level**
- 31 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
  - 32 6 NYCRR Subpart 201-6: Process Definition By Emission Unit

**EU=U-DERV1**

- 33 6 NYCRR 212-1.6 (a): Compliance Certification
- 34 6 NYCRR 212-2.1 (b): Compliance Certification
- 35 6 NYCRR 212-2.1 (b): Compliance Certification
- 36 6 NYCRR 212-2.1 (b): Compliance Certification
- 37 6 NYCRR 212-2.4 (b): Compliance Certification

**EU=U-PLAB1,EP=LAB02**

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- 38 6 NYCRR 212-2.1 (b): Compliance Certification
- 39 6 NYCRR 212-2.1 (b): Compliance Certification

**EU=U-TANK1,EP=0ST36,Proc=ST1,ES=0ST36**

- 40 40CFR 60.116b, NSPS Subpart Kb: Compliance Certification

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 41 ECL 19-0301: Contaminant List
- 42 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 43 6 NYCRR 617.11 (d): Compliance Demonstration

NOTE: \* preceding the condition number indicates capping.



**FEDERALLY ENFORCEABLE CONDITIONS**  
**\*\*\*\* Facility Level \*\*\*\***

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

**Item A: 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 Title V Facilities - 6 NYCRR 201-1.10 (b)**

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.



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

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

**Item D: Certification by a Responsible Official - 6 NYCRR 201-6.2 (d) (12)**

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

**Item E: Requirement to Comply With All Conditions - 6 NYCRR 201-6.4 (a) (2)**

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

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

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

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

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

**Item H: Property Rights - 6 NYCRR 201-6.4 (a) (6)**

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



**Item I: Severability - 6 NYCRR 201-6.4 (a) (9)**

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

**Item J: Permit Shield - 6 NYCRR 201-6.4 (g)**

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

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

**Item K: Reopening for Cause - 6 NYCRR 201-6.4 (i)**

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

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is



three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

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

**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.

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

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

**Condition 1: Acceptable Ambient Air Quality  
Effective between the dates of 05/06/2016 and 05/05/2021**

**Applicable Federal Requirement:6 NYCRR 200.6**

**Item 1.1:**

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

**Condition 2: Fees  
Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 2.1:**

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

**Condition 3: Recordkeeping and Reporting of Compliance Monitoring  
Effective between the dates of 05/06/2016 and 05/05/2021**

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



**Item 3.1:**

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

- (i) The date, place, and time of sampling or measurements;
- (ii) The date(s) analyses were performed;
- (iii) The company or entity that performed the analyses;
- (iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;
- (v) The results of such analyses including quality assurance data where required; and
- (vi) The operating conditions as existing at the time of sampling or measurement.

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

**Condition 4: Records of Monitoring, Sampling, and Measurement  
Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 4.1:**

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

**Condition 5: Compliance Certification  
Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 5.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 5.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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



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

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

- (1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
- (2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
- (3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring report required above.
- (4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill

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Hotline phone number at 1-800-457-7362 shall be used. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.2(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

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

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

In the case of any emission testing performed during the previous six month reporting period, either due to a request by the Department, EPA, or a regulatory requirement, the permittee shall include in the semiannual report a summary of the testing results and shall indicate whether or not the Department or EPA has approved the results.

All semiannual reports may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office) and one copy shall be sent to the Administrator (or his or her representative). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.4(e), contained elsewhere in this permit.



Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

**Condition 6: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 6.1:**

The Compliance Certification activity will be performed for the Facility.

**Item 6.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

- i. Compliance certifications shall contain:
  - the identification of each term or condition of the permit that is the basis of the certification;
  - the compliance status;
  - whether compliance was continuous or intermittent;
  - the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related recordkeeping and reporting requirements of this permit;
  - such other facts as the Department may require to determine the compliance status of the facility as specified in any special permit terms or conditions; and
  - such additional requirements as may be specified elsewhere in this permit related to compliance certification.
- ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit which are identified as being subject to certification, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.
- iii. Compliance certifications shall be submitted annually. Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters.

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The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the Department.

iv. All annual compliance certifications may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office) and one copy shall be sent to the Administrator (or his or her representative). The mailing addresses for the above referenced persons are:

Chief – Stationary Source Compliance Section  
USEPA Region 2  
Air Compliance Branch  
290 Broadway  
New York, NY 10007-1866

The address for the RAPCE is as follows:

Regional Air Pollution Control Engineer  
NYSDEC Region 9 Headquarters  
270 Michigan Avenue  
Buffalo, NY 14203-2915

The address for the BQA is as follows:

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

Monitoring Frequency: ANNUALLY  
Reporting Requirements: ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 1/30/2017.  
Subsequent reports are due on the same day each year

**Condition 7: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 7.1:**

The Compliance Certification activity will be performed for the Facility.

**New York State Department of Environmental Conservation**

Permit ID: 9-2909-00107/00001

Facility DEC ID: 9290900107



**Item 7.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year. Statements are to be mailed to: New York State Department of Environmental Conservation, Division of Air Resources, Bureau of Air Quality Planning, 625 Broadway, Albany NY 12233-3251

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due by April 15th for previous calendar year

**Condition 8: Recordkeeping requirements  
Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 8.1:**

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

(1) a copy of each emission statement submitted to the department; and

(2) records indicating how the information submitted in the emission statement was determined, including any calculations, data, measurements, and estimates used.

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

**Condition 9: Open Fires - Prohibitions  
Effective between the dates of 05/06/2016 and 05/05/2021**

**Applicable Federal Requirement:6 NYCRR 215.2**

**Item 9.1:**

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

**Item 9.2**

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

(a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.

