

New York State Department of Environmental Conservation
Facility DEC ID: 9291100068



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 9-2911-00068/00133
Mod 0 Effective Date: 02/27/2002 Expiration Date: No expiration date.
Mod 1 Effective Date: 09/09/2002 Expiration Date: No expiration date.

Permit Issued To: OLIN CORP
501 MERRITT SEVEN
NORWALK, CT 06856-4500

Facility: OLIN CHEMICALS GROUP NIAGARA FALLS PLANT
2400 BUFFALO AVE
NIAGARA FALLS, NY 14303

Contact: BEN BRAYLEY
OLIN CHLOR ALKALI DIVISION
2400 BUFFALO AVE PO BOX 748
NIAGARA FALLS, NY 14302-0748
(716) 278-6422

Description:
OLIN CHEMICALS GROUP NIAGARA FALLS PLANT IS LOCATED AT 2400 BUFFALO AVENUE IN THE CITY OF NIAGARA FALLS, NEW YORK. THE CHLOR ALKALI MANUFACTURING FACILITY PRODUCES CHLORINE, SODIUM HYDROXIDE, HYDROGEN, HYDROCHLORIC ACID AND SODIUM HYPOCHLORITE. CHLORINE IS PRODUCED USING 12 MEMBRANE ELECTROLYZERS. SODIUM HYDROXIDE IS PRODUCED AT 33% CONCENTRATION AND IS EVAPORATED TO 50% CONCENTRATION. CHLORINE IS LIQUIFIED AND A PORTION IS UTILIZED ON SITE TO MANUFACTURE SODIUM HYPOCHLORITE AND HYDROCHLORIC ACID.

THIS PERMIT MODIFICATION IS BEING ISSUED TO CLARIFY THE YEARLY TOTAL EMISSION LIMITS FOR CARBON MONOXIDE (CO) AND OXIDES OF NITROGEN (NOX) FOR THE FACILITY. EACH OF THESE POLLUTANTS MUST REMAIN AT A YEARLY LIMIT OF LESS THAN 100 TONS DURING ANY 12 MONTH CONSECUTIVE TIME PERIOD FOR THE FACILITY TO REMAIN A SYNTHETIC MINOR BY DEFINITION.

THERE ARE SEVEN EMISSION UNITS FOR THIS PERMIT WHICH INCLUDE :

EMISSION UNIT A-00001 : CONTAINS PROCESSING EQUIPMENT UTILIZED TO LIQUIFY CHLORINE, PRODUCE HYDROCHLORIC ACID, PRODUCE RAW BLEACH AND SCRUB



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CHLORINE FROM CHLORINE LIQUIFICATION TAIL GAS AND MISCELLANEOUS VENT STREAMS.

EMISSION UNIT A-00002 : CONTAINS PROCESSING EQUIPMENT UTILIZED TO REMOVE IMPURITIES FROM SODIUM CHLORIDE BRINE PRIOR TO ELECTROLYSIS.

EMISSION UNIT A-00003 : CONSISTS OF AN ION EXCHANGE SYSTEM AND ASSOCIATED PROCESS TANKS. THE ION EXCHANGE SYSTEM IS UTILIZED TO SOFTEN BRINE TO THE LEVEL REQUIRED FOR MEMBRANE CELL OPERATION.

EMISSION UNIT A-00004 : CONSISTS OF STORAGE TANKS ASSOCIATED WITH THE HCL SYNTHESIS UNIT. THESE INCLUDE AN ACID CONDENSATE TANK AND A SCRUBBER SURGE TANK.

EMISSION UNIT A-00005 : CONTAINS PROCESSING EQUIPMENT UTILIZED IN THE CONCENTRATION AND STORAGE OF SODIUM HYDROXIDE. THE SODIUM HYDROXIDE EVAPORATION SYSTEM AND STORAGE TANKS ARE VENTED TO THE ATMOSPHERE.

EMISSION UNIT A-00006 : CONTAINS PROCESSING EQUIPMENT UTILIZED TO PROCESS HYDROGEN. THE HYDROGEN IS PRODUCED IN THE 12 MEMBRANE ELECTROLYZERS.

EMISSION UNIT A-00007 : CONTAINS TWO 75,000 LB/HR 150 PSIG STEAM PACKAGE BOILERS WHICH PROVIDE ALL THE STEAM FOR THE PLANT SITE. THEY CAN BURN HYDROGEN, NATURAL GAS AND #2 FUEL OIL SEPARATELY AND IN COMBINATION. TYPICALLY, HYDROGEN AND NATURAL GAS WILL BE BURNED TOGETHER.

