

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

Facility Identification Data

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

Owner/Firm

Name: VANDEMARK CHEMICAL INC
Address: 1 NORTH TRANSIT RD
LOCKPORT, NY 14094, USA
Owner Classification: Corporation/Partnership

Permit Contacts

Division of Environmental Permits:
Name: DOUGLAS E BORSCHER
Address: 270 MICHIGAN AVE
BUFFALO, NY 14203-2999

Division of Air Resources:
Name: JACQUELINE DIPRONIO
Address: 270 MICHIGAN AVENUE
BUFFALO, NY 14203-2999

Air Permitting Contact:

Name: MATTHEW BARMASSE
Address: VANDEMARK CHEMICAL INC
1 NORTH TRANSIT RD
LOCKPORT, NY 14094-2399
Phone:7164336764

Permit Description

Introduction

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

Summary Description of Proposed Project

Application for renewal of Air Title V Facility.

Attainment Status

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007



VANDEMARK CHEMICAL INC is located in the town of LOCKPORT in the county of NIAGARA. The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter < 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	MARGINAL NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

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

** NOx has a separate ambient air quality standard in addition to being an ozone precursor

Facility Description

As a batch chemical manufacturing facility, Van Demark must respond to customer demands for new or modified products quickly and efficiently. These new/modified products may involve the use of new reactants and/or changes in chemicals used at the facility. These new formulations may result in the emission of altered emissions from existing equipment and sources. This is a state facility modification application to secure the necessary approval to manufacture a new product in existing processing equipment with a modification of emissions exhausting through existing emissions points. Known as CARBAESTER process, the facility emissions of sulfur dioxide will increase due to the reaction of thionyl chloride. During the life of production of the carbaester product, the manufacture of products currently permitted will be displaced by this product.

Permit Structure and Description of Operations

The Title V permit for VANDEMARK CHEMICAL INC is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process.

A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device.

[NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

- combustion - devices which burn fuel to generate heat, steam or power
- incinerator - devices which burn waste material for disposal
- control - emission control devices
- process - any device or contrivance which may emit air contaminants that is not included in the above categories.

VANDEMARK CHEMICAL INC is defined by the following emission unit(s):

Emission unit UDERV1 - ISOICHEM's phosgene and phosgene derivative production area. This emission unit includes emission points: 00SC4-the main scrubber exhaust; 00SC8-plant ventilation and emergency scrubbing system, 00P5-phosgene production area ventilation and emergency scrubber, 00S17-drum filling station; 00S18-centrifuge; 00S20-vent condenser; 00S21-Vac-u-max baghouse in D-3; 00S22-solids addition baghouse in C-1 for D-3; 00S28-dust collector for solids addition room in C-1; 00S29-Vac-u-max baghouse in D-7, 00DC5-dust collector for D-7 and D-9; 00S40-filter dryer vent condenser; 0PT33-receiver tank; 0PT34-wash tank; 0PT19-centrifuge wash tank; and 0PT20-vacuum pump cooling tank.

Emission unit UDERV1 is associated with the following emission points (EP):

00P5, 00DC5, 00S17, 00S18, 00S19, 00S20, 00S21, 00S22, 00S28, 00S29, 00S30, 00S40, 00S41, 00SC4, 00SC8, 0PT19, 0PT20, 0PT29, 0PT33, 0PT34

It is further defined by the following process(es):

Process: CM1 is located at First, Building D-AREA - This is the D-area production unit. Phosgene is used as a reactant to produce phosgene derivatives. A scrubbing 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, S8, emission point 00SC8, which is used in by-pass and emergency situations for emissions normally venting to emission point 00SC4. This scrubber column normally handles plant ventilations, pressure relief devices, vacuum pumps in D-Area and the D-3 addition blower.

Process: DMI is located at Building B-AREA - Phosgene production gases are vented to the main scrubber columns S3 and S4, emission point point 00SC4. Phosgene production fugitive emissions and chlorine are vented to emission point 00P5, a caustic scrubber. This scrubber may be used in an emergency situation for phosgene production.

Emission unit UFUG01 - Process fugitive emissions.

It is further defined by the following process(es):

Process: FUG is located at A-B-C-D AREAS, Building FUG AREA - Process fugitive emissions.