(b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.





procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

**Condition 11: Recycling and Salvage**  
Effective between the dates of 05/06/2016 and 05/05/2021

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

**Item 11.1:**

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

**Condition 12: Prohibition of Reintroduction of Collected Contaminants to the air**  
Effective between the dates of 05/06/2016 and 05/05/2021

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

**Item 12.1:**

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

**Condition 13: Exempt Sources - Proof of Eligibility**  
Effective between the dates of 05/06/2016 and 05/05/2021

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

**Item 13.1:**

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

**Condition 14: Trivial Sources - Proof of Eligibility**  
Effective between the dates of 05/06/2016 and 05/05/2021

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

**Item 14.1:**

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

**Condition 15: Requirement to Provide Information**  
Effective between the dates of 05/06/2016 and 05/05/2021

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





**New York State Department of Environmental Conservation**

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**Item 20.1:**

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

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

**Condition 21: Emission Unit Definition**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 21.1:**

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

Emission Unit: U-DERV1

Emission Unit Description:

Phosgene and phosgene derivative production area. This emission unit includes emission points: 00SC4-the main scrubber exhaust; 00SC8-plant ventilation and emergency scrubbing system, 000P5-phosgene production area ventilation and emergency scrubber, 00S17-drum filling station; 00S19-centrifuge pack-out; 00S20-vent condenser; 00S21-solids addition baghouse in C-1 for D-3; 00S22-solids addition baghouse in C-1 for D-7; 00S23-vac-u-max filter for D-7; 00S24-Vac-u-max filter in D-3; 00S28-solids baghouse in C-1; 00S29- solids addition baghouse in D-7/D9; 0PT20-vacuum pump cooling tank; 0PT33-receiver tank; 0PT34-wash tank; 00S25-vacuum tray dryer and 0DGC1-tray dryer loading hood.

Building(s): A-AREA  
B-AREA  
C-AREA  
D  
D-1  
D-6  
D-AREA  
E-AREA

**Item 21.2:**

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

Emission Unit: U-FUG01

Emission Unit Description:

Process fugitive emissions from the phosgene derivatives laboratory, including A-area; phosgene production B-area; C-area; and D-area.

Building(s): FUG AREA

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**Item 21.3:**

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

Emission Unit: U-PLAB1

Emission Unit Description:

U-PLAB1 describes exempt laboratory activities and at times may have production activities. This unit has two emission points LAB01, a scrubber, and LAB02, an activated carbon drum. If commercial products are being made and there are applicable requirements, the appropriate monitoring will be conducted.

Building(s): A-AREA  
B-AREA

**Item 21.4:**

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

Emission Unit: U-TANK1

Emission Unit Description:

VanDeMark storage vessels. Volatile organic compound storage tanks include emission points ST119, OST21, OST22, OST25, ST26A, OST27, OST28, OST29, and OST30 in C-Area and emission points 00ST7, OST32, OST35, and OST36 in the D-Area.

Building(s): C-AREA  
D-AREA

**Condition 22: Progress Reports Due Semiannually**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 22.1:**

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

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

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

**Condition 23: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 23.1:**



The Compliance Certification activity will be performed for the Facility.

**Item 23.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

VanDeMark is a custom chemical batch manufacturer located in Lockport, New York and manufactures phosgene and phosgene derivatives at this location. The phosgene is produced on a semi-continuous basis in B Area. Process emissions are controlled by sodium hydroxide scrubbing systems; 00SC4, 00SC8, and 00P5. The batch chemical processes occur in the D-Area. Emissions are controlled at the 00SC4 scrubbing system and emergency/ventilation scrubber 00SC8.

The permittee is a major source of emissions of carbon monoxide in excess of 100 tons and as such subject to Title V permitting requirements. Additional contaminants emitted include but not limited to are: particulates, nitrogen oxides, volatile organic compounds (VOC), sulfur dioxide, and various hazardous air pollutants (HAPs) such as hydrogen chloride, hexane, chlorine, phosgene, monochlorobenzene, toluene, methyl alcohol, 1,4-dioxane, n,n-dimethyl formamide, hydrazine, n-ndiethylaniline, methylene chloride, methyl t-butyl ether, phenol, triethyl amine, and xylene. The facility uses various batch chemical reactors, mixing vessels, process vents, tanks, dryers, condensers, scrubbers, fabric filters, and carbon vapor drums in the manufacture of its products and the control of air pollutants emitted from these processes.

Because of the variable nature of the batch chemical industry, it is critical for the facility to be able to respond to requests for new custom products in an expedient manner. Therefore, consistent with the provisions of 6NYCRR, Part 201-6.4(f)(2), the permittee has submitted and this Department has approved the following flexibility protocol. This protocol will allow:

- addition of new minor emission sources
- modify existing emission sources
- replace/modify existing control devices
- install additional control devices
- emit new contaminants, and
- change emissions of existing contaminants
- add new storage tanks per 6NYCRR Part

229

Modifications to existing minor process emission sources,



the addition of new emission sources or the relocation of emission sources may occur within any of the identified emission units; U-DERV1, U-PLAB1, U-TANK1, and UFUG01.

Changes cannot occur under the terms of this protocol that involve the alteration of any emissions cap or the applicability of additional requirements.

Notifications:

Prior to making changes under the terms of this flexibility protocol, the permittee shall notify the Department in writing 30 days prior and will include all information necessary to substantiate that the changes are consistent with this protocol and will ensure compliance with all applicable requirements. The information to be submitted includes but is not limited to: a description of the changes to be made; the addition or modification of process and control equipment; the specific contaminants to be emitted; calculations of emission rate potentials and potential to emit based on AP-42 emission factors, stack tests, material balance and/or engineering calculations and Air Impact Modeling if requested by the Department.

If this information demonstrates that the changes to be made are not consistent with the terms of this protocol, then the Department will require the submission of a permit modification.

Recordkeeping:

The permittee shall maintain records of all modifications made under this flexibility protocol. These modifications will be incorporated into the Title V permit at the time of renewal.

6NYCRR, Part 212 Process Emission Sources:

New contaminants from existing or new emission sources:

The production of custom chemicals may result in the emission of contaminants not already addressed within the Title V permit. Additional contaminants can include volatile organic compounds and hazardous air pollutants, criteria pollutants or other pollutants not currently specified in the Title V permit. In order to ensure compliance with the Air toxics provisions of 6NYCRR, Part 212, the facility will evaluate the addition of new contaminants from existing or new process sources by



calculating an emission rate potential (ERP) for the new constituent. ERP's will be calculated in accordance with AP-42 methods or best engineering practices.

Contaminants designated as High Toxicity Air Contaminants (HTAC) will be assigned an 'A' environmental rating. For emissions of other contaminants, the permittee shall request an assignment of an environmental rating based on the toxicity of the contaminant and the emission rate potential. Contaminants will be evaluated in accordance with the control requirements of 6NYCRR, Part 212-2.3, Table 3 and Table 4. An Air Impact Modeling analysis of emissions must be conducted to determine if that level of control from existing or new equipment is sufficient or if additional control equipment will be required. This analysis is to be submitted to this Department along with the 30 day notification letter. If a BACT (Best Available Control Technology) analysis or a variance is required, the change will not be allowed under the terms of this flexibility protocol and a permit modification will be required.

Evaluation of non-HTAC Particulate Emissions-212-2.4(b):

In order to demonstrate compliance with the particulate emission limits of 6NYCRR, Part 212-2.4(b). The non-HAP particulate ERP will be calculated from new or modified existing sources using mass balance, engineering estimates, or AP-42 emission factors. If the ERP exceeds 0.05 grains per dscf, then particulate control equipment such as either a fabric filter, high-efficiency cyclone, or scrubber will be required prior to the operation of the process source. Calculations must demonstrate that the control efficiency will be sufficient to ensure compliance with the standard.

-Source will be visually inspected and if there are visible emissions it will be shut-down and repaired. Records of repairs will be maintained as required by the permit.

-Semi-annual maintenance on the control device will be conducted. Records will be maintained as required by the permit.

Evaluation of VOC Emissions-212-3-VOC RACT:

Total emissions of volatile organic compounds from facility-wide existing emission sources and proposed new emission sources or modifications of existing sources must remain less than 50 tons during any consecutive 12 month



period. Facility-wide emissions shall be calculated using production records, the current version of EPA TANKS software, the most current AP-42 emission factors, chemical engineering mass balance calculations, and/or engineering estimates. If controls are needed to maintain total VOC emissions to less than 50 tons per rolling 12 month period, one of the following methods may be used:

**Operational hours:** The facility must demonstrate in their construction notification and document in a log the hours of operation and appropriate emission factors to demonstrate compliance with the monthly rolling total.

**New scrubber:** operational parameters such as scrubber flow and caustic strength must be provided that will ensure proper operation of the scrubbers.

**Use of D-Area packed scrubber system:** The facility must submit documentation showing that the existing equipment can accommodate the emissions increase.

**Use of a condenser:** the permittee shall maintain records that include control efficiency and required operating temperature ranges. Hourly temperature readings shall be maintained to demonstrate continuous compliance.

**Use of a carbon adsorber:** Carbon adsorption systems shall be monitored daily, when in use, by a device capable of detecting contaminant breakthrough at the action level, or 10 ppm.

Any proposed modification which results in total facility wide emissions exceeding 50 tons during any consecutive twelve month period will not be allowed under the provisions of this protocol. A significant permit modification would then be required as per 6NYCRR, Part 201-6.6(d).

6NYCRR, Part 229-Volatile Organic Liquid Storage and Transfer:

The production of new chemicals may require additional storage tanks or change of use for existing tanks described within emission units U-TANK1 and DERV1. Under the provisions of this protocol, the permittee will be allowed to add VOL storage tanks having a capacity less than 20,000 gallons provided that:

Total actual facility-wide emissions of VOC from existing and new emission sources are to remain less than 50 tons



during any consecutive rolling 12-month period. Any proposed new emissions which bring the total rolling 12 month emissions to greater than 50 tons will not be allowed under this protocol and the Department will require a significant permit modification under 6NYCRR, Part 201-6.6(d) to be submitted.

Under the provisions of this flexibility protocol, the permittee will be allowed the following storage facilities:

- fixed roof storage tanks having a capacity of 20,000 gallons or greater and storing a VOL liquid with a maximum true vapor pressure of 4.0 or greater provided that the tank is equipped with an internal floating roof with a liquid mounted primary seal and gasketed fittings, or equivalent control.

- fixed roof storage tanks greater than or equal to 10,000 gallons but less than 20,000 gallons provided the tank is equipped with submerged fill.

- volatile liquid storage tanks with a capacity of less than 10,000 gallons provided the tank is equipped with a conservation vent or submerged fill.

40 CFR Part 60: New Source Performance Standards (NSPS)

There are currently several New Source Performance Standards which could be triggered as a result of future changes or modifications:

Subpart Dc 60.40c-Small Industrial/Commercial/Institutional Steam Generating Units:

Under the terms of this protocol the permittee may add a new combustion unit greater than 10 and less than 100 MMBTU/hr provided that:

The permittee must submit notification to this Department and the EPA of the date of construction and start-up that includes the design input capacity and identification of all fuels combusted.

If natural gas alone is combusted, the facility is only required to comply with section 60.48c(a).

Oil-fired combustion units greater than 30 MMBTU per hour will not be allowed under the provisions of this protocol. Oil shall not be combusted in the affected facility that



contains greater than 0.5 weight percent sulfur. Compliance shall be based on certification from the fuel supplier as described under 60.48c(f)(1) and/or (2). Each affected facility subject to the fuel sulfur limitations shall keep records from the oil supplier that affirms compliance with the limit. Quarterly reports shall be submitted in accordance with 60.48c(d), (e), and (f).

The performance test for sulfur dioxide shall consist of the certification from the supplier.

Record-keeping shall include the amount of each fuel type combusted each day and these records kept on-site for a period of five years.

A PSD/NSR applicability determination must be made prior to the construction or modification of any new combustion unit.

Coal or wood fired units will not be allowed to commence construction under the provisions of this protocol.

Subpart Kb 60.110b Volatile Organic Liquid Storage Vessels

The production of new chemicals may require additional production and storage capacity. This subpart applies to VOL tanks with a capacity greater than or equal to 40 cubic meters (10,568) gallons.