THE FACILITY IS CAPPING OUT OF TITLE V PERMIT REQUIREMENTS BY TRACKING EMISSIONS AS TO NOT EXCEED A TOTAL EMISSION RATE OF 100 TONS PER YEAR OF CARBON MONOXIDE OR 100 TONS PER YEAR OF OXIDES OF NITROGEN (NOX) AS PER 6NYCRR PART 201.5. OLIN MUST ALSO COMPLY WITH 40 CFR 82 REQUIREMENTS FOR REFRIGERANTS PURCHASED.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: DAVID S DENK
 DIVISION OF ENVIRONMENTAL PERMITS
 270 MICHIGAN AVE
 BUFFALO, NY 14203-2999

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

Applications for Permit Renewals and Modifications

Permit Modifications, Suspensions and Revocations by the Department

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 ******
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 1-1: Applications for Permit Renewals and Modifications
Applicable State Requirement: 6NYCRR 621.13

Item 1-1.1:

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 1-1.2:

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

Item 1-1.3:

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

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transfer of ownership.

Condition 3: Applications for Permit Renewals and Modifications
Applicable State Requirement: 6NYCRR 621.13(a)

Expired by Mod No: 1

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 1-2: Permit Modifications, Suspensions and Revocations by the Department
Applicable State Requirement: 6NYCRR 621.14

Item 1-2.1:

The Department reserves the right to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

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

Expired by Mod No: 1

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



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ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

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501 MERRITT SEVEN
NORWALK, CT 06856-4500

Facility: OLIN CHEMICALS GROUP NIAGARA FALLS PLANT
2400 BUFFALO AVE
NIAGARA FALLS, NY 14303

Authorized Activity By Standard Industrial Classification Code:
2812 - ALKALIES AND CHLORINE
2819 - INDUSTRIAL INORGANIC CHEMICALS



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1-1 6NYCRR 201-7.2: Compliance Demonstration
- 1-2 6NYCRR 201-7.2: Compliance Demonstration
- 1-3 6NYCRR 225-1.2: Compliance Demonstration
- 18 6NYCRR 227-1.3(a): Compliance Demonstration
- 1-4 40CFR 82: Recycling and emissions reduction.

Emission Unit Level

EU=A-00001,Proc=A01

- 22 6NYCRR 212.9(b): Compliance Demonstration

EU=A-00001,Proc=A02

- 23 6NYCRR 212.9(b): Compliance Demonstration

EU=A-00001,Proc=A03

- 24 6NYCRR 212.9(b): Compliance Demonstration
- 25 6NYCRR 212.9(b): Compliance Demonstration

EU=A-00001,Proc=A04

- 26 6NYCRR 212.9(b): Compliance Demonstration

EU=A-00001,EP=36701,Proc=A05

- 27 6NYCRR 212.9(b): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 1-5 ECL 19-0301: Contaminant List
- 28 6NYCRR 201-1.4: Unavoidable noncompliance and violations
- 31 6NYCRR 201-5: Emission Unit Definition
- 33 6NYCRR 211.2: Air pollution prohibited

Emission Unit Level

- 34 6NYCRR 201-5: Emission Point Definition By Emission Unit
- 35 6NYCRR 201-5: Process Definition By Emission Unit

Mod 0 Permit Effective Date: 02/27/2002

Permit Expiration Date: No expiration date.

Mod 1 Permit Effective Date: 09/09/2002

Permit Expiration Date: No expiration date.



FEDERALLY ENFORCEABLE CONDITIONS

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6NYCRR Part 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation.

Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

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

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: Acceptable Ambient Air Quality - 6NYCRR Part 200.6

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

Item C: Maintenance of Equipment - 6NYCRR Part 200.7

Any person who owns or operates an air contamination

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

Item D: Unpermitted Emission Sources - 6NYCRR Part 201-1.2

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.

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

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

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

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

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

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

(4) The facility owner and/or operator notified the Department within two working days after the event



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occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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

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

Item F: Recycling and Salvage - 6NYCRR Part 201-1.7

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

Item G: Prohibition of Reintroduction of Collected Contaminants to the Air - 6NYCRR Part 201-1.8

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

Item H: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR Part 201-3.2(a)

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

Item I: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR Part 201-3.3(a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific



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

Item J: Required Emission Tests - 6 NYCRR Part 202-1.1

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

Item K: Visible Emissions Limited - 6 NYCRR Part 211.3

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.

Item L: Open Fires - 6 NYCRR Part 215

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.

Item M: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not



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limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item N: Federally Enforceable Requirements - 40 CFR 70.6(b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

FEDERAL APPLICABLE REQUIