

New York State Department of Environmental Conservation
Facility DEC ID: 9140200435



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 9-1402-00435/00037
Effective Date: 05/10/2002 Expiration Date: 05/10/2007

Permit Issued To: P V S CHEMICALS INC
55 LEE ST
BUFFALO, NY 14210-2109

Contact: CHRISTOPHER J. CANCELLA
PVS CHEMICALS INC
55 LEE ST
BUFFALO, NY 14210
(716) 825-5762

Facility: PVS CHEMICALS
55 LEE ST
BUFFALO, NY 14210

Description:

PVS Chemicals, Inc. (New York) is a manufacturer of all strengths and grades of sulfuric acid and oleum using the contact process. Other substances produced and stored at this facility include ammonium thiosulfate, sodium bisulfite, diethanolamine sulfur dioxide adduct, etc. Raw materials for these processes are molten sulfur, spent sulfuric acid, anhydrous ammonia, liquid sulfur dioxide, sodium hydroxide, sodium carbonate, diethanolamine, etc. This facility is also a shipping terminal for hydrochloric acid.

The PVS Chemicals facility has the potential-to-emit sulfur dioxide at a rate greater than 250 tons per year and sulfuric acid mist at a rate greater than 100 tons per year but less than 250 tons per year. These emission rates are above the major source thresholds of 100 tons per year. Therefore, the facility requires this Title V operating permit.

This Title V facility permit for PVS Chemicals contains all of the air emission sources at the facility organized as emission units. Each of the emission units contains emission sources with similar air pollution control requirements. All applicable air pollution control requirements are listed in this permit along with the appropriate monitoring, record keeping and reporting necessary to determine the compliance status of the facility. A general discussion of the Title V permit requirements follows.

Facility level requirements:

All of the permit requirements that apply to the entire facility are included in the facility section of the permit. These include all of the generally applicable air pollution control requirements that are part of every Title V facility permit issued in New York. Of specific note are conditions under 6 NYCRR Parts 202-2 and 201-6 that specify the submission of an annual facility emission statement, and annual and semi-annual compliance monitoring reports.

New York State Department of Environmental Conservation
Facility DEC ID: 9140200435



Emission Unit U-00010:

This emission unit is composed of four chemical bulk storage tanks which store spent sulfuric acid received at the facility in tank trailer and tank car quantities. Two of the tanks (#113 & 116) vent directly to atmosphere and must be observed daily for excessive emission opacity per 6NYCRR Part 212.6(a). The other two tanks (#102 & 103) vent to a scrubber which removes sulfur dioxide. The contents of these two tanks must be maintained under negative pressure at all times, with daily verification by the operator. The packed wet scrubber is subject to 6NYCRR Part 212.9 and must be operated at all times, with hourly verification of fluid flow through the scrubber and continuous monitoring of pH which must be maintained at or above 7.5 units. Included in this permit are monitoring and reporting requirements to assure compliance with these regulations.

Emission Unit U-00020:

This emission unit is composed of equipment and processes necessary to generate sulfur dioxide by thermally decomposing spent sulfuric acid or by burning elemental sulfur in the presence of excess oxygen; and catalytically converting sulfur dioxide to sulfur trioxide which is then absorbed in strong sulfuric acid to produce saleable commercial grades of sulfuric acid and oleum.

Consent Order 81-79 established emission limits for sulfur dioxide and sulfur trioxide of 230 pounds per hour and 35 pounds per hour, respectively. During review of the application for this Title V permit, the Department has determined it is necessary to revise the environmental rating of Sulfur Dioxide emissions at this emission source from "D" to "B". This is being done because over the last twenty years since Consent Order 81-79 was completed, the Department has learned much more about the toxicity of sulfur dioxide and its effects on humans and the ecosystem. Therefore, this permit requires PVS to establish, within a certain time frame, a new emission limit for sulfur dioxide by providing for 94% control or by performing a Best Available Control Technology (BACT) analysis per 6NYCRR Part 212.5(d). Regarding the sulfur trioxide emission limit, PVS is required by this permit to determine if the facility is currently in compliance with the sulfuric acid mist emission limit found in 6NYCRR Part 224.2(b). If the facility is not in compliance, PVS must develop a plan for achieving compliance within a set time frame. Upon achieving compliance, the sulfur dioxide and sulfur trioxide emission limits imposed by Consent Order 81-79 will be superseded by the new limits established per the requirements of this permit.

The permit requires PVS to continuously monitor sulfur dioxide emissions from emission point 00005 with certified continuous emission monitoring (CEM) equipment. The CEM equipment is currently in use but the certification process has not yet been completed due to an ongoing enforcement action discussed further below. A relative accuracy test audit (RATA) must be successfully completed to complete the certification process. The ongoing CEM Quality Assurance/Quality Control program will include daily drift calibrations, quarterly calibration gas audits, an annual RATA, and record keeping and reporting requirements.

The permit also requires physical observation for visible opacity at emission point 00005 two times per hour in accordance with 6NYCRR Part 212.6.

Included in this permit are monitoring and reporting requirements to assure compliance with these regulations.

New York State Department of Environmental Conservation
Facility DEC ID: 9140200435



Emission Unit U-00030:

This emission unit is composed of the molten sulfur and sulfuric acid storage tanks located at the facility. The processes associated with this emission unit have emissions of regulated air pollutants at insignificant levels. No specific federally enforceable conditions are associated with this emission unit with the exception of a general requirement that PVS maintain records indicating that emissions from this unit remain at insignificant levels.

Emission Unit U-00040:

This emission unit is composed of the fuming sulfuric acid (oleum) and high purity sulfuric acid processes, including all of the associated processing, storage, and air pollution control equipment. The permit requires physical observation for visible opacity at emission point 00006 once per hour per 6NYCRR Part 212.6. The packed wet scrubber is subject to 6NYCRR Part 212.9 and must be operated at all times, with hourly verification of fluid flow through the scrubber and continuous monitoring of the acid strength of the scrubber fluid. The acid strength must remain at or above 98 percent. Included in this permit are monitoring and reporting requirements to assure compliance with these regulations.

Emission Unit U-00050:

This emission unit is composed of a series of 31% and 35% hydrochloric acid tanks that are connected in a vent manifold and vented through a wet scrubber. Emissions from this unit are insignificant, therefore, no specific federally enforceable regulatory requirements apply with the exception of a general requirement that PVS maintain records indicating that emissions from this unit remain at insignificant levels. The emission limitations are included in the state enforceable only section of this Title V permit and as such will not be federally enforceable.

Emission Unit U-00060:

This emission unit includes all equipment and processes necessary to produce ammonium thiosulfate solution. All process gases are vented through an alkaline scrubber to remove sulfur dioxide and an acidic scrubber to remove ammonia. The scrubbers are regulated by 6NYCRR Part 212.9. The alkaline scrubber fluid must be maintained at a pH of at least 5.5 units. The acidic scrubber fluid must be maintained at a pH of less than 7.0 units. Included in this permit are monitoring and reporting requirements to assure compliance with these regulations.

Emission Unit U-00070:

This emission unit includes a batch reactor where aqueous diethanolamine sulfur dioxide adduct is formed, and associated storage tanks. Emissions from this unit are insignificant, therefore, no specific federally enforceable regulatory requirements apply with the exception of a general requirement that PVS maintain records indicating that emissions from this unit remain at insignificant levels. The emission limitations are included in the state enforceable only section of this Title V permit and as such will not be federally enforceable.

Emission Unit U-00080:



New York State Department of Environmental Conservation
Facility DEC ID: 9140200435

This emission unit includes packed towers where aqueous sodium bisulfite is formed by combining sulfur dioxide and water with sodium carbonate or sodium hydroxide. The reaction is carried out with gas flowing countercurrent to liquid. Process gasses are vented to an alkaline scrubber to remove sulfur dioxide. Also included are three sodium bisulfite storage tanks. The scrubber is regulated by 6NYCRR Part 212.9 and must maintain a pH of at least 7.5 units and control sulfur dioxide emissions to a minimum of 91%. Included in this permit are monitoring and reporting requirements to assure compliance with these regulations.

Emission Unit U-00090:

This emission unit consists of a 25 million btu per hour boiler that can burn natural gas, number 2 or number 3 fuel oil. This boiler provides steam for use at various processes throughout the facility. Opacity of emissions from the boiler is limited per 6 NYCRR Part 227-1 and the boiler must burn low sulfur fuel oil per 6 NYCRR Part 225-1. Included in this permit are monitoring and reporting requirements to assure compliance with these regulations.

Enforcement

PVS Chemicals is currently involved in an enforcement dispute with the State, specifically, the New York State Attorney General's Office. This enforcement action involves several Divisions of the Department, including the Division of Air Resources. A schedule outlining the steps and completion dates necessary for certification of the CEMS for sulfur dioxide will be included with any settlement of this dispute. Once the enforcement dispute is completed, this permit will be modified to reflect the CEM certification schedule and any other items as necessary.