Under the terms of this protocol each proposed new storage tank will be evaluated for applicability and may be added to emission units U-DERV1 and U-TANK1 without a modification of the Title V permit as long as the following criteria are met:

If the tank is less than 75 m<sup>3</sup>, or greater than or equal to 75 m<sup>3</sup> and less than 151 m<sup>3</sup> storing a maximum true vapor pressure less than 15 kPa then it is exempt from the General Provisions of Subpart A and the provisions of Subpart Kb 60.110b except for recordkeeping requirements. Records will be maintained for the life of the source showing the dimension of the storage vessel and an analysis showing the capacity. If a tank is between 75 m<sup>3</sup> and 151m<sup>3</sup>, records shall be kept showing that no material with a maximum true vapor pressure of greater than 15kPa is stored in the tank.

Synthetic Organic Chemicals Manufacturing Industry (SOCMI) Regulations



Subpart VV 60.480 Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI)  
Subpart NNN 60.660 VOC Emissions from SOCMI Distillation Operations  
Subpart RRR 60.700 VOC Emissions from SOCMI Reactor Processes

VanDeMark manufactures one SOCMI chemical-phosgene. The manufacturing unit pre-dates the NSPS January 5, 1981 applicability date. VanDeMark's chemical derivatives group does not manufacture any SOCMI chemicals.

40 CFR Part 63 National Emission Standards For Hazardous Air Pollutants (NESHAPs):

NESHAPs are applicable to facilities that emit or have the potential to emit considering controls an aggregate of 10 tons per year or greater of any individual HAP and/or 25 tons per year or more of any combined HAPs. Total facility wide emissions of HAPs from existing and any new emission source (s) are to be limited to less than the major source thresholds through the use of emissions control equipment and therefore will be subject to only area source requirements, if any.

Individual emissions from any proposed new source or modification will be evaluated and include the result in the facility wide total. If it is anticipated that total emissions will exceed major source thresholds, the modification will not be allowed under the terms of this protocol.

Monitoring to demonstrate compliance will be consistent with that described for specific control equipment identified under the 212-3 RACT provisions.

New NESHAPs promulgated will be evaluated for applicability. If additional control equipment and performance tests are required to meet the new requirements, a permit modification will be required.

6 NYCRR, Part 231-2: New Source Review/40 CFR Part 52 Prevention of Significant Deterioration:

Any new or modified emission source shall not be part of a source project that results in a significant net emissions increase that exceeds the NSR major source threshold or that would require the establishment of a new federally enforceable emission cap to avoid NSR requirements.



Replacement of Control Equipment

The permittee is allowed to replace or modify existing control devices in accordance with the notification requirements as long as the action results in the same or greater degree of air cleaning.

The permittee is allowed to add additional control equipment if it is determined that a greater degree of control efficiency is required to meet an AGC/SGC as a result of a product change.

This Department can, at any time, request a stack test to demonstrate compliance with any applicable requirements. The Department can also request the submission of a permit modification if it is necessary to impose additional monitoring requirements.

Confidentiality:

Because of the competitive nature of the batch chemical industry, the permittee requests that all material submitted with respect to the production of new chemical products, be designated confidential.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

**Condition 24: Facility Permissible Emissions  
Effective between the dates of 05/06/2016 and 05/05/2021**

**Applicable Federal Requirement:6 NYCRR 201-7.1**

**Item 24.1:**

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

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

CAS No: 007446-09-5 PTE: 79,999 pounds per year  
Name: SULFUR DIOXIDE

CAS No: 0NY998-00-0 PTE: 99,999 pounds per year  
Name: VOC

**Condition 25: Capping Monitoring Condition**



Effective between the dates of 05/06/2016 and 05/05/2021

Applicable Federal Requirement:6 NYCRR 201-7.1

**Item 25.1:**

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

40 CFR 52.21 (i) (1)

**Item 25.2:**

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

**Item 25.3:**

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

**Item 25.4:**

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

**Item 25.5:**

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

**Item 25.6:**

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 007446-09-5      SULFUR DIOXIDE

**Item 25.7:**

Compliance Certification shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

The permittee will accept federally enforceable permit conditions to limit its potential to emit of sulfur dioxide from the production of Carbester to less than the



40 ton significant emissions increase for a major modification subject to Prevention of Significant Deterioration. Therefore, a non-applicability determination has been made relative to 40 CFR Subpart A 52.21(1)(1) Prevention of Significant Deterioration (PSD).

1. VanDeMark, a chemical process plant, is one of the 28 source categories for which a major stationary source is defined as having a potential to emit of 100 tons per year of any pollutant for which there is a National Ambient Air Quality Standard (NAAQS). Actual emissions of carbon monoxide exceed 100 tons per year.

2. The facility will limit potential emissions of sulfur dioxide, during the production of Carbester, to less than the major modification de minimus of 40 tons by maintaining the efficiency of its scrubbing system to a minimum 91% control for this contaminant. Sulfur dioxide, a criteria air contaminant is assigned a 'B' environmental rating and the degree of air cleaning required by 6NYCRR, Part 212-2.1(b) is specified in Table 3 of 212-2.3(a).

3. A performance test was performed on the scrubbers and the removal efficiency for sulfur dioxide was determined to be greater than the required minimum 91%. The scrubbers are monitored per the standard operating procedure VC00094 (current editions made available to Department representatives on request).

In addition, the facility has chosen to limit total facility-wide sulfur dioxide emissions from all emission sources (process and combustion) to less than 40 tons during any consecutive twelve month period in order to avoid possible future PSD applicability for any new source project with the potential to emit sulfur dioxide.

Records will be maintained on-site for a minimum of five years and made available to Department representatives during normal business hours.

Parameter Monitored: SULFUR DIOXIDE

Upper Permit Limit: 39.5 tons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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



**Condition 26: Capping Monitoring Condition**  
Effective between the dates of 05/06/2016 and 05/05/2021

**Applicable Federal Requirement: 6 NYCRR 201-7.1**

**Item 26.1:**

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

- 6 NYCRR 212-3.1 (a) (2)
- 6 NYCRR 229.1 (d) (2) (vii)
- 6 NYCRR 229.1 (d) (2) (viii)

**Item 26.2:**

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

**Item 26.3:**

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

**Item 26.4:**

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

**Item 26.5:**

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

**Item 26.6:**

The Compliance Certification activity will be performed for the Facility.