New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007

Emission unit UPLAB1 - mit U-PLAB1 describes exempt laboratory activities and at times may have production activities. This unit has two potentially regulated emission points LAB01, a scrubber and LAB02, activated carbon drum. If commercial products are being made and there are applicable requirements, the appropriate monitoring will be conducted.

Emission unit UPLAB1 is associated with the following emission points (EP):

LAB01, LAB02

It is further defined by the following process(es):

Process: PL1 is located at A-10, Building A-AREA - Pilot lab off-gases vent through emission point LAB01 and are destroyed in a caustic scrubber. 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 unit UTANK1 - ISOCHEM storage vessels including VOC storage tanks, include emission points 00ST1, 0ST14, 0ST22, 0ST25, 0ST26, 0ST27, 0ST29, and 0ST30 C-Area and emission points 00ST7, 0ST31, 0ST32, 0ST35, and 0ST36 in the D-Area.

Emission unit UTANK1 is associated with the following emission points (EP):

00ST7, 0ST14, 0ST21, 0ST22, 0ST25, 0ST26, 0ST27, 0ST28, 0ST29, 0ST30, 0ST32, 0ST35, 0ST36, ST119

It is further defined by the following process(es):

Process: ST1 is located at 1, Building C-AREA - Volatile organic compound storage tanks.

Title V/Major Source Status

VANDEMARK CHEMICAL INC is subject to Title V requirements. This determination is based on the following information:

The facility is subject to the Title V major source permitting requirements of 40 CFR Part 70 and 6NYCRR Part 201-6 as determined by actual historical emissions of carbon monoxide (CO) in excess of 100 tons per year from the production of phosgene.

Program Applicability

The following chart summarizes the applicability of VANDEMARK CHEMICAL INC with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability
PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	NO
NSPS	YES

**New York State Department of Environmental Conservation
Permit Review Report**



Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007

TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	YES
SIP	YES

NOTES:

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

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

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's)

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

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

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

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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007



RACT Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

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

Compliance Status

Facility is in compliance with all requirements

SIC Codes

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

SIC Code	Description
2834	PHARMACEUTICAL PREPARATIONS
2869	INDUSTRIAL ORGANIC CHEMICALS, NEC

SCC Codes

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

SCC Code	Description
3-01-830-01	CHEMICAL MANUFACTURING CHEMICAL MANUFACTURING - GENERAL PROCESSES Storage/Transfer
3-01-999-99	CHEMICAL MANUFACTURING CHEMICAL MANUFACTURING - OTHER NOT CLASSIFIED Specify in Comments Field

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Series code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for that contaminant. If no PTE quantity is displayed, the PTE Range is provided to indicate the approximate magnitude of facility-wide emissions for the specified contaminant in terms of tons per year (tpy). The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
000123-91-1	1,4-DIETHYLENE DIOXIDE (HAP)		> 0 but < 10 tpy
000121-69-7	BENZENAMINE, N, N-DIMETHYL (HAP)		> 0 but < 10 tpy
000630-08-0	CARBON MONOXIDE		>= 250 tpy
007782-50-5	CHLORINE (HAP)		>= 10 tpy
000108-90-7	CHLOROBENZENE (HAP)		>= 10 tpy
000075-09-2	DICHLOROMETHANE (HAP)		> 0 but < 10 tpy
000068-12-2	FORMAMIDE, N,N-DIMETHYL (HAP)		> 0 but < 10 tpy
0NY100-00-0	HAP		>= 40 tpy but < 50 tpy
000110-54-3	HEXANE (HAP)		> 0 but < 10 tpy
000302-01-2	HYDRAZINE (HAP)		> 0 but < 10 tpy
007647-01-0	HYDROGEN CHLORIDE (HAP)		>= 10 tpy
000067-56-1	METHYL ALCOHOL (HAP)		> 0 but < 10 tpy
000079-22-1	METHYL CHLOROCARBONATE (C2H3ClO2)		>= 10 tpy but < 25 tpy
001634-04-4	METHYL TERTBUTYL ETHER (HAP)		> 0 but < 10 tpy
000121-44-8	N,N-DIETHYL ETHANAMINE (HAP)		> 0 but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN		>= 2.5 tpy but < 10 tpy
0NY075-00-0	PARTICULATES		>= 2.5 tpy but < 10 tpy
000108-95-2	PHENOL (HAP)		> 0 but < 10 tpy
000075-44-5	PHOSGENE (HAP)		>= 10 tpy
0NY075-00-5	PM-10		> 0 but < 2.5 tpy
007446-09-5	SULFUR DIOXIDE	79999	
000108-88-3	TOLUENE (HAP)		>= 10 tpy
0NY998-00-0	VOC	99999	
001330-20-7	XYLENE, M, O & P MIXT. (HAP)		> 0 but < 10 tpy