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: RICHARD P. SWEENEY
 270 MICHIGAN AVE
 BUFFALO, NY 14203-2999

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 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 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 and Modifications

Permit Modifications, Suspensions, and Revocations by the Department

Facility Level

Submission of Applications 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 and Modifications
Applicable State Requirement: 6NYCRR 621.13(a)

Item 3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Condition 4: Permit Modifications, Suspensions, and Revocations by the Department
Applicable State Requirement: 6NYCRR 621.14

New York State Department of Environmental Conservation
Facility DEC ID: 9140200435



Item 4.1:

The Department reserves the right to modify, suspend, or revoke this permit. The grounds for modification, suspension or revocation include:

- a) the scope of the permitted activity is exceeded or a violation of any condition of the permit or provisions of the ECL and pertinent regulations is found;
- b) the permit was obtained by misrepresentation or failure to disclose relevant facts;
- c) new material information is discovered; or
- d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the permit was issued.

****** Facility Level ******

Condition 5: Submission of Applications for Permit Modification or Renewal -REGION 9 HEADQUARTERS
Applicable State Requirement: 6NYCRR 621.5(a)

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 9 Headquarters
Division of Environmental Permits
270 Michigan Avenue
Buffalo, NY 14203-2999
(716) 851-7165



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

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ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

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Facility: PVS CHEMICALS
55 LEE ST
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Authorized Activity By Standard Industrial Classification Code:
2819 - INDUSTRIAL INORGANIC CHEMICALS

Permit Effective Date: 05/10/2002

Permit Expiration Date: 05/10/2007



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 Sealing
- 2 Acceptable ambient air quality
- 3 Maintenance of equipment
- 4 Unpermitted Emission Sources
- 5 Emergency Defense
- 6 Recycling and Salvage
- 7 Prohibition of Reintroduction of Collected Contaminants to the Air
- 8 Public Access to Recordkeeping for Title V facilities
- 9 Proof of Eligibility
- 10 Proof of Eligibility
- 11 Applicable Criteria, Limits, Terms, Conditions and Standards
- 12 Cessation or Reduction of Permitted Activity Not a Defense
- 13 Compliance Requirements
- 14 Federally-Enforceable Requirements
- 15 Fees
- 16 Monitoring, Related Recordkeeping and Reporting Requirements
- 17 Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements
- 18 Permit Shield
- 19 Property Rights
- 20 Reopening for Cause
- 21 Right to Inspect
- 22 Severability
- 23 Emission Unit Definition
- 24 Compliance Certification
- 25 Compliance Certification
- 26 Permit Exclusion Provisions
- 27 Required emissions tests
- 28 Compliance Certification
- 29 Recordkeeping requirements
- 30 Visible emissions limited.
- 31 Open Fires Prohibited at Industrial and Commercial Sites
- 32 Compliance Certification
- 33 Recycling and Emissions Reduction

Emission Unit Level

- 34 Emission Point Definition By Emission Unit
- 35 Process Definition By Emission Unit
- 36 Compliance Certification (EU=U-00010,Proc=001)
- 37 Compliance Certification (EU=U-00010,Proc=020,ES=00102)
- 38 Compliance Certification (EU=U-00010,Proc=020,ES=00103)
- 39 Compliance Certification (EU=U-00010,EP=00102,Proc=020,ES=00104)



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

- 40 Compliance Certification (EU=U-00020,EP=00005)
- 41 Compliance Certification (EU=U-00020,EP=00005)
- 42 Compliance Certification (EU=U-00020,EP=00005,Proc=002,ES=00005)
- 43 Compliance Certification (EU=U-00020,EP=00005,Proc=002,ES=00005)
- 44 Compliance Certification (EU=U-00020,EP=00005,Proc=002,ES=00005)
- 45 Compliance Plan (EU=U-00020,Proc=002,ES=00005)
- 46 Compliance Certification (EU=U-00040,EP=00006)
- 47 Compliance Certification (EU=U-00040,EP=00006)
- 48 Compliance Certification (EU=U-00060,EP=00160,Proc=012,ES=00160)
- 49 Compliance Certification (EU=U-00060,EP=00160,Proc=012,ES=00160)
- 50 Compliance Certification (EU=U-00060,EP=00160,Proc=012,ES=00161)
- 51 Compliance Certification (EU=U-00080,Proc=016,ES=00181)
- 52 Compliance Certification (EU=U-00080,EP=00182,Proc=015,ES=00182)
- 53 Compliance Certification (EU=U-00080,EP=00182,Proc=015,ES=00182)
- 54 Compliance Certification (EU=U-00090)

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 55 Unavoidable noncompliance and violations
- 56 General Provisions
- 57 Contaminant List
- 58 Air pollution prohibited

Emission Unit Level

- 59 Compliance Demonstration
- 60 Compliance Demonstration



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

FEDERALLY ENFORCEABLE CONDITIONS

****** Facility Level ******

Condition 1: Sealing

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 200.5

Item 1.1:

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

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

(c) Unless authorized by the commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section

Condition 2: Acceptable ambient air quality

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 200.6

Item 2.1:

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 3: Maintenance of equipment

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 200.7

Item 3.1:

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



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Condition 4: Unpermitted Emission Sources
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-1.2

Item 4.1:

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

- (a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.
- (b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Condition 5: Emergency Defense
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-1.5

Item 5.1:

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.



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Condition 6: Recycling and Salvage
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-1.7

Item 6.1:

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

Condition 7: Prohibition of Reintroduction of Collected Contaminants to the Air
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-1.8

Item 7.1:

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 8: Public Access to Recordkeeping for Title V facilities
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-1.10(b)

Item 8.1:

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.

Condition 9: Proof of Eligibility
Effective between the dates of 05/10/2002 and 05/10/2007

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

Item 9.1:

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

Condition 10: Proof of Eligibility
Effective between the dates of 05/10/2002 and 05/10/2007



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

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

Item 10.1:

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

Condition 11: Applicable Criteria, Limits, Terms, Conditions and Standards

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 11.1:

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

- i. Any reporting requirements and operations under an accidental release plan, response plan, and compliance plan as approved as of the date of the permit issuance, or
- ii. Any support documents submitted as a part of the permit application for this facility as accepted and approved as of the date of permit issuance.

Any noncompliance with the federally-enforceable portions of this permit constitutes a violation of the federal Clean Air Act and will be grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

Item 11.2:

Any document, including reports, required by the federally-enforceable portions of this permit shall contain a certification by the responsible official for this facility as set forth in Section 201-6.3 that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

Condition 12: Cessation or Reduction of Permitted Activity Not a Defense
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 12.1:

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.



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Condition 13: Compliance Requirements
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 13.1:

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 the responsible official, consistent with Section 201-6.3 of Part 201.

Item 13.2:

The permittee shall comply with the approved compliance schedule for this permit if such a schedule is a part of this permit. Risk management plans must be submitted to the Administrator if required by Section 112(r) of the Clean Air Act for this facility.

Item 13.3:

Progress reports consistent with an applicable schedule of compliance must be submitted at least semiannually on a calendar year basis, or at a more frequent period if specified in the applicable requirement or by the Department elsewhere in this permit. These reports shall be submitted to the Department within 30 days after the end of a reporting period. 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 14: Federally-Enforceable Requirements
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Item 14.1:

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.

Condition 15: Fees

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 15.1:

The permittee shall pay the required fees associated with this permit.

Condition 16: Monitoring, Related Recordkeeping and Reporting Requirements

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 16.1:

Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, 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 17: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 17.1:

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 relieve the permittee from the requirement to comply with any condition contained in this permit.

The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The permittee shall also, on request, furnish the Department with copies of records required to be kept by the permit. Where information is claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



Condition 18: Permit Shield

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 18.1:

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield. For those facilities for which a permit shield has been granted, 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.

Condition 19: Property Rights

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 19.1:

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

Condition 20: Reopening for Cause

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 20.1:

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



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

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.

Item 20.2:

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.

Item 20.3:

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.

Condition 21: Right to Inspect

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 21.1:

Upon presentation of credentials and other documents, as may be required by law, the permittee shall allow the Department or an authorized representative to perform the following:

i. Enter upon the permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

iii. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

iv. As authorized by the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Condition 22: Severability



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 22.1:

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.

Condition 23: Emission Unit Definition

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 23.1:

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

Emission Unit: U-00010

Emission Unit Description:

SPENT SULFURIC ACID IS RECEIVED AT PVS (NY) IN TANK TRAILER AND TANK CAR QUANTITIES AND TRANSFERRED INTO ONE OF FOUR STORAGE. THIS EMISSION UNIT IS COMPRISED OF FOUR BULK CHEMICAL TANKS STORING SPENT SULFURIC ACID. TWO TANKS VENT TO ATMOSPHERE, TWO TANKS VENT TO SCRUBBER. SPENT SULFURIC ACID IS GENERALLY COMPRISED OF 60%-95% H₂SO₄, WITH HYDROCARBONS AND WATER AS CONTAMINANTS.

Building(s): YARD

Item 23.2:

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

Emission Unit: U-00020

Emission Unit Description:

SULFUR DIOXIDE (SO₂) IS GENERATED BY THERMALLY DECOMPOSING SPENT SULFURIC ACID (H₂SO₄) OR BY BURNING ELEMENTAL SULFUR IN THE PRESENCE OF EXCESS OXYGEN. THE SO₂ IS THEN CATALYTICALLY CONVERTED TO SULFUR TRIOXIDE (SO₃) AND ABSORBED IN STRONG SULFURIC ACID TO PRODUCE SALEABLE COMMERCIAL GRADES OF SULFURIC ACID AND FUMING SULFURIC ACID (OLEUM).

Building(s): B3
YARD

Item 23.3:



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

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

Emission Unit: U-00030

Emission Unit Description:

MOLTEN SULFUR IS RECEIVED FROM OFF-SITE AND TRANSFERRED INTO STORAGE VESSELS TO SATISFY PRODUCTION DEMAND. ALSO, DURING THE COURSE OF PRODUCTION AND SALES, SULFURIC ACID STORAGE TANKS ARE FILLED AND EMPTIED. THIS EMISSION UNIT IS COMPRISED OF ALL MOLTEN SULFUR AND SULFURIC ACID STORAGE TANKS AT PVS CHEMICALS INC (NY).

Building(s): YARD

Item 23.4:

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

Emission Unit: U-00040

Emission Unit Description:

AS SALES DISTRIBUTION MANDATES, SULFUR TRIOXIDE (SO₃) IS STRIPPED FROM A STREAM OF FUMING SULFURIC ACID IN AN EVAPORATOR. THE SO₃ IS EITHER CONDENSED AND MIXED WITH COMMERCIAL GRADE FUMING SULFURIC ACID IN THE 65% OLEUM PROCESS TO FORM VARIOUS HIGHER STRENGTHS OF FUMING SULFURIC ACID OR THE SO₃ IS COMBINED WITH PURE WATER IN A SPECIALLY CONSTRUCTED ABSORPTION COLUMN TO FORM HIGH PURITY SULFURIC ACID. THERE ARE SEVERAL TANKS ASSOCIATED WITH THE STORAGE OF SALEABLE FUMING SULFURIC ACID. THE OLEUM PROCESS, THE 65% OLEUM PROCESS, THE HIGH PURITY SULFURIC ACID PROCESS, THE OLEUM STORAGE AND THE OLEUM TANK TRAILER, TANK CAR AND DRUM LOADING STATIONS ARE ALL CONNECTED TO A SCRUBBER WHICH REMOVES FREE SO₃ AND H₂SO₄ AEROSOL FROM THE GAS STREAM BEFORE BEING EMITTED. THERE ARE ALSO SEVERAL STORAGE TANKS ASSOCIATED WITH THE HIGH PURITY SULFURIC ACID PROCESS.

Building(s): B2

Item 23.5:

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

Emission Unit: U-00050

Emission Unit Description:

A SERIES OF 31% AND 35% HYDROCHLORIC ACID STORAGE TANKS ARE CONNECTED IN A VENT

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



MANIFOLD AND VENTED THROUGH A WET SCRUBBER.
ACTIVITIES AT THIS EMISSION UNIT INCLUDE
TRANSFERS TO AND FROM THE STORAGE TANKS.

Building(s): YARD

Item 23.6:

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

Emission Unit: U-00060

Emission Unit Description:

SULFUR DIOXIDE, AMMONIA AND WATER ARE
COMBINED TO FORM AN AQUEOUS MIXTURE OF
AMMONIUM SULFITE AND AMMONIUM BISULFITE.
ALL AMMONIUM BISULFITE IS THEN DRIVEN TO
SULFITE WITH THE ADDITION OF AMMONIA. THE
AMMONIUM SULFITE IS HEATED AND EXCESS
SULFUR IS ADDED TO PRODUCE AMMONIUM
THIOSULFATE SOLUTION. ALL PROCESS GASES ARE
VENTED THROUGH A SCRUBBER SYSTEM BEFORE
BEING EXHAUSTED TO ATMOSPHERE.

Building(s): B4

Item 23.7:

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

Emission Unit: U-00070

Emission Unit Description:

PURE SULFUR DIOXIDE IS COMBINED WITH
AQUEOUS DIETHANOLAMINE SOLUTION TO FORM
AQUEOUS DIETHANOLAMINE SULFUR DIOXIDE
ADDUCT IN A BATCH REACTOR. EXCESS SULFUR
DIOXIDE IS VENTED TO AN ALKALINE SCRUBBER
WHERE PROCESS EXHAUST OCCURS. THIS EMISSION
UNIT ALSO INCLUDES AN AQUEOUS
DIETHANOLAMINE STORAGE TANK AND AN AQUEOUS
DIETHANOLAMINE SULFUR DIOXIDE ADDUCT
STORAGE TANK.

Building(s): B5

Item 23.8:

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

Emission Unit: U-00080

Emission Unit Description:

AQUEOUS SODIUM BISULFITE IS FORMED BY
COMBINING SULFUR DIOXIDE AND WATER WITH
SODIUM CARBONATE OR SODIUM HYDROXIDE.
REACTION IS CARRIED OUT IN PACKED TOWERS



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

WITH GAS FLOWING COUNTERCURRENT TO LIQUID FOLLOWED BY LIQUID FINISHING IN TANKS TO MEET PRODUCT SPECIFICATIONS. PROCESS GASSES ARE VENTED TO AN ALKALINE SCRUBBER TO REMOVE SO₂. THIS EMISSION UNIT INCLUDES A VENT MANIFOLD FOR THREE SODIUM BISULFITE STORAGE TANKS AND A BULK SODIUM CARBONATE RECEIVING SYSTEM.

Building(s): B3

Item 23.9:

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

Emission Unit: U-00090

Emission Unit Description:

NATURAL GAS OR #2/#3 FUEL OIL IS BURNED IN A 25.0 MBTU/HR PACKAGE BOILER TO GENERATE STEAM FOR THE FACILITY.

Building(s): B1

Condition 24: Compliance Certification

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.5(c)(3)(ii)

Item 24.1:

The Compliance Certification activity will be performed for the Facility.

Item 24.2:

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

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



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 or a toxic 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 any of the above conditions 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) through (4) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.3(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraph (1) through (4) of this section must also be identified in the 6 month monitoring report

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



required above.

If the permittee seeks to have a violation excused as provided in 201-1.4, the permittee shall report such violations as required under 201-1.4(b). However, in no case may reports of any deviation be on a less frequent basis than those described in paragraphs (1) through (4) above. 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.

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 shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Compliance Monitoring and Enforcement (BCME) in the DEC central office). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.5(e), contained elsewhere in this permit.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/02.

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

Condition 25: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



Applicable Federal Requirement: 6NYCRR 201-6.5(e)

Item 25.1:

The Compliance Certification activity will be performed for the Facility.

Item 25.2:

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. 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.

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



iv. All compliance certifications shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Compliance Monitoring and Enforcement (BCME) in the DEC central office). Please send annual compliance certifications to Chief of the Stationary Source Compliance Section, the Region 2 EPA representative for the Administrator, at the following address:

USEPA Region 2
Air Compliance Branch
290 Broadway
New York, NY 10007-1866

The address for the RAPCE is as follows:

270 Michigan Avenue
Buffalo, NY 14203-2999

The address for the BCME is as follows:

NYSDEC
Bureau of Compliance Monitoring
and Enforcement
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 1/30/03.
Subsequent reports are due on the same day each year

Condition 26: Permit Exclusion Provisions
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.5(g)

Item 26.1:

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 currently pending or future legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant 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), and particularly any such enforcement



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

action as may be authorized pursuant to 6 NYCRR 201-1.2 and 6 NYCRR 201-6.5(g).

The issuance of this permit by the Department and the receipt thereof by the Applicant does not supercede, revoke or rescind an order or modification thereof on consent or determination by the Commissioner issued heretofore by the Department or any of the terms, conditions or requirements contained in such order or modification thereof unless specifically intended by this permit.

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 the right of the Department to bring any future action, or pursue any pending action, either administrative or judicial, to required remediation, contribution for costs incurred or funds expended, for any violations, past, present or future, known or unknown, of applicable federal law, the ECL, or the rules and regulations promulgated thereunder, or conditions contained in any other licenses or permits issued to the Applicant and not addressed in this permit.

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 the right of the Department to pursue any claims for natural resource damages against the Applicant.

Condition 27: Required emissions tests
Effective between the dates of 05/10/2002 and 05/10/2007

0 Applicable Federal Requirement: 6NYCRR 202-1.1

Item 27.1:

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

Condition 28: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 202-2.1

Item 28.1:

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:

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



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due by April 15th for previous calendar year

Condition 29: Recordkeeping requirements

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 202-2.5

Item 29.1:

(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 30: Visible emissions limited.

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 211.3

Item 30.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Condition 31: Open Fires Prohibited at Industrial and Commercial Sites

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 215.

Item 31.1:

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, rubbish for salvage, or rubbish generated by industrial or commercial activities.

Condition 32: Compliance Certification

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 225-1.2(a)(2)

Item 32.1:

The Compliance Certification activity will be performed for the Facility.



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Item 32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

No person will sell, offer for sale, purchase or use any distillate oil fuel which contains sulfur in a quantity exceeding the following limitation.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 1.10 percent by weight

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL CHANGE

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/02.

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

Condition 33: Recycling and Emissions Reduction

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 40CFR 82, Subpart F

Item 33.1:

The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVAC's in Subpart B:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR Part 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR Part 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR Part 82.161.
- d. Persons disposing of small appliances, MVAC's, and MVAC-like appliances must comply with recordkeeping requirements pursuant to 40 CFR Part 82.166. ("MVAC-like appliance as defined at 40 CFR Part 82.152)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR Part 82.156.



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR Part 82.166.

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

Condition 34: Emission Point Definition By Emission Unit
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 34.1:

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

Emission Unit: U-00010

Emission Point: 00024

Height (ft.): 40 Diameter (in.): 3
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Emission Point: 00102

Height (ft.): 45 Diameter (in.): 6
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Emission Point: 00113

Height (ft.): 40 Diameter (in.): 3
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Item 34.2:

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

Emission Unit: U-00020

Emission Point: 00005

Height (ft.): 150 Diameter (in.): 42
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Item 34.3:

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

Emission Unit: U-00030

Emission Point: 00018

Height (ft.): 24 Diameter (in.): 8
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Emission Point: 00019

Height (ft.): 38 Diameter (in.): 6



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Emission Point: 00020
Height (ft.): 38 Diameter (in.): 5
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Emission Point: 00022
Height (ft.): 40 Diameter (in.): 3
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Emission Point: 00023
Height (ft.): 40 Diameter (in.): 3
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Emission Point: 00029
Height (ft.): 2 Length (in.): 26 Width (in.): 18
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Emission Point: 00070
Height (ft.): 21 Diameter (in.): 4
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: YARD

Item 34.4:

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

Emission Unit: U-00040

Emission Point: 00006
Height (ft.): 28 Diameter (in.): 6
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: B2

Emission Point: 00141
Height (ft.): 10 Diameter (in.): 4
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: B2

Emission Point: 00142
Height (ft.): 10 Diameter (in.): 4
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: B2

Emission Point: 00143
Height (ft.): 10 Diameter (in.): 4
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: B2

Emission Point: 00144
Height (ft.): 10 Diameter (in.): 4
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: B2

Item 34.5:



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

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

Emission Unit: U-00050

Emission Point: 00150

Height (ft.): 20

Diameter (in.): 10

NYTMN (km.): 4752.92

NYTME (km.): 186.109

Building: YARD

Item 34.6:

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

Emission Unit: U-00060

Emission Point: 00160

Height (ft.): 46

Diameter (in.): 12

NYTMN (km.): 4752.92

NYTME (km.): 186.109

Building: B4

Item 34.7:

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

Emission Unit: U-00070

Emission Point: 00170

Height (ft.): 15

Diameter (in.): 8

NYTMN (km.): 4752.92

NYTME (km.): 186.109

Building: B5

Emission Point: 00171

Height (ft.): 12

Diameter (in.): 4

NYTMN (km.): 4752.92

NYTME (km.): 186.109

Building: B5

Emission Point: 00172

Height (ft.): 12

Diameter (in.): 4

NYTMN (km.): 4752.92

NYTME (km.): 186.109

Building: B5

Item 34.8:

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

Emission Unit: U-00080

Emission Point: 00180

Height (ft.): 24

Diameter (in.): 2

NYTMN (km.): 4752.92

NYTME (km.): 186.109

Building: B3

Emission Point: 00181

Height (ft.): 40

Diameter (in.): 6

NYTMN (km.): 4752.92

NYTME (km.): 186.109

Building: B3

Emission Point: 00182



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Height (ft.): 35 Diameter (in.): 10
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: B3

Item 34.9:

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

Emission Unit: U-00090

Emission Point: 00028

Height (ft.): 40 Diameter (in.): 18
NYTMN (km.): 4752.92 NYTME (km.): 186.109 Building: B1

Condition 35: Process Definition By Emission Unit

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 201-6.

Item 35.1:

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

Emission Unit: U-00010

Process: 001

Source Classification Code: 3-01-023-21

Process Description:

SPENT SULFURIC ACID IS RECEIVED FROM
OFF-SITE IN RAILROAD TANK CARS AND IN TANK
TRAILERS. AS SPENT SULFURIC ACID IS
TRANSFERRED INTO A STORAGE TANK, THE TANK
IS VENTED TO THE ATMOSPHERE THROUGH A FLAME
ARRESTER. THERE ARE TWO SPENT SULFURIC ACID
STORAGE TANKS FOR THIS PROCESS ON SITE
WHICH CAN RECEIVE SPENT SULFURIC ACID AT
ANY TIME OF DAY OR NIGHT.

Emission Source/Control: 00024 - Process

Design Capacity: 150 1000 gallons

Emission Source/Control: 00113 - Process

Design Capacity: 150 1000 gallons

Item 35.2:

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

Emission Unit: U-00010

Process: 020

Source Classification Code: 3-01-023-21

Process Description:

SPENT SULFURIC ACID IS RECEIVED FROM
OFF-SITE IN RAILROAD TANK CARS AND IN TANK
TRAILERS. AS SPENT SULFURIC ACID IS



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

TRANSFERRED INTO A STORAGE TANK, THE TANK IS VENTED THROUGH A SCRUBBER TO REMOVE SO₂. THIS PROCESS DESCRIBES TWO SPENT SULFURIC ACID STORAGE TANKS WHICH CAN RECEIVE SPENT SULFURIC ACID AT ANY TIME OF DAY OR NIGHT.

Emission Source/Control: 00104 - Control
Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: 00102 - Process
Design Capacity: 75 1000 gallons

Emission Source/Control: 00103 - Process
Design Capacity: 75 1000 gallons

Item 35.3:

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

Emission Unit: U-00020
Process: 002
Source Classification Code: 3-01-023-01
Process Description:

SULFUR DIOXIDE (SO₂) IS GENERATED BY THERMALLY DECOMPOSING SPENT SULFURIC ACID (H₂SO₄) OR BY BURNING ELEMENTAL SULFUR IN THE PRESENCE OF EXCESS OXYGEN. THE SO₂ IS THEN CATALYTICALLY CONVERTED TO SULFUR TRIOXIDE (SO₃) AND ABSORBED IN STRONG SULFURIC ACID TO PRODUCE SALEABLE COMMERCIAL GRADES OF SULFURIC ACID AND FUMING SULFURIC ACID (OLEUM).

Emission Source/Control: 00005 - Control
Control Type: MIST ELIMINATOR

Emission Source/Control: 0006A - Control
Control Type: MIST ELIMINATOR

Emission Source/Control: 00003 - Process
Design Capacity: 220 tons per day

Emission Source/Control: 00004 - Process
Design Capacity: 220 tons per day

Item 35.4:

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

Emission Unit: U-00030
Process: 003
Source Classification Code: 3-99-999-94



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Process Description:

MOLTEN SULFUR IS RECEIVED FROM OFF-SITE IN RAILROAD TANK CARS AND IN TANK TRAILERS. AS MOLTEN SULFUR IS TRANSFERRED INTO A STORAGE TANK, THE TANK IS VENTED TO THE ATMOSPHERE. SOME BREATHING LOSSES ALSO OCCUR AT THE STORAGE VESSEL. THERE ARE TWO MOLTEN SULFUR STORAGE VESSELS ON SITE WHICH CAN RECEIVE MOLTEN SULFUR AT ANY TIME OF DAY OR NIGHT.

Emission Source/Control: 00018 - Process
Design Capacity: 1,000 tons

Emission Source/Control: 00029 - Process
Design Capacity: 100 tons

Item 35.5:

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

Emission Unit: U-00030

Process: 004

Source Classification Code: 3-99-999-94

Process Description:

AS SULFURIC ACID IS ADDED TO A STORAGE VESSEL, THE STORAGE VESSEL IS VENTED TO THE ATMOSPHERE. SOME BREATHING LOSSES ALSO OCCUR AT THE STORAGE VESSEL. THERE ARE A TOTAL OF SIX VESSELS STORING SULFURIC ACID.

Emission Source/Control: 00019 - Process
Design Capacity: 75 1000 gallons

Emission Source/Control: 00020 - Process
Design Capacity: 75 1000 gallons

Emission Source/Control: 00022 - Process
Design Capacity: 150 1000 gallons

Emission Source/Control: 00023 - Process
Design Capacity: 150 1000 gallons

Emission Source/Control: 00070 - Process
Design Capacity: 12 1000 gallons

Item 35.6:

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

Emission Unit: U-00040



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Process: 005

Source Classification Code: 3-01-023-21

Process Description:

GASEOUS SULFUR TRIOXIDE (SO₃) IS ABSORBED INTO STRONG SULFURIC ACID IN TWO ABSORPTION TOWERS TO FORM FUMING SULFURIC ACID (OLEUM). THE TWO PUMP TANKS USED FOR CIRCULATING THE OLEUM OVER THE TOWERS ARE VENTED TO THE OLEUM SCRUBBER.

Emission Source/Control: 00006 - Control

Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 00025 - Process

Design Capacity: 26,000 tons per year

Item 35.7:

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

Emission Unit: U-00040

Process: 006

Source Classification Code: 3-01-023-21

Process Description:

SULFUR TRIOXIDE IS STRIPPED FROM A STREAM OF FUMING SULFURIC ACID IN AN EVAPORATOR. THE SO₂ IS CONDENSED AND MIXED WITH COMMERCIAL GRADE FUMING SULFURIC ACID IN THE 65% OLEUM ABSORPTION PROCESS TO FORM VARIOUS HIGHER STRENGTHS OF FUMING SULFURIC ACID. THE 65% OLEUM ABSORPTION PROCESS IS VENTED TO THE OLEUM SCRUBBER.

Emission Source/Control: 00006 - Control

Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 00065 - Process

Design Capacity: 17,500 tons per year

Item 35.8:

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

Emission Unit: U-00040

Process: 007

Source Classification Code: 3-01-023-21

Process Description:

AS VARIOUS STRENGTHS OF OLEUM ARE PRODUCED IN THE 65% OLEUM PROCESS, THE OLEUM IS TRANSFERRED TO STORAGE TANKS WHERE IT IS HELD FOR DISTRIBUTION. ALL OLEUM STORAGE TANKS ASSOCIATED WITH THE 65% OLEUM PROCESS ARE VENTED TO THE OLEUM SCRUBBER.

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



Emission Source/Control: 00006 - Control
Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 00132 - Process
Design Capacity: 1,100 gallons

Emission Source/Control: 00133 - Process
Design Capacity: 8,000 gallons

Emission Source/Control: 00135 - Process
Design Capacity: 8,000 gallons

Emission Source/Control: 00138 - Process
Design Capacity: 8,000 tons per year

Item 35.9:

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

Emission Unit: U-00040

Process: 008

Source Classification Code: 3-01-023-21

Process Description:

TO DISTRIBUTE THE OLEUM PRODUCED IN THE 65% OLEUM PROCESS, OLEUM IS TRANSFERRED TO TANK TRAILERS, RAILROAD TANK CARS AND DRUMS. ALL SHIPPING CONTAINERS ARE VENTED TO THE OLEUM SCRUBBER DURING TRANSFER. TRANSFERS MAY TAKE PLACE AT ANY TIME OF DAY OR NIGHT.

Emission Source/Control: 00006 - Control
Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 00139 - Process
Design Capacity: 17,500 tons per year

Item 35.10:

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

Emission Unit: U-00040

Process: 009

Source Classification Code: 3-01-023-21

Process Description:

SULFUR TRIOXIDE IS STRIPPED FROM A STREAM OF FUMING SULFURIC ACID IN AN EVAPORATOR. THE SO₃ MIXED WITH PURE DRY AIR IS THEN COMBINED WITH PURE WATER IN A SPECIALLY CONSTRUCTED ABSORPTION COLUMN TO FORM HIGH PURITY SULFURIC ACID. AS THE DRY AIR EXITS

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



THE PROCESS, IT CARRIES SULFURIC ACID MIST. THIS SPECIALLY CONSTRUCTION ABSORPTION COLUMN IS VENTED TO THE OLEUM SCRUBBER. FINISHED PRODUCT IS TRANSFERRED TO A SERIES OF STORAGE TANKS WHICH ARE VENTED TO ATMOSPHERE.

Emission Source/Control: 00006 - Control
Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 00140 - Process
Design Capacity: 10,000 tons per year

Emission Source/Control: 00141 - Process
Design Capacity: 5 1000 gallons

Emission Source/Control: 00142 - Process
Design Capacity: 5 1000 gallons

Emission Source/Control: 00143 - Process
Design Capacity: 5 1000 gallons

Emission Source/Control: 00144 - Process
Design Capacity: 5 1000 gallons

Item 35.11:

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

Emission Unit: U-00050
Process: 010
Source Classification Code: 3-01-011-98
Process Description:

HYDROCHLORIC ACID AT STRENGTHS RANGING FROM 30% TO 35% IS RECEIVED IN RAILROAD TANK CARS AND TANK TRAILERS. THE HCl IS TRANSFERRED FROM THE SHIPPING CONTAINERS INTO A SERIES OF THREE STORAGE TANKS ALL CONNECTED WITH A COMMON VENT HEADER. THE VENT HEADER VENTS THROUGH A SCRUBBER BEFORE BEING EXHAUSTED TO ATMOSPHERE.

Emission Source/Control: 00150 - Control
Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: 00151 - Process
Design Capacity: 25,000 gallons

Emission Source/Control: 00152 - Process
Design Capacity: 25,000 gallons

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



Emission Source/Control: 00153 - Process

Design Capacity: 25,000 gallons

Item 35.12:

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

Emission Unit: U-00050

Process: 011

Source Classification Code: 3-01-011-98

Process Description:

HYDROCHLORIC ACID AT STRENGTHS RANGING FROM 30% TO 35% IS RECEIVED IN RAILROAD TANK CARS AND TANK TRAILERS. THE HCl IS TRANSFERRED FROM THE SHIPPING CONTAINERS INTO A SERIES OF NINE STORAGE TANKS. THE HCl IS THEN TRANSFERRED INTO SHIPPING VESSELS FOR DISTRIBUTION. TRANSFER OPERATIONS ARE VENTED BACK TO THE VENT HEADER AND THEN THROUGH A SCRUBBER BEFORE BEING EXHAUSTED TO ATMOSPHERE.

Emission Source/Control: 00150 - Control

Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: 00159 - Process

Design Capacity: 10,000 tons per year

Item 35.13:

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

Emission Unit: U-00060

Process: 012

Source Classification Code: 3-01-999-98

Process Description:

SULFUR DIOXIDE, AMMONIA AND WATER ARE COMBINED IN A GASSING TANK TO FORM AN AQUEOUS MIXTURE OF AMMONIUM SULFITE AND AMMONIUM BISULFITE. THIS IS AN INTERMEDIATE IN THE PRODUCTION OF AMMONIUM THIOSULFATE SOLUTION. ALL PROCESS GASSES FROM THE GASSING TANK ARE VENTED THROUGH AN ALKALINE SCRUBBER TO REMOVE SO₂ AND AN ACIDIC SCRUBBER TO REMOVE NH₃. AMMONIA IS USED TO NEUTRALIZE AN AQUEOUS MIXTURE OF AMMONIUM SULFITE AND AMMONIUM BISULFITE IN THE DIGEST TANK. AFTER NEUTRALIZATION, THE SOLUTION IS HEATED AND MOLTEN SULFUR IS ADDED TO THE MIXTURE TO FORM AMMONIUM THIOSULFATE SOLUTION. ALL PROCESS GASSES



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

ARE VENTED THROUGH AN ALKALINE SCRUBBER TO REMOVE SO₂ AND AN ACIDIC SCRUBBER TO REMOVE NH₃.

Emission Source/Control: 00160 - Control
Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 00161 - Control
Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 00162 - Process
Design Capacity: 50,000 tons per year

Item 35.14:

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

Emission Unit: U-00070

Process: 014

Source Classification Code: 3-99-999-94

Process Description:

PURE SULFUR DIOXIDE IS COMBINED WITH AQUEOUS DIETHANOLAMINE SOLUTION TO FORM AQUEOUS DIETHANOLAMINE SULFUR DIOXIDE ADDUCT (CONTAINING APPROXIMATELY 20% SO₂) IN A BATCH REACTOR. EXCESS SULFUR DIOXIDE IS VENTED TO AN ALKALINE SCRUBBER WHERE PROCESS EXHAUST OCCURS. THIS EMISSION UNIT ALSO INCLUDES AN AQUEOUS DIETHANOLAMINE STORAGE TANK AND AN AQUEOUS DIETHANOLAMINE SULFUR DIOXIDE ADDUCT STORAGE TANK.

Emission Source/Control: 00170 - Control
Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 00171 - Process
Design Capacity: 4 1000 gallons

Emission Source/Control: 00172 - Process
Design Capacity: 4 1000 gallons

Emission Source/Control: 00173 - Process
Design Capacity: 360 tons per year

Item 35.15:

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

Emission Unit: U-00080

Process: 015

Source Classification Code: 3-01-009-05

Process Description:

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



AQUEOUS SODIUM BISULFITE IS FORMED BY COMBINING SULFUR DIOXIDE AND WATER WITH SODIUM CARBONATE OR SODIUM HYDROXIDE. REACTION IS CARRIED OUT IN PACKED TOWERS WITH GAS FLOWING COUNTERCURRENT TO LIQUID FOLLOWED BY LIQUID FINISHING IN TANKS TO MEET PRODUCT SPECIFICATIONS. PROCESS GASSES ARE VENTED TO AN ALKALINE SCRUBBER TO REMOVE SO₂. AS SODIUM BISULFITE SOLUTION IS PRODUCED, IT IS TRANSFERRED TO THREE STORAGES WHICH ARE VENTED THROUGH A COMMON VENT HEADER TO ATMOSPHERE.

Emission Source/Control: 00180 - Control
Control Type: CONSERVATION VENT

Emission Source/Control: 00182 - Control
Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: 00183 - Process
Design Capacity: 42,000 gallons

Emission Source/Control: 00185 - Process
Design Capacity: 16,000 tons per year

Item 35.16:

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

Emission Unit: U-00080
Process: 016
Source Classification Code: 3-01-021-22
Process Description:

SODIUM CARBONATE IS RECEIVED IN BULK DRY POWDER FORM AND IS TRANSFERRED INTO STORAGE VIA PNEUMATIC CONVEYOR. A TWO STAGE SPRAY SCRUBBER IS USED TO REMOVE PARTICLES FROM THE LOADING AIR SYSTEM.

Emission Source/Control: 00181 - Control
Control Type: GAS SCRUBBER (GENERAL, NOT CLASSIFIED)

Emission Source/Control: 00184 - Process
Design Capacity: 30,000 gallons

Item 35.17:

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

Emission Unit: U-00090
Process: 017
Source Classification Code: 1-02-006-02



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Process Description:

NATURAL GAS IS BURNED IN A 25.0 MILLION BTU/HR FIRE TUBE PACKAGE BOILER TO GENERATE STEAM FOR THE FACILITY. ALTHOUGH BOILER IS RATED FOR 25.0 MILLION BTU/HR, BOILER ROUTINELY OPERATES AT LESS THAN 20% OF CAPACITY IN MODULATING MODE. NOTE: PACKAGE BOILER HAS DUEL FUEL CAPABILITY AND CAN BURN UP TO 166 GALS/HR OF #2 FUEL OIL IN PLACE OF NATURAL GAS.

Emission Source/Control: 00028 - Combustion

Design Capacity: 25,000,000 British thermal units per hour

Item 35.18:

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

Emission Unit: U-00090

Process: 018

Source Classification Code: 1-02-006-02

Process Description:

#2 OR #3 FUEL OIL IS BURNED IN A 25.0 MILLION BTU/HR FIRE TUBE PACKAGE BOILER TO GENERATE STEAM FOR THE FACILITY. ALTHOUGH THE BOILER IS RATED FOR 25.0 MILLION BTU/HR, THE BOILER ROUTINELY OPERATES AT LESS THAN 20% OF CAPACITY IN MODULATING MODE. THIS BOILER HAS DUAL FUEL CAPABILITY (FUEL OIL OR NATURAL GAS).

Emission Source/Control: 00028 - Combustion

Design Capacity: 25,000,000 British thermal units per hour

Condition 36: Compliance Certification

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.6(a)

Item 36.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00010

Process: 001

Regulated Contaminant(s):

CAS No: 007664-93-9 SULFURIC ACID

Item 36.2:

Compliance Certification shall include the following monitoring:



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

Monitoring Description:

The facility owner and/or operator shall observe all emission points, except emission points 00113 and 00024, or other sources of air pollution daily during daylight hours to monitor for unusual opacity conditions. If visible emissions above those that are normal and in compliance with section 212.6(a) are detected (this may be zero percent opacity for many or all stacks), the facility owner shall determine the cause immediately and make the necessary correction. The records of these observations will be recorded in a log at the facility and shall be available for inspection by Department representatives upon request. Records will be maintained for a period of at least five years.

If visible emissions above those that are normal and in compliance continue to be present after corrections are made, the facility owner will conduct a Method 9 assessment to determine the degree of opacity.

If the opacity is determined to exceed the limits of section 212.6(a), the facility will be determined to be in violation, will remedy the problem, and will contact the Department. The provisions of Part 201-1.4 shall apply.

A semi-annual report shall be submitted to the Department that summarizes the opacity compliance history of the emission point for the previous six months.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: DAILY
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 7/30/02.
Subsequent reports are due every 6 calendar month(s).

Condition 37: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Item 37.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00010

Process: 020

Emission Source: 00102

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 37.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Storage tank #102 shall be maintained under negative pressure at all times. A daily check must be made to verify that the tank is under negative pressure. The results of each daily observation must be recorded in a log.

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/02.

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

Condition 38: Compliance Certification

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 38.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00010

Process: 020

Emission Source: 00103

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 38.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Storage tank #103 shall be maintained under negative pressure at all times. A daily check must be made to verify that the tank is under negative pressure. The



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

results of each daily observation must be recorded in a log.

Monitoring Frequency: DAILY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/02.
Subsequent reports are due every 6 calendar month(s).

Condition 39: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 39.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00010 Emission Point: 00102
Process: 020 Emission Source: 00104

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 39.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The packed wet scrubber shall be operated to control sulfur dioxide emissions at all times. The scrubber fluid shall be monitored at least once per hour for the existence of flow through the scrubber and continuously for pH. The pH of the scrubber fluid shall be a minimum of 7.5 units. The packed tower scrubber and the scrubber pH monitor must be operated and maintained in accordance with manufacturer's recommendations. A daily log must be maintained on site to record the observations of flow and pH (at least hourly readings) and any equipment maintenance and repairs.

A semi-annual report shall be submitted to the Department that summarizes the operating history of the scrubber for the previous six months and lists any deviations from permit requirements.

All records are to be kept on site for a period of five years and made available to Department representatives

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



during normal business hours.

Parameter Monitored: ACIDITY/ALKALINITY
Lower Permit Limit: 7.5 pH units
Monitoring Frequency: CONTINUOUS
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 7/30/02.
Subsequent reports are due every 6 calendar month(s).

Condition 40: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9(a)

Item 40.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00020 Emission Point: 00005

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 40.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Consent Order 81-79 established a 230 pounds per hour limit for sulfur dioxide emissions. During review of the application for this Title V permit, the Department has determined it is necessary to revise the environmental rating of Sulfur Dioxide emissions at this emission source from "D" to "B". This is being done because over the last twenty years since Consent Order 81-79 was completed, the Department has learned much more about the toxicity of sulfur dioxide and it's effects on humans and the ecosystem. Therefore, PVS must choose one of the following courses of action to determine the new sulfur dioxide emission limit:

Option #1. Provide for 94% control of the sulfur dioxide emissions, OR,

Option #2. Perform a Best Available Control Technology



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

(BACT) analysis per 6NYCRR Part 212.5(d).

Within six months of the Title V permit issuance date, PVS shall submit a report to the Department which details the control system design if option #1 is chosen, or an approvable BACT analysis if option #2 is chosen.

Within 30 days of Departmental approval of the report containing the control system design or BACT analysis, depending on which option described above is chosen, PVS shall submit equipment purchase order(s) and a construction schedule for any physical work necessary to complete the proposed action. The facility must be in compliance with the upgraded emission control rates within one year of Departmental approval of the report.

Upon completion, this condition and the emission limits established by this action shall supersede the sulfur dioxide limit imposed by Consent Order 81-79.

Monitoring Frequency: AS REQUIRED - SEE MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 41: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 224.2(b)

Item 41.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00020 Emission Point: 00005

Regulated Contaminant(s):

CAS No: 007664-93-9 SULFURIC ACID

Item 41.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Consent Order 81-79 established a 35 pounds per hour limit for sulfur trioxide emissions from emission point 00005. However, 6NYCRR Part 224.2(b), which was promulgated on May 10, 1984, contains an emission limit for sulfuric acid mist generated during the production of sulfuric acid which applies to this emission unit. As



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

such, PVS must now determine if the facility is in compliance with that emission limit found in 6NYCRR Part 224.2(b) for sulfuric acid mist. Within six months of the Title V permit issuance date, PVS must either provide documentation of compliance OR submit a plan for achieving compliance.

Within 30 days of Departmental approval of the compliance plan (if one is required), PVS shall submit equipment purchase order(s) and a construction schedule for any physical work necessary to achieve compliance.

The facility must be brought into compliance with 6NYCRR Part 224.2(b) within one year of Departmental approval of the compliance plan. At that time, the sulfur trioxide emission limit imposed by Consent Order 81-79 will be superseded by the sulfuric acid mist emission limit contained in 6NYCRR Part 224.2(b).

Monitoring Frequency: AS REQUIRED - SEE MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

7

Condition 42: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.6

Item 42.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00020 Emission Point: 00005
Process: 002 Emission Source: 00005

Regulated Contaminant(s):
CAS No: 007664-93-9 SULFURIC ACID

Item 42.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The facility owner and/or operator shall physically observe emission point 00005 hourly to monitor for unusual opacity conditions. If visible emissions above those that are normal and in compliance with section 212.6(a) are



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

detected (this may be zero percent opacity for many or all stacks), the facility owner shall determine the cause immediately and make the necessary correction. The records of the physical observations must be recorded in a log at the facility and shall be available for inspection by Department representatives upon request. Records will be maintained for a period of at least five years.

If visible emissions above those that are normal and in compliance continue to be present after corrections are made, the facility owner will conduct a Method 9 assessment to determine the degree of opacity.

If the opacity is determined to exceed the limits of section 212.6(a), the facility will be determined to be in violation, will remedy the problem, and will contact the Department. The provisions of Part 201-1.4 shall apply.

PVS maintains a video monitor which is used to periodically observe emission point 00005 for unusual opacity conditions and hastens operator response to opacity problems.