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

**Item 26.7:**

Compliance Certification shall include the following monitoring:

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



Actual emissions of volatile organic compounds (VOCs), as of 03/13/1997 are limited to less than 50 tons per each rolling twelve month period in order to avoid the Reasonably Available Control Requirements (RACT) of 6NYCRR, Part 212-3 and Part 229. Production records, the current version of EPA TANKS Software, AP-42 fuel emission factors, and engineering estimates will be used to calculate the rolling monthly total of VOC emissions.

Process and emission control parameters will be monitored and the minimum 99.5% control efficiency required by Part 212-2.1 (a) and (b) and 212-2.3 Table 4 for the scrubber will allow VOC emissions to remain below the 50 ton cap. A daily log is to be kept on-site to record monitored parameters as specified in the standard operating procedure manuals VC-0094 and PH0033 (current editions made available to Department representatives on request) including percent caustic concentration and caustic feed /flow rate.

Activated carbon canisters for the adsorption of organic vapors are in service for several storage tanks and process operations. The frequency for drum replacement (00S25, OPT19, OPT33, OPT34, ST14, ST25 and ST35) is once per calendar year. These carbon drums are changed-out for new (fresh) drums before each campaign begins (one campaign for every set of drums). Periodically, these drums are monitored, for VOC breakthrough.

The carbon drum for the D-7 vent condenser and PT-25 absorption column (emission point 00S20) is to be monitored twice daily when in operation utilizing an appropriate field monitoring device and the carbon drum replaced when breakthrough is detected at 10 parts per million (PPM).

Emission point 00SC9, storage tank ST-3 carbon drum, is to be monitored weekly when in operation using an appropriate field monitoring device. Detection of VOC at levels of 10 PPM will initiate drum replacement.

Emission point 00SC10, plant ventilation carbon drum, is to be monitored once per shift (12 hours) when in operation, using an appropriate field monitoring device. Detection of VOC at levels of 10 PPM will initiate drum replacement.

The permittee will conduct compliance verifications including but not limited to production rate, process material, air flow rate, control equipment parameters, visible emissions, etc as appropriate for the

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circumstances. The permittee will confirm that during source operation all pertinent parameters are within ranges that ensure compliance with the particulate emission rate.

Records of these verifications, investigations and corrective actions will be kept on-site for a period of 5 years and made available to Department representatives on 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, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: VOC

Upper Permit Limit: 49.5 tons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

**Condition 27: Air pollution prohibited**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

**Applicable Federal Requirement:6 NYCRR 211.1**

**Item 27.1:**

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

**Condition 28: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

**Applicable Federal Requirement:6 NYCRR 212-1.5 (g)**

**Item 28.1:**

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The Compliance Certification activity will be performed for the Facility.

**Item 28.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

VanDeMark shall maintain a record of all fence-line phosgene alarm conditions greater than 0.1 ppmv including the date, time, alarm location, windspeed and direction, and operator response.

These records are to be kept on-site and made available to Department representatives on request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

**Condition 29: Compliance Certification**

**Effective between the dates of 05/06/2016 and 05/05/2021**

**Applicable Federal Requirement: 6 NYCRR 236.6 (e) (3)**

**Item 29.1:**

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000075-44-5 PHOSGENE

**Item 29.2:**

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The permittee as a producer of Phosgene is subject to the Reasonably Available Control Technology (RACT) requirements of 6 NYCRR, Part 236 for Synthetic Organic Chemical Manufacturing Facility Component Leaks. As per 236.6(e)(3) the facility has submitted an alternative method of compliance with the requirements of this Part and this Department has determined these procedures to exceed the control and repair requirements of this Part and therefore constitute RACT. This alternative method of compliance was submitted to the United States Environmental Protection Agency as a source specific revision to the New York State Implementation Plan. These procedures are summarized as follows:

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- 1) The Phosgene production and handling facilities are enclosed and vented to a scrubbing system with a minimum 99.5% control efficiency.
- 2) A leak as defined by Part 236.1(b)(10) is an emission of Phosgene greater than or equal to 10,000 ppmv. Equipment is continuously monitored for chemical leaks by detection monitors strategically placed in the production area. These monitors detect Phosgene at 0.02 ppmv and alarms at 0.1 ppmv to immediately alert personnel of chemical leaks.
- 3) The Phosgene monitors shall be maintained and calibrated according to historical operational PM program. The current calibration procedures shall be made accessible to Department representatives on request.
- 4) All repairs to leaking components will be completed within three days of leak detection or equipment will be taken out of service.
- 5) All leaks are recorded on internal incident reporting documents and will include the following information: date on which leak occurred, type of component, location of component, date on which the component was repaired.
- 6) Records will be retained on-site for a minimum of five years.

Parameter Monitored: PHOSGENE  
Upper Permit Limit: 10000 parts per million (by volume)  
Monitoring Frequency: CONTINUOUS  
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -  
SEE MONITORING DESCRIPTION  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2016.  
Subsequent reports are due every 6 calendar month(s).

**Condition 30: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 30.1:**  
The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):  
CAS No: 0NY100-00-0 TOTAL HAP

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**Item 30.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The permittee owns two back-up emergency existing CI RICE engines located at an area source of HAP emissions and are subject to the NESHAP Subpart ZZZZ (40 CFR 63.6580). These engines pre-date the applicability date of the NSPS Subpart IIII.

The permittee is required to install a non-resettable hour meter if one is not already installed.