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

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

Item B: Public Access to Recordkeeping for Title V Facilities - 6NYCRR Part 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 6NYCRR 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 Part 201-6.3(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.

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(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 Part 201-6.5(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 Part 201-6.5(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 Part 201-6.5(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 Part 201-6.5(a)(6)

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

Item I: Severability - 6 NYCRR Part 201-6.5(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.

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

Item J: Permit Shield - 6 NYCRR Part 201-6.5(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 Part 201-6.5(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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

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.

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

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.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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.

Regulatory Analysis

Location Facility/EU/EP/Process/ES	Regulation	Short Description	Condition
FACILITY	ECL 19-0301	Powers and Duties of the Department with respect to air pollution control	52
FACILITY	40CFR 52-A.21 (i) (1)	Review of Major Stationary Sources and Major Modifications - Source Applicability	55
U-TANK1/0ST36/ST1/0ST36	40CFR 60-Kb.116b	NSPS for volatile organic liquid storage vessels-	51
FACILITY	40CFR 68	monitoring of operations Chemical accident prevention provisions	21
U-DERV1	40CFR 68-A.10 (a)	Applicability	39



New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007

U-DERV1	40CFR 68-A.10 (e)	Applicability	40
FACILITY	40CFR 82	Protection of	26
FACILITY	40CFR 82-A	Stratospheric Ozone	
FACILITY	40CFR 82-F	Protection of	27
FACILITY	40CFR 82-F	Stratospheric Ozone - production and consumption controls	22, 28
FACILITY	40CFR 82-F.154	Protection of	29
FACILITY	6NYCRR 200.6	Stratospheric Ozone - recycling and emissions reduction - prohibitions	
FACILITY	6NYCRR 200.7	Acceptable ambient air quality.	1
FACILITY	6NYCRR 201-1.4	Maintenance of equipment.	10
FACILITY	6NYCRR 201-1.7	Unavoidable noncompliance and violations	53
FACILITY	6NYCRR 201-1.8	Recycling and Salvage	11
FACILITY	6NYCRR 201-1.8	Prohibition of reintroduction of collected contaminants to the air	12
FACILITY	6NYCRR 201-3.2 (a)	Exempt Activities - Proof of eligibility	13
FACILITY	6NYCRR 201-3.3 (a)	Trivial Activities - proof of eligibility	14
FACILITY	6NYCRR 201-6	Title V Permits and the Associated Permit Conditions	23, 30, 31
FACILITY	6NYCRR 201-6.5 (a) (4)	General conditions	15
FACILITY	6NYCRR 201-6.5 (a) (7)	General conditions	
Fees 2	6NYCRR 201-6.5 (a) (8)	General conditions	16
FACILITY	6NYCRR 201-6.5 (c)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	3
FACILITY	6NYCRR 201-6.5 (c) (2)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	4
FACILITY	6NYCRR 201-6.5 (c) (3) (ii)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	5
FACILITY	6NYCRR 201-6.5 (d) (5)	Compliance schedules	17
FACILITY	6NYCRR 201-6.5 (e)	Compliance Certification	6
FACILITY	6NYCRR 201-6.5 (f) (2)	Protocol	24
FACILITY	6NYCRR 201-6.5 (f) (6)	Off Permit Changes	18
FACILITY	6NYCRR 201-7	Federally-Enforceable Emission Caps	54, 55, 56
FACILITY	6NYCRR 202-1.1	Required emissions tests.	19
FACILITY	6NYCRR 202-2.1	Emission Statements - Applicability	7
FACILITY	6NYCRR 202-2.5	Emission Statements - record keeping requirements.	8
FACILITY	6NYCRR 211.2	General Prohibitions - air pollution prohibited.	57



New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007

FACILITY	6NYCRR 211.3	General Prohibitions - visible emissions limited	20
FACILITY	6NYCRR 212.10 (a) (2)	NOx and VOC RACT required at major facilities	56
U-DERV1	6NYCRR 212.4 (a)	General Process Emission Sources - emissions from new sources and/or modifications	32, 33, 34, 35, 36
U-PLAB1/LAB02	6NYCRR 212.4 (a)	General Process Emission Sources - emissions from new sources and/or modifications	60
U-DERV1	6NYCRR 212.4 (c)	General Process Emission Sources - emissions from new processes and/or modifications	37
U-DERV1	6NYCRR 212.6 (a)	General Process Emission Sources - opacity of emissions limited	38
FACILITY	6NYCRR 215	Open Fires	9
FACILITY	6NYCRR 221.2	Prohibition.	58
FACILITY	6NYCRR 229.1 (d) (2) (vii)	New requirements outside NYCMA/LOCMA VOL tanks 10000-20000 gallons	56
U-TANK1	6NYCRR 229.1 (d) (2) (vii)	New requirements outside NYCMA/LOCMA VOL tanks 10000-20000 gallons	44
FACILITY	6NYCRR 229.1 (d) (2) (viii)	New requirements outside NYCMA/LOCMA VOL tanks less than 10000 gallons	56
U-TANK1	6NYCRR 229.1 (d) (2) (viii)	New requirements outside NYCMA/LOCMA VOL tanks less than 10000 gallons	45
U-DERV1/00SC4/CM1/SIST3	6NYCRR 229.3 (e) (2) (iv)	Volatile organic liquid storage tanks	42
U-TANK1/00ST1/ST1/00ST1	6NYCRR 229.3 (e) (2) (iv)	Volatile organic liquid storage tanks	46
U-TANK1/0ST21/ST1/0ST21	6NYCRR 229.3 (e) (2) (iv)	Volatile organic liquid storage tanks	49
U-TANK1/0ST22/ST1/0ST22	6NYCRR 229.3 (e) (2) (iv)	Volatile organic liquid storage tanks	50
U-DERV1/00SC4/CM1/SIST2	6NYCRR 229.3 (e) (2) (v)	Volatile organic liquid storage tanks	41
U-DERV1/00SC4/CM1/SIST8	6NYCRR 229.3 (e) (2) (v)	Volatile organic liquid storage tanks	43
U-TANK1/00ST7/ST1/00ST7	6NYCRR 229.3 (e) (2) (v)	Volatile organic liquid storage tanks	47
U-TANK1/0ST14/ST1/0ST14	6NYCRR 229.3 (e) (2) (v)	Volatile organic liquid storage tanks	48
FACILITY	6NYCRR 236.6 (e) (3)	Exemptions.	25
FACILITY	6NYCRR 617.11 (d)	Decision-making and findings requirements	59

Applicability Discussion:

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

ECL 19-301.

This section of the Environmental Conservation Law establishes the powers and duties

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

assigned to the Department with regard to administering the air pollution control program for New York State.

6NYCRR Part 200-.6

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

6NYCRR Part 200-.7

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

6NYCRR Part 201-1.4

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

6NYCRR Part 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6NYCRR Part 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6NYCRR Part 201-3.2(a)

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

6NYCRR Part 201-3.3(a)

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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

pollution control requirements, regulations, or law.

6NYCRR Part 201-6

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

6NYCRR 201-6.5(a)(4)

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

6NYCRR 201-6.5(a)(7)

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

6NYCRR 201-6.5(a)(8)

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

6NYCRR Part 201-6.5(c)

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

6NYCRR Part 201-6.5(c)(2)

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6NYCRR Part 201-6.5(c)(3)(ii)

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

6NYCRR 201-6.5(d)(5)

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

6NYCRR Part 201-6.5(e)

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

6NYCRR 201-6.5(f)(6)

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

6NYCRR Part 202-1.1

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

6NYCRR Part 202-2.1

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

6NYCRR Part 202-2.5

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

6NYCRR Part 211-.2

This regulation prohibits any emissions of air contaminants to the outdoor atmosphere which may be detrimental to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property regardless

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

of the existence of any specific air quality standard or emission limit.

6 NYCRR Part 211.3

This condition requires that the opacity (i.e., the degree to which emissions other than water reduce the transmission of light) of the emissions from any air contamination source be less than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent.

6 NYCRR Part 215

Prohibits open fires at industrial and commercial sites.

40 CFR Part 68.

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

40 CFR Part 82, Subpart F

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

Facility Specific Requirements

In addition to Title V, VANDEMARK CHEMICAL INC has been determined to be subject to the following regulations:

40CFR 52-A.21 (i) (1)

ISOCHEM 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).

40CFR 60-Kb.116b

New Source Performance Standard applies to each storage vessels with a capacity greater than 75 cubic

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007



meters which commenced construction after July 23, 1984.

ISOCHEM will not store liquids having a vapor pressure greater than 15.0 kPa in tank ST-36 and therefore not be subject to the requirements of this subpart as per 60.110b(b)

40CFR 68-A.10 (a)

(a) An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance is required to comply with the requirements to have an accidental release plan within a defined time, which is no later than:

- (1) June 21, 1999;
- (2) Three years after the date on which a regulated substance is first listed; or
- (3) The date on which a regulated substance is first present above a threshold quantity.

40CFR 68-A.10 (e)

If at any time a covered process has a change in its eligibility criteria, the owner or operator shall comply with the requirements associated with the new criteria that applies to the process and update the RMP.

40CFR 82

The purpose of this regulation is to implement standards on the protection of stratospheric ozone through the control of chloroflourocarbons (CFCs).

40CFR 82-A

This subpart is intended to implement the Montreal Protocol on Substances that Deplete the Ozone Layer and sections 602, 603, 604, 605, 606, 607, 614 and 616 of the Clean Air Act Amendments of 1990, Public Law 101-549. It imposes limits on the production and consumption (defined as production plus imports minus exports, excluding transshipments and used controlled substances) of certain ozone-depleting substances according to specified schedules. The requirement applies to any person that produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product.

40CFR 82-F.154

This section specifies the following prohibitions:

Effective June 14, 1993, no person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the environment any class I or class II substance used as refrigerant in such equipment. De minimis releases associated with good faith attempts to recycle or recover refrigerants are not subject to this prohibition.

Effective July 13, 1993, no person may open appliances except MVACs for maintenance, service, or

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007



repair, and no person may dispose of appliances except for small appliances, MVACs, and MVAC-like appliances.

Effective November 15, 1993, no person may manufacture or import recycling or recovery equipment for use during the maintenance, service, or repair of appliances except MVACs, and no person may manufacture or import recycling or recovery equipment for use during the disposal of appliances except small appliances, MVACs, and MVAC-like appliances, unless the equipment is certified.

Effective June 14, 1993, no person shall alter the design of certified refrigerant recycling or recovery equipment in a way that would affect the equipment's ability to meet the certification standards set forth in § 82.158 without resubmitting the altered design for certification testing. Until it is tested and shown to meet the certification standards the equipment so altered will be considered uncertified.

Effective August 12, 1993, no person may open appliances except MVACs for maintenance, service, or repair, and no person may dispose of appliances except for small appliances, MVACs, and MVAC-like appliances, unless such person has certified to the Administrator pursuant to § 82.162 that such person has acquired certified recovery or recycling equipment and is complying with the applicable requirements of this subpart.

Effective August 12, 1993, no person may recover refrigerant from small appliances, MVACs, and MVAC-like appliances for purposes of disposal of these appliances unless such person has acquired recovery equipment that meets the standards set forth in § 82.158 (l) and/or (m).

No person may sell or offer for sale for use as a refrigerant any class I or class II substance consisting wholly or in part of used refrigerant.

Effective August 12, 1993, no person reclaiming refrigerant may release more than 1.5% of the refrigerant received by them.

Effective November 15, 1993, no person may sell or distribute, or offer for sale or distribution, any appliances, except small appliances, unless such equipment is equipped with a servicing aperture to facilitate the removal of refrigerant at servicing and disposal.

Effective November 15, 1993, no person may sell or distribute, or offer for sale or distribution any small appliance unless such equipment is equipped with a process stub to facilitate the removal of refrigerant at servicing and disposal.

No technician training or testing program may issue certificates pursuant to § 82.161 unless the program complies with all of the standards of § 82.161 and appendix D, and has been granted approval.

Effective November 14, 1994, no person may sell or distribute, or offer for sale or distribution, any class I or class II substance for use as a refrigerant to any person unless:

6NYCRR 201-6.5 (c) (3) (ii)

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007



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

6NYCRR 201-6.5 (f) (2)

This regulation defines, in general terms, the protocol component of the operational flexibility provisions. Protocols are to specify how proposed compliance changes are to be evaluated with respect to applicable requirements and in particular Part 212. This regulation requires the protocol to include provisions for notifying the Department of changes, assessing control requirements, determining compliance with applicable rules and maintaining the source inventory.

6NYCRR 201-7

This subpart specifies how a source owner or operator may opt to avoid being subject to one or more applicable requirements to which the source or unit would have otherwise been subject, or where needed to establish an emission reduction credit by accepting federally-enforceable permit conditions restricting or capping emissions.

6NYCRR 212 .10 (a) (2)

Reasonably Available Control Technology requirements for Major Facilities located outside of lower Orange County and metropolitan New York City and which have the potential to emit of 100 tons per year or more of nitrogen oxides and 50 tons per year or more of volatile organic compounds. This facility has chosen to limit its emissions of volatile organic compounds to less than 50 tons per year during any consecutive twelve month period in order to avoid major source requirements.

6NYCRR 212 .4 (a)

This rule requires compliance with the degree of control specified in Tables 2, 3 and 4 for new (after July 1, 1973) process emission sources.

6NYCRR 212 .4 (c)

This rule requires existing sources (in operation after July 1, 1973) of solid particulates with environmental rating of B or C which are not subject to Table 5 "Processes for which Permissible Emission Rate is Based on Process Weight, to be limited to an particulate emission rate not to exceed 0.05 grains per dry standard cubic foot.

6NYCRR 212 .6 (a)

This rule specifies an opacity limitation of less than 20% for any six consecutive minute period for all process emission sources.

6NYCRR 221 .2

Prohibits the use of asbestos containing surface coating material.

6NYCRR 229 .1 (d) (2) (vii)

Any volatile organic liquid storage tank with a capacity greater than or equal to 10,000 gallons but less than 20,000 gallons located at a facility with an annual potential to emit (PTE) of VOC greater than 50 tons per year in areas other than the New York City metropolitan area or the Lower Orange County

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007



metropolitan area , (which were designated as nonattainment areas for ozone on or after August 23, 1979,) must be equipped with submerged fill.

Since the facility wide PTE was not limited to less than the major source threshold of 50 tons per year until 3/13/97; tanks constructed prior to that date were required to comply with the control requirements of this subpart.

6NYCRR 229 .1 (d) (2) (viii)

Volatile liquid organic storage tanks with a capacity less than 10,000 gallons and located at a facility with an annual potential to emit (PTE)of 50 tons outside of the New York City metropolitan area or the Lower Orange County metropolitan area, (which was designated as non-attainment area on or after August 23, 1979) must be equipped with conservation vents.

Since the facility- wide PTE was not limited to less than 50 tons until 03/13/97, the tanks constructed prior to that date were required to comply with the control requirements of this subpart.

6NYCRR 229 .3 (e) (2) (iv)

Volatile organic liquid storage tanks with a capacity greater than or equal to 10,000 gallons but less than 20,000 gallons are required to be equipped with submerge fill.

6NYCRR 229 .3 (e) (2) (v)

Volatile organic liquid storage tanks with a capacity of less than 10,000 gallons are required to be equipped with conservation vents.

6NYCRR 236 .6 (e) (3)

Conditions under 236.6(e)(3) allow alternative methods of compliance that have been determined on a case-by case basis by DEC to constitute "reasonably available control technology."

6NYCRR 617 .11 (d)

617.11 DECISION-MAKING AND FINDINGS REQUIREMENTS.

(a) Prior to the lead agency's decision on an action that has been the subject of a final EIS, it shall afford agencies and the public a reasonable time period (not less than 10 calendar days) in which to consider the final EIS before issuing its written findings statement. If a project modification or change of circumstance related to the project requires a lead or involved agency to substantively modify its decision, findings may be amended and filed in accordance with subdivision 617.12(b) of this Part.

(b) In the case of an action involving an applicant, the lead agency's filing of a written findings statement and decision on whether or not to fund or approve an action must be made within 30 calendar days after the filing of the final EIS.

(c) No involved agency may make a final decision to undertake, fund, approve or disapprove an action that has been the subject of a final EIS, until the time period provided in subdivision 617.11(a) of this section has passed and the agency has made a written findings statement. Findings and a decision may be made simultaneously.

(d) Findings must:

(1) consider the relevant environmental impacts, facts and conclusions disclosed in the final EIS;

(2) weigh and balance relevant environmental impacts with social, economic and other considerations;



New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007

- (3) provide a rationale for the agency's decision;
(4) certify that the requirements of this Part have been met;
(5) certify that consistent with social, economic and other essential considerations from among

the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.

(e) No state agency may make a final decision on an action that has been the subject of a final EIS and is located in the coastal area until the agency has made a written finding that the action is consistent with applicable policies set forth in 19 NYCRR 600.5. When the Secretary of State has approved a local government waterfront revitalization program, no state agency may make a final decision on an action, that is likely to affect the achievement of the policies and purposes of such program, until the agency has made a written finding that the action is consistent to the maximum extent practicable with that local waterfront revitalization program.

Compliance Certification

Summary of monitoring activities at VANDEMARK CHEMICAL INC:

Table with 3 columns: Location Facility/EU/EP/Process/ES, Type of Monitoring, and Cond No. It lists various monitoring activities such as record keeping/maintenance procedures and monitoring of process or control device parameters as surrogate.

Basis for Monitoring

6NYCRR, Part 201-7- Federally Enforceable Emissions Caps:

ISOCHEM, 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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007



national ambient air quality standard (NAAQS). Actual emissions of carbon monoxide from the facility exceed 100 tons per year. ISOICHEM will accept federally enforceable permit conditions to limit its potential to emit of sulfur dioxide from the production of Carbester in emission unit U-DERV1 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).

ISOICHEM will limit potential emissions of sulfur dioxide during the production of Carbester to less than 40 tons by maintaining the efficiency of its scrubbing system to the minimum 91% control of sulfur dioxide required by 6NYCRR, Part 212.4(a).

6NYCRR, Part 212.4(a)-Emissions from New Emission Sources and/or Modifications:

Phosgene production is described in emission unit UDERV-1, process DM1. Phosgene and chlorine emissions are controlled by the caustic scrubbing system, emission point 00SC4. Emission rate potentials of chlorine, hydrogen chloride, and isopropyl chloroformate are in excess of one pound per hour and therefore a minimum control efficiency of 99% for 'A' rated contaminants is required. Compliance will be demonstrated by monitoring and recording process and control parameters as specified in VC-0090 (current edition). The phosgene department also maintains a scrubbing system, emission point 000P5, used for fugitive emissions from the process, this scrubber may also be used if the D-Area scrubber system (00SC4) is not available. Compliance will be demonstrated by monitoring and recording process and control parameters as specified in PH0033.

Emission unit U-DERV1, process CM1 describes the D-Area derivatives production unit consisting of reactor vessels, chemical process and storage tanks, and packed tower scrubbing systems. Here, phosgene is used as a reactant to produce phosgene derivatives. Off-gases from the reactor vessels are controlled by two packed tower identified as emission source 00SC4, and vented through emission point 00SC4. Emission rate potentials of phosgene, chlorine, and chloroformates, "A" rated contaminants in excess of one pound per hour are controlled to a minimum 99% as required by Part 212. Compliance will be demonstrated by monitoring % caustic greater than 2% and caustic feed pressure/flow rate for the scrubbing towers. A second scrubbing tower, emission point 00SC8, is used in by-pass and emergency situations only to handle emissions normally venting to emission point 00SC4. This scrubber column normally handles general plant ventilation and fugitives

Emission unit U-DERV1 also has an ERP of sulfur dioxide, of 50 pounds per hour during the production of carbaester and therefore Table 2 of Part 212 requires a minimum control of 91%.