A semi-annual report shall be submitted to the Department that summarizes the opacity compliance history of the emission point for the previous six months.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: AS REQUIRED - SEE 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 7/30/02.
Subsequent reports are due every 6 calendar month(s).

Condition 43: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 43.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00020 Emission Point: 00005
Process: 002 Emission Source: 00005

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 43.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Sulfur dioxide emissions from emission point 00005 must be continuously monitored and measured by a certified Continuous Emission Monitoring System (CEMS).

1. The CEMS shall be operated in conformance with a CEMS Monitoring Plan developed by the permittee and approved by the Department, which is based on 40 CFR Part 60, Appendix B (Performance Specifications) & Appendix F (Quality Assurance Procedures) and the NYSDEC guidance document titled "Air Guide 34 - Continuous Emission Monitoring." Compliance requires the annual completion of a Relative Accuracy Test Audit (RATA). Prior to conducting the RATA, the permittee must submit a test protocol for approval to the following addresses: NYSDEC, Regional Air Pollution Control Engineer, 270 Michigan Avenue, Buffalo, NY 14203-2999; and NYSDEC, Bureau of Compliance Monitoring and Enforcement, 625 Broadway, Albany, NY 12233-3254. The permittee must notify the Department at least 30 days prior to the scheduled RATA date to give the Department the opportunity to witness each annual RATA.

2. PVS must maintain (and retain for at least five (5) years following the date of such measurements, maintenance, reports and records) a file of all measurements, including:

- a. CEMS performance evaluations;
- b. All CEMS or monitoring device calibration checks;
- c. Adjustments and maintenance performed on these systems or devices; and
- d. All other information required by 40 CFR Part 60, recorded in a permanent form suitable for inspection.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/02.

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



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Condition 44: Compliance Certification

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 44.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00020 Emission Point: 00005
Process: 002 Emission Source: 00005

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 44.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

PVS shall submit a CEMS quarterly written report for every calendar year quarter. Copies of the quarterly report must be postmarked within thirty (30) days after the end of each calendar quarter and forwarded to a) NYSDEC, Bureau of Compliance Monitoring and Enforcement, 625 Broadway, Albany, NY 12233-3258 and b) RAPCE, NYSDEC, 270 Michigan Avenue, Buffalo, NY 14203-2999.

All quarterly reports shall include:

- a. A summary of the calculated daily average sulfur dioxide emission rates from emission point 00005.
- b. A summary of excess emissions, CEMS down time and CEMS out-of-control periods reported in a format acceptable to the Department.
- c. A summary of the results of the quarterly monitoring performance audit, reported in the format of 40 CFR Part 60, Appendix F (or equivalent).
- d. Excess emissions shall be identified as any 24-hour block period during which the average emissions of sulfur dioxide, as measured by the CEMS, exceeds 230 pounds per hour.
- e. For the purposes of this permit, excess emissions indicated by the CEMS for 24-hour block periods, other than start-up or shutdown periods, may be considered violations of the applicable emission limits.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: QUARTERLY (CALENDAR)



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Reports due 30 days after the reporting period.
The initial report is due 7/30/02.
Subsequent reports are due every 3 calendar month(s).

Condition 45: Compliance Plan
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 45.1:

Compliance will be achieved according to the following schedule for the emission units, processes, sources or emission points specified in this permit:

Emission Unit: U-00020 Emission Point: 00005
Process: 002 Emission Source: 00005

Consent Order: 97-CV-0596

Item 45.2:

Remedial Measure:

Schedule Date: 04/18/2002

Continue to provide all process operators training in proper operation concepts, recognition of process upsets, and conditions requiring immediate shutdown.

Item 45.3:

Remedial Measure:

Schedule Date: 05/18/2002

Install an automated ammonia shutdown system acceptable to the Department that utilizes electrically actuated ball valves to automatically shut off the flow of ammonia from the ammonia tank car.

Item 45.4:

Remedial Measure:

Schedule Date: 10/15/2002

Certify that the facility CEMS meets the requirements, as applicable, of 40 CFR Part 60, Appendices B & F, and the Department guidance document titled "Air Guide 34 - Continuous Emission Monitoring."

Item 45.5:

Remedial Measure:

Schedule Date: 11/14/2002

Submit to the Regional Air Pollution Control Engineer (RAPCE) for approval a Performance Specification Test Protocol for the certification of the CEMS.



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Item 45.6:

Remedial Measure:

Schedule Date: 01/13/2003

Notify the RAPCE of the date upon which the CEMS Performance Specification Test will commence at least 30 days prior to the performance test.

Item 45.7:

Remedial Measure:

Schedule Date: 02/13/2003

Complete the CEMS Performance Specification Test.

Item 45.8:

Remedial Measure:

Schedule Date: 03/15/2003

Submit to the RAPCE for approval a CEMS Performance Specification Test Report within 30 days after completion of such test.

Item 45.9:

Remedial Measure:

Schedule Date: 07/15/2003

Submit to the RAPCE for approval a CEMS Quality Assurance Plan within 90 days of approval of the CEMS Performance Specification Test Report.

Item 45.10:

Remedial Measure:

Schedule Date: 08/15/2003

Maintain a file of all measurements, including: CEMS performance evaluations, all CEMS/monitoring device calibration checks, adjustments/maintenance performed on the systems or devices, and all other information required by 40CFR Part 60 DEC Air Guide 34.

Item 45.11:

Remedial Measure:

Schedule Date: 08/15/2003

Upon approval of the CEMS Quality Assurance Plan, submit a quarterly written report for every calendar year quarter to the RAPCE and Director of the Bureau of Air Quality Surveillance.

Condition 46: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

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Applicable Federal Requirement: 6NYCRR 212.6(a)

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



Item 46.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00040 Emission Point: 00006

Regulated Contaminant(s):

CAS No: 007664-93-9 SULFURIC ACID

Item 46.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The facility owner and/or operator shall observe emission point 00006 hourly to monitor for unusual opacity conditions. If visible emissions above those that are normal and in compliance with section 212.6(a) are detected (this may be zero percent opacity for many or all stacks), the facility owner shall determine the cause immediately and make the necessary correction. The records of these observations will be recorded in a log at the facility and shall be available for inspection by Department representatives upon request. Records will be maintained for a period of at least five years.

If visible emissions above those that are normal and in compliance continue to be present after corrections are made, the facility owner will conduct a Method 9 assessment to determine the degree of opacity.

If the opacity is determined to exceed the limits of section 212.6(a), the facility will be determined to be in violation, will remedy the problem, and will contact the Department. The provisions of Part 201-1.4 shall apply.

A semi-annual report shall be submitted to the Department that summarizes the opacity compliance history of the emission point for the previous six months.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Monitoring Frequency: HOURLY

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

The initial report is due 7/30/02.

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

Condition 47: Compliance Certification

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 47.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00040 Emission Point: 00006

Regulated Contaminant(s):

CAS No: 007664-93-9 SULFURIC ACID

CAS No: 007664-93-9 SULFURIC ACID

Item 47.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The wet packed tower scrubber shall be operated to control sulfur trioxide and sulfuric acid emissions to a minimum of 96%, as required by 6NYCRR Part 212.4(a) and for a B environmental rating in Table 2 of Part 212.9(b), at all times. The scrubber fluid shall be monitored at least once per hour during production for the existence of flow through the scrubber and continuously for sulfuric acid concentration. The recirculating scrubber fluid shall be at least 98% sulfuric acid. The packed tower scrubber and the scrubber conductivity sensor and alarm must be operated and maintained in accordance with manufacturer's recommendations. A daily log must be maintained on site to record the observations of flow and concentration (at least hourly readings) and any equipment maintenance and repairs.

A semi-annual report shall be submitted to the Department that summarizes the operating history of the scrubber for the previous six months and lists any deviations from permit requirements.

All records are to be kept on site for a period of five years and made available to Department representatives during normal business hours.

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



Parameter Monitored: SULFURIC ACID
Lower Permit Limit: 98 percent
Monitoring Frequency: CONTINUOUS
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 7/30/02.
Subsequent reports are due every 6 calendar month(s).

Condition 48: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.6

Item 48.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00060 Emission Point: 00160
Process: 012 Emission Source: 00160

Regulated Contaminant(s):
CAS No: 010196-04-0 SULFUROUS ACID, DIAMMONIUM SALT

Item 48.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The facility owner and/or operator shall physically observe emission point 00160 daily to monitor for unusual opacity conditions. If visible emissions above those that are normal and in compliance with section 212.6(a) are detected (this may be zero percent opacity for many or all stacks), the facility owner shall determine the cause immediately and make the necessary correction. The records of these observations will be recorded in a log at the facility and shall be available for inspection by Department representatives upon request. Records will be maintained for a period of at least five years.

If visible emissions above those that are normal and in compliance continue to be present after corrections are made, the facility owner will conduct a Method 9 assessment to determine the degree of opacity.



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

If the opacity is determined to exceed the limits of section 212.6(a), the facility will be determined to be in violation, will remedy the problem, and will contact the Department. The provisions of Part 201-1.4 shall apply.