The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE according to your own maintenance plan.

a. Change oil and filter every 500 hours of operation or annually, whichever comes first or may use oil analysis program instead of prescribed oil change frequency

b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and

c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

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

**Condition 31: Emission Point Definition By Emission Unit  
Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 31.1:**

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

Emission Unit: U-DERV1

Emission Point: 000P5

Height (ft.): 36

Diameter (in.): 30

NYTMN (km.): 4787.92

NYTME (km.): 198.729

Building: B-AREA

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Emission Point: 00S17  
Height (ft.): 26 Diameter (in.): 12  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-AREA

Emission Point: 00S19  
Height (ft.): 42 Diameter (in.): 6  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-AREA

Emission Point: 00S20  
Height (ft.): 4 Diameter (in.): 2  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-AREA

Emission Point: 00S21  
Height (ft.): 9 Diameter (in.): 5  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-AREA

Emission Point: 00S22  
Height (ft.): 42 Diameter (in.): 3  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-AREA

Emission Point: 00S23  
Height (ft.): 42 Diameter (in.): 3  
NYTMN (km.): 4787.9 NYTME (km.): 198.7 Building: D-AREA

Emission Point: 00S25  
Height (ft.): 10 Diameter (in.): 6  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-6

Emission Point: 00S28  
Height (ft.): 26 Diameter (in.): 12  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-AREA

Emission Point: 00S29  
Height (ft.): 48 Diameter (in.): 12  
NYTMN (km.): 4787.9 NYTME (km.): 198.7 Building: D-AREA

Emission Point: 00S30  
Height (ft.): 2 Diameter (in.): 1  
NYTMN (km.): 4787.9 NYTME (km.): 198.7 Building: D-AREA

Emission Point: 00SC4  
Height (ft.): 60 Diameter (in.): 12  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-AREA

Emission Point: 00SC8  
Height (ft.): 65 Diameter (in.): 16  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-AREA

Emission Point: OPT19  
Height (ft.): 42 Diameter (in.): 2  
NYTMN (km.): 4787.9 NYTME (km.): 198.7 Building: D-1

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Emission Point: OPT20  
Height (ft.): 3 Diameter (in.): 2  
NYTMN (km.): 4787.9 NYTME (km.): 198.7 Building: D-AREA

Emission Point: OPT33  
Height (ft.): 43 Diameter (in.): 2  
NYTMN (km.): 4787.92 NYTME (km.): 198.7 Building: D-AREA

Emission Point: OPT34  
Height (ft.): 43 Diameter (in.): 2  
NYTMN (km.): 4787.92 NYTME (km.): 198.7 Building: D-AREA

**Item 31.2:**

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

Emission Unit: U-PLAB1

Emission Point: LAB01  
Height (ft.): 33 Diameter (in.): 4  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: B-AREA

Emission Point: LAB02  
Height (ft.): 36 Diameter (in.): 2  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: A-AREA

**Item 31.3:**

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

Emission Unit: U-TANK1

Emission Point: 00ST7  
Height (ft.): 42 Diameter (in.): 2  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: D-AREA

Emission Point: 0ST14  
Height (ft.): 25 Diameter (in.): 2  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: C-AREA

Emission Point: 0ST21  
Height (ft.): 25 Diameter (in.): 2  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: C-AREA

Emission Point: 0ST22  
Height (ft.): 32 Diameter (in.): 2  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: C-AREA

Emission Point: 0ST25  
Height (ft.): 34 Diameter (in.): 2  
NYTMN (km.): 4787.92 NYTME (km.): 198.729 Building: C-AREA

Emission Point: 0ST27



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Height (ft.): 33	Diameter (in.): 2	
NYTMN (km.): 4787.92	NYTME (km.): 198.729	Building: C-AREA
Emission Point: OST28		
Height (ft.): 33	Diameter (in.): 2	
NYTMN (km.): 4787.92	NYTME (km.): 198.729	Building: C-AREA
Emission Point: OST29		
Height (ft.): 33	Diameter (in.): 2	
NYTMN (km.): 4787.92	NYTME (km.): 198.729	Building: C-AREA
Emission Point: OST30		
Height (ft.): 33	Diameter (in.): 2	
NYTMN (km.): 4787.92	NYTME (km.): 198.729	Building: C-AREA
Emission Point: OST32		
Height (ft.): 33	Diameter (in.): 2	
NYTMN (km.): 4787.92	NYTME (km.): 198.729	Building: D-AREA
Emission Point: OST35		
Height (ft.): 37	Diameter (in.): 2	
NYTMN (km.): 4787.92	NYTME (km.): 198.729	Building: D-AREA
Emission Point: OST36		
Height (ft.): 18	Diameter (in.): 2	
NYTMN (km.): 4787.92	NYTME (km.): 198.729	Building: D-AREA
Emission Point: ST119		
Height (ft.): 25	Diameter (in.): 2	
NYTMN (km.): 4787.9	NYTME (km.): 198.7	Building: C-AREA
Emission Point: ST26A		
Height (ft.): 34	Diameter (in.): 2	
NYTMN (km.): 4787.92	NYTME (km.): 198.729	Building: C-AREA
Emission Point: ST31A		
Height (ft.): 34	Diameter (in.): 2	
NYTMN (km.): 4787.873	NYTME (km.): 199.507	Building: C-AREA

**Condition 32: Process Definition By Emission Unit**  
Effective between the dates of 05/06/2016 and 05/05/2021

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

**Item 32.1:**

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

Emission Unit: U-DERV1  
 Process: CMI Source Classification Code: 3-01-999-99  
 Process Description:  
 This is the D-area production unit. Phosgene is used as a reactant to produce phosgene derivatives. A scrubbing

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system consisting of two packed towers S3 and S4, emission point 00SC4 is used to control emissions of phosgene, hydrogen chloride, chloroformates, sulfur dioxide and chlorine. There is a large scrubbing tower, 00S-8, emission point 00SC8, which is used in by-pass and emergency situations for emissions normally venting to emission point 00SC4. This scrubber column also handles plant ventilations, pressure relief devices, vacuum pumps in D-Area and the D-3 addition blower.