6NYCRR, Part 212.4(c) Emissions of Particulate Emissions:

Emission unit UDERV-1 has five emission points, 00S21, 00S22, 00S28, 00S29, and 00DC5, which are subject to 0.05 grains/dscf particulate limit established in 6NYCRR, Part 212.4(c). Compliance will be demonstrated by daily visual observations when operating. If visible emissions are noted, the equipment is immediately shut down until repairs are completed.

6NYCRR, Part 212.10-Reasonably Available Control Technology for Major Sources of VOC and NOx:

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1

10/25/2007



Since the potential to emit of VOC's exceeds the major source threshold of 50 tons per year, actual emissions of VOC will be limited to less than 50 tons per each rolling twelve month period in order to avoid the control requirements of this subpart. To ensure compliance with the 50 ton per year limit, process and control parameters will be monitored to demonstrate that VOC emissions from the facility process scrubbers are controlled to a minimum of 99.9%. A daily log is kept on-site which monitors parameters as specified in procedure VC-0090 including %caustic greater than 2% and caustic feed/flow rate.

In addition, VOC emissions from emission points 00S20, the vacuum tray dryer; 00S19, the vacuum pump discharge; and 00S40, the filter dryer; will be controlled to 70%, 99%, and 90% respectively. Each emission point will be monitored using an appropriate field measuring device and detection of VOC at levels of 10 PPM will indicate breakthrough and initiate carbon drum replacement to ensure the required control efficiency. Emission point 00S20 is to be monitored twice daily to ensure a minimum 70% control efficiency. EP 00S19 is to be monitored weekly to ensure 99% removal of VOC. EP 00S40 will be monitored once per shift to ensure 90% VOC removal.

6NYCRR, Part 229-Volatile Organic Liquid Storage :

Emission unit U-TANK1 describes storage vessels. Since the facility-wide potential to emit of VOC was not limited to less than the major source threshold of 50 tons per year until 3/13/97, the tanks constructed prior to that date were required to comply with the control requirements of Part 229 and are either equipped with conservation vents or submerged fill depending on capacity. Tanks constructed subsequent to that date are not subject to the Part 229 requirements unless the facility actual emissions exceed the 50 ton major source threshold.

Facility -wide emissions of VOC are limited through federally enforceable conditions establishing the control efficiency of emission points 00SC4, 00S19, 00S20, 00S40 as noted under the capping requirements for 6NYCRR, Part 212.10.

6NYCRR, Part 236-Synthetic Organic Chemical Manufacturing Component Leaks:

The provisions of Part 236(e)(3) provide for an alternative method of compliance for monitoring chemical leaks. ISOCHEM has chosen an alternative method which has been reviewed and determined by the Department to exceed the prescribed control and repair requirements of that Part. ISOCHEM continuously monitors for phosgene leaks thru a series of self-calibrating detection monitors strategically placed throughout the production area. These monitors detect phosgene at a level of 0.1 ppmv which far exceeds the 10,000 ppmv level defined as a leak by Part 236. Repairs to leaking components are completed within three days or the equipment is removed from service until repairs are completed. This alternate method of compliance has been submitted to the United States Environmental Protection Agency as a source specific revision to the New York State Implementation Plan.

40 CFR 60.110b-Standards of Performance for New Stationary Sources for Volatile Organic Liquid Storage Tanks:

These requirements apply to storage tanks greater than or equal to 75 cubic meters which commenced

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-2909-00107/00001 Renewal Number: 1



10/25/2007

construction after July 23, 1984. There is only one tank at ISOCHEM, tank OST36, meeting these criteria. This subpart does not apply to storage tanks meeting the applicability criteria if the liquid being stored has a vapor pressure less than 15.0 kPa. ISOCHEM has chosen to store only liquids having a vapor pressure less than 15.0 kPa and will not be subject to the control or monitoring requirements of this subpart.