PVS maintains a video monitor which is used to periodically observe emission point 00160 for unusual opacity conditions and hastens operator response to opacity problems.

A semi-annual report shall be submitted to the Department that summarizes the opacity compliance history of the emission point for the previous six months.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: DAILY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/02.
Subsequent reports are due every 6 calendar month(s).

Condition 49: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 49.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00060 Emission Point: 00160
Process: 012 Emission Source: 00160

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 49.2:

Compliance Certification shall include the following monitoring:

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



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

The packed wet scrubber shall be operated to control ammonia emissions at all times. The scrubber fluid shall be monitored at once per hour for the existence of flow through the scrubber and continuously for pH. The pH of the scrubber fluid shall be a maximum of 7.0 units. The packed tower scrubber and the scrubber pH monitor must be operated and maintained in accordance with manufacturer's recommendations. A daily log must be maintained on site to record the observations of flow and pH (at least hourly readings) and any equipment maintenance and repairs.

A semi-annual report shall be submitted to the Department that summarizes the operating history of the scrubber for the previous six months and lists any deviations from permit requirements.

All records are to be kept on site for a period of five years and made available to Department representatives during normal business hours.

Parameter Monitored: ACIDITY/ALKALINITY
Upper Permit Limit: 7.0 pH units
Monitoring Frequency: CONTINUOUS
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/02.
Subsequent reports are due every 6 calendar month(s).

Condition 50: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 50.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00060 Emission Point: 00160
Process: 012 Emission Source: 00161

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 50.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL



DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The packed wet scrubber shall be operated to control sulfur dioxide emissions at all times. The scrubber fluid shall be monitored at once per hour for the existence of flow through the scrubber and continuously for pH. The pH of the scrubber fluid shall be a minimum of 5.5 units. The packed tower scrubber and the scrubber pH monitor must be operated and maintained in accordance with manufacturer's recommendations. A daily log must be maintained on site to record the observations of flow and pH (at least hourly readings) and any equipment maintenance and repairs.

A semi-annual report shall be submitted to the Department that summarizes the operating history of the scrubber for 20the previous six months and lists any deviations from permit requirements.

All records are to be kept on site for a period of five years and made available to Department representatives during normal business hours.

Parameter Monitored: ACIDITY/ALKALINITY
Lower Permit Limit: 5.5 pH units
Monitoring Frequency: CONTINUOUS
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 7/30/02.
Subsequent reports are due every 6 calendar month(s).

Condition 51: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 51.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00080
Process: 016 Emission Source: 00181

Regulated Contaminant(s):
CAS No: 000497-19-8 SODIUM CARBONATE

Item 51.2:

Compliance Certification shall include the following monitoring:



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Adequate water flow to the soda ash scrubber must be verified prior to receiving and transferring soda ash into storage via pneumatic conveyor. These observations will be recorded in a log at the facility and shall be available for inspection by Department representatives upon request. Records will be maintained for a period of at least five years. A semi-annual report shall be submitted to the Department that summarizes the compliance history of the emission point for the previous six months.

Monitoring Frequency: AS REQUIRED - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/02.

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

Condition 52: Compliance Certification

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 52.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00080 Emission Point: 00182
Process: 015 Emission Source: 00182

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 52.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The wet packed tower scrubber shall be operated to control sulfur dioxide emissions to a minimum of 91%, as required by 6NYCRR Part 212.4(a) and for a B environmental rating in Table 2 of Part 212.9(b), at all times that aqueous sodium bisulfite is being produced. The scrubber water shall be monitored at least once per hour during production for the existence of flow through the scrubber and continuously for pH. The pH of the scrubber fluid



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

shall be a minimum of 7.5 units. The packed tower scrubber and the scrubber pH monitor must be operated and maintained in accordance with manufacturer's recommendations. A daily log must be maintained on site to record the observations of flow and pH (at least hourly readings) and any equipment maintenance and repairs.

A semi-annual report shall be submitted to the Department that summarizes the operating history of the scrubber for the previous six months and lists any deviations from permit requirements.

All records are to be kept on site for a period of five years and made available to Department representatives during normal business hours.

Parameter Monitored: ACIDITY/ALKALINITY
Lower Permit Limit: 7.5 pH units
Monitoring Frequency: CONTINUOUS
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 7/30/02.
Subsequent reports are due every 6 calendar month(s).

Condition 53: Compliance Certification
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 212.9

Item 53.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00080 Emission Point: 00182
Process: 015 Emission Source: 00182

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 53.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The water flow alarm on the wet packed tower scrubber must be checked at least monthly to verify that it is in

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



good working condition. These observations will be recorded in a log at the facility and shall be available for inspection by Department representatives upon request. Records will be maintained for a period of at least five years. A semi-annual report shall be submitted to the Department that summarizes the compliance history of the water flow alarm for the previous six months.

Monitoring Frequency: MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/02.

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

Condition 54: Compliance Certification

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable Federal Requirement: 6NYCRR 227-1.3(a)

Item 54.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00090

Item 54.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

No owner or operator of a combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average in reference test method 9 in Appendix A of 40 CFR 60.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Monitoring Frequency: AS REQUIRED - SEE 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 7/30/02.

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



STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

Condition 55: Unavoidable noncompliance and violations
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable State Requirement: 6NYCRR 201-1.4

Item 55.1:

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

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

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

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

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



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

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

Condition 56: General Provisions

Effective between the dates of 05/10/2002 and 05/10/2007

Applicable State Requirement: 6NYCRR 201-5.

Item 56.1:

This section contains terms and conditions that are not federally enforceable and are not required under the Act or under any of its applicable requirements. Terms and conditions so designated are not subject to the requirements of Section 201-6.4 of Part 201.

Item 56.2:

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.

Item 56.3:

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.

Condition 57: Contaminant List

Effective between the dates of 05/10/2002 and 05/10/2007

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

Item 57.1:

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

CAS No: 007664-41-7

Name: AMMONIA

CAS No: 007647-01-0

Name: HYDROGEN CHLORIDE

CAS No: 000497-19-8

Name: SODIUM CARBONATE



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

CAS No: 007446-09-5
n0 Name: SULFUR DIOXIDE

CAS No: 007664-93-9
Name: SULFURIC ACID

CAS No: 010196-04-0
Name: SULFUROUS ACID, DIAMMONIUM SALT

Condition 58: Air pollution prohibited
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable State Requirement: 6NYCRR 211.2

Item 58.1:

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

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

Condition 59: Compliance Demonstration
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable State Requirement: 6NYCRR 212.4(a)

Item 59.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00050 Emission Point: 00150

Regulated Contaminant(s):
CAS No: 007647-01-0 HYDROGEN CHLORIDE

Item 59.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The packed tower scrubber shall be operated at all times
that emissions from the loading or unloading of



New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435

hydrochloric acid may occur, as required by 6NYCRR Part 212.4(a) and for a B environmental rating in Table 2 of Part 212.9 (b). The scrubber water shall be monitored daily for the existence of flow through the scrubber and for hydrogen chloride concentration. The scrubber water must be removed and replaced before the hydrogen chloride concentration exceeds 18 percent. The packed tower scrubber must be operated and maintained in accordance with manufacturer's recommendations. A daily log must be maintained on site to record the daily observations of flow and hydrogen chloride concentration and any equipment maintenance and repairs.

A semi-annual report shall be submitted to the Department that summarizes the operating history of the scrubber for the previous six months and lists any deviations from permit requirements.

All records are to be kept on site for a period of five years and made available to Department representatives during normal business hours.

Parameter Monitored: CONCENTRATION

Upper Permit Limit: 18 percent

Monitoring Frequency: DAILY

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 7/30/02.

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

Condition 60: Compliance Demonstration
Effective between the dates of 05/10/2002 and 05/10/2007

Applicable State Requirement: 6NYCRR 212.4(a)

Item 60.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00070 Emission Point: 00170

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 60.2:

Compliance Demonstration shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 9-1402-00435/00037

Facility DEC ID: 9140200435



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

Monitoring Description:

The packed bed scrubber shall be operated at all times that diethanolamine sulfur dioxide adduct is being produced. Sulfur dioxide emissions shall be controlled to a minimum of 91% as required by 6NYCRR Part 212.4(a) and for a B environmental rating in Table 2 of Part 212.9 (b).

The scrubber water shall be monitored at least once per hour during production for the existence of flow through the scrubber and continuously for pH. The pH of the scrubber fluid shall be a minimum of 8.0 pH units. The packed scrubber and the scrubber pH monitor must be operated and maintained in accordance with manufacturer's recommendations. A daily log must be maintained on site to record the observations of flow and pH (at least hourly readings) and any equipment maintenance and repairs.

A semi-annual report shall be submitted to the Department that summarizes the operating history of the scrubber for the previous six months and lists any deviations from permit requirements.

All records are to be kept on site for a period of five years and made available to Department representatives during normal business hours.

Parameter Monitored: ACIDITY/ALKALINITY

Lower Permit Limit: 8.0 pH units

Monitoring Frequency: CONTINUOUS

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 7/30/02.

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