Emission Source/Control: 000D6 - Control  
Control Type: VAPOR RECOVERY SYS(INCL.  
CONDENSERS,HOODING, OTHER ENCLOSURES)

Emission Source/Control: 00AC2 - Control  
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 00DC5 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 00SC9 - Control  
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 0C1C2 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 0D6C1 - Control  
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 0D7C1 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 0D9C2 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: 0D9C3 - Control  
Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0D9C5 - Control  
Control Type: REFRIGERATED CONDENSER

Emission Source/Control: 0D9C6 - Control  
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 0S1T1 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 0S1T2 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 0SC10 - Control  
Control Type: ACTIVATED CARBON ADSORPTION

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Emission Source/Control: CV-33 - Control  
Control Type: CONSERVATION VENT

Emission Source/Control: CV-34 - Control  
Control Type: CONSERVATION VENT

Emission Source/Control: PT-33 - Control  
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: PT-34 - Control  
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 00C1B - Process

Emission Source/Control: 00S30 - Process

Emission Source/Control: 00SA1 - Process

Emission Source/Control: 00SA2 - Process

Emission Source/Control: 00SA3 - Process

Emission Source/Control: 0D1V1 - Process

Emission Source/Control: 0D7C2 - Process

Emission Source/Control: 0D7C3 - Process

Emission Source/Control: 0PT33 - Process

Emission Source/Control: 0PT34 - Process

Emission Source/Control: 0S1B5 - Process

Emission Source/Control: 0S1D1 - Process

Emission Source/Control: 0S1D3 - Process

Emission Source/Control: 0S1D7 - Process

Emission Source/Control: 0S1D9 - Process

Emission Source/Control: D9FD1 - Process

Emission Source/Control: D9T33 - Process

Emission Source/Control: D9T34 - Process

Emission Source/Control: PE1D1 - Process

Emission Source/Control: S1P15 - Process



Emission Source/Control: S1T15 - Process  
Emission Source/Control: S1T21 - Process  
Emission Source/Control: S1T22 - Process  
Emission Source/Control: S1T23 - Process  
Emission Source/Control: S1T24 - Process  
Emission Source/Control: S1T25 - Process  
Emission Source/Control: SIST2 - Process  
Emission Source/Control: SIST3 - Process  
Emission Source/Control: SIST8 - Process

**Item 32.2:**

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

Emission Unit: U-DERV1  
Process: DMI Source Classification Code: 3-01-999-99  
Process Description:  
Phosgene production gases are normally discharged to the main scrubber towers S3 and S4 under normal operations (emission point 00SC4). Phosgene production gases can be discharged to first the water scrubber S-6 and caustic scrubber S-5 during an emergency situation (000P5), or if S-3 and S-4 are not available (during a shut-down). Phosgene production fugitive emissions are vented first to the water scrubber S-6 and then to the caustic scrubber S-5 and then to emission point 000P5.

Emission Source/Control: 000P2 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 00S-5 - Control  
Control Type: SODIUM-ALKALI SCRUBBING

Emission Source/Control: 00S-6 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 0S1T1 - Control  
Control Type: WET SCRUBBER

Emission Source/Control: 0S1B1 - Process

Emission Source/Control: 0S1B5 - Process

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**Item 32.3:**

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

Emission Unit: U-FUG01

Process: FUG

Source Classification Code: 3-01-999-99

Process Description:

Process fugitive emissions from the D-Area, VDM fugitives, and miscellaneous fugitive emission sources. Phosgene production fugitive emissions are vented first to the water scrubber S-6 and then to the caustic scrubber S-5. All chlorine emissions from the chlorine railcars, vaporizer, PRV's and plant ventilation vent directly to the caustic scrubber S-5. Both scrubber towers are discharged to emission point 000P5.

Emission Source/Control: 00DRV - Process

Emission Source/Control: 00PHS - Process

Emission Source/Control: 0MISC - Process

**Item 32.4:**

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

Emission Unit: U-PLAB1

Process: PL1

Source Classification Code: 3-01-999-99

Process Description:

Pilot lab off-gases vent through emission point LAB01 and are destroyed in a caustic scrubber (tower S-7). Emission point LAB01 is located in the B-Area while processes are located in the A-Area. Pilot lab processes off-gases vented through emission point LAB02 are located in A-Area and absorbed in the activated carbon units.

Emission Source/Control: A10VS - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: LH6B5 - Control

Control Type: SCRUBBER - PACKED BED

Emission Source/Control: 00A10 - Process

Emission Source/Control: 00LH6 - Process

**Item 32.5:**

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

Emission Unit: U-TANK1

Process: ST1

Source Classification Code: 3-01-830-01

Process Description: Volatile organic compound storage tanks.

Emission Source/Control: 00SF7 - Control

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Control Type: SUBMERGED FILL LINE

Emission Source/Control: 0CV14 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 0SF21 - Control

Control Type: SUBMERGED FILL LINE

Emission Source/Control: 0SF25 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 0SF26 - Control

Control Type: SUBMERGED FILL LINE

Emission Source/Control: 0SF27 - Control

Control Type: SUBMERGED FILL LINE

Emission Source/Control: 0SF28 - Control

Control Type: SUBMERGED FILL LINE

Emission Source/Control: 0SF29 - Control

Control Type: SUBMERGED FILL LINE

Emission Source/Control: 0SF30 - Control

Control Type: SUBMERGED FILL LINE

Emission Source/Control: 0SF32 - Control

Control Type: SUBMERGED FILL LINE

Emission Source/Control: 0SF35 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 0SF36 - Control

Control Type: SUBMERGED FILL LINE

Emission Source/Control: SF119 - Control

Control Type: SUBMERGED FILL LINE

Emission Source/Control: 00ST7 - Process

Emission Source/Control: 0ST14 - Process

Emission Source/Control: 0ST21 - Process

Emission Source/Control: 0ST22 - Process

Emission Source/Control: 0ST25 - Process

Emission Source/Control: 0ST27 - Process

Emission Source/Control: 0ST28 - Process



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Emission Source/Control: 0ST29 - Process

Emission Source/Control: 0ST30 - Process

Emission Source/Control: 0ST32 - Process

Emission Source/Control: 0ST35 - Process

Emission Source/Control: 0ST36 - Process

Emission Source/Control: D1T19 - Process

Emission Source/Control: ST119 - Process

Emission Source/Control: ST26A - Process

**Condition 33: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 33.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-DERV1

**Item 33.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

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 owner/operator shall conduct daily visible emissions observation of emission points 00021, 00S22, 00S28, and 00S29 when in operation. If visible emissions are observed, the process equipment shall be shut down until corrective action is completed. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

**Condition 34: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 34.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-DERV1

Regulated Contaminant(s):

CAS No: 007446-09-5      SULFUR DIOXIDE

**Item 34.2:**

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Sulfur dioxide, a criteria pollutant, emissions during the production of Carbaester are required by Table 3 of 212-2.3(a) to be controlled by an air cleaning device to a minimum 91%.

Process and control parameters are to be monitored to demonstrate that the scrubber system is continuously operated and maintained in such a manner as to ensure the minimum degree of air cleaning. The permittee will confirm that during source operation all pertinent parameters are within ranges that ensure compliance with the minimum required control efficiency.

A daily log is to be kept on site which will record monitored parameters as specified in procedure VC0094 and PH0033 (current editions made available to Department representatives on request) including % caustic and caustic feed pressure/flow rate.

The permittee will investigate, in a timely manner, any instance where there is cause to believe that the minimum required control efficiency is not being met. 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 for a period of 5

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years and made available to Department representatives on 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, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: DEGREE OF AIR CLEANING

Lower Permit Limit: 91 percent reduction

Reference Test Method: Method 6C

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

**Condition 35: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 35.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-DERV1

Regulated Contaminant(s):

CAS No: 000075-44-5	PHOSGENE
CAS No: 000079-22-1	METHYL CHLOROCARBONATE (C2H3CLO2)
CAS No: 007782-50-5	CHLORINE
CAS No: 007647-01-0	HYDROGEN CHLORIDE

**Item 35.2:**

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The flow rate and percent caustic are checked hourly. The flow rate is determined manually or with instrumentation reading. The percent caustic is determined manually by titration and ranges between 2% minimum and 9%.

Records of these verifications, investigations and corrective actions will be kept on-site for a period of 5 years and made available to Department representatives on request. Should the Department determine that permittee's

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record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: CONCENTRATION  
Lower Permit Limit: 2 percent by volume  
Monitoring Frequency: HOURLY  
Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE - SEE MONITORING DESCRIPTION  
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)  
Reports due 30 days after the reporting period.  
The initial report is due 7/30/2016.  
Subsequent reports are due every 6 calendar month(s).

**Condition 36: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 36.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-DERV1

Regulated Contaminant(s):

CAS No: 000075-44-5	PHOSGENE
CAS No: 000079-22-1	METHYL CHLOROCARBONATE (C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub> )
CAS No: 007647-01-0	HYDROGEN CHLORIDE
CAS No: 007782-50-5	CHLORINE

**Item 36.2:**

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Process and control parameters are monitored to demonstrate that the scrubber system is continuously operated and maintained in such a manner as to ensure a minimum degree of air cleaning of 99.5% for potential emissions of hydrogen chloride, chlorine, phosgene and methyl carbonate from process sources as required by Table 4 of 212-2.3(b). A daily log is to be kept on site which will record monitored parameters as specified in procedure VC0094 and PH0033 (current editions made available to Department representatives on request) including % caustic and caustic feed pressure/flow rate.

The flow rate and percent caustic are checked hourly. The

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flow rate is determined manually or with instrumentation reading. The percent caustic is determined manually by titration and ranges between 2% minimum and 9%.

The permittee will confirm that during source operation all pertinent parameters are within ranges that ensure compliance with the minimum required control efficiency.

The permittee will investigate, in a timely manner, any instance where there is cause to believe that the minimum required control efficiency is not being met. 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 for a period of 5 years and made available to Department representatives on 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, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: DEGREE OF AIR CLEANING

Lower Permit Limit: 99.5 percent reduction

Monitoring Frequency: PER SHIFT

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

**Condition 37: Compliance Certification**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 37.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-DERV1

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

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**Item 37.2:**

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Emissions of solid particulates from emission points 00S21, 00S22, 00S28, 00S29, shall not exceed 0.050 grains of particulate per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis. Maintenance of bag filters will be performed as necessary or when indicated by visual observations. Maintenance records will be kept on-site for a period of five years.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.05 grains per dscf

Reference Test Method: Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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

**Condition 38: Compliance Certification**

**Effective between the dates of 05/06/2016 and 05/05/2021**

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

**Item 38.1:**

The Compliance Certification activity will be performed for:

Emission Unit: U-PLAB1

Emission Point: LAB02

**Item 38.2:**

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The scrubber (S-7) associated with lab activities, shall be operated and maintained as appropriate to achieve the minimum degree of air cleaning necessary to comply with the control requirements of Table 3 and Table 4 of 6NYCRR, Part 212-2.3. In the event that full-scale production is intended, the permittee shall submit notification to this Department a minimum thirty days prior along with the intended scrubber operational parameters. The environmental rating and the degree of air cleaning shall be determined by this Department.







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

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

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

**STATE ONLY APPLICABLE REQUIREMENTS**  
**The following conditions are state applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.**

**Condition 41: Contaminant List**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

**Applicable State Requirement:ECL 19-0301**

**Item 41.1:**  
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000075-44-5  
Name: PHOSGENE



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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 43: Compliance Demonstration**  
**Effective between the dates of 05/06/2016 and 05/05/2021**

**Applicable State Requirement: 6 NYCRR 617.11 (d)**

**Item 43.1:**

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000075-44-5 PHOSGENE

**Item 43.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Phosgene production is limited to 16,100,000 pounds per year. Any proposal for an increase in phosgene production beyond this limit will require a full State Environmental Quality Review (SEQR) and may result in a positive declaration. Records of annual phosgene production are to be kept on-site for a period of 5 years and made available to representatives of this department on request.

Parameter Monitored: PHOSGENE

Upper Permit Limit: 16100000 pounds per year

Monitoring Frequency: ANNUALLY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2016.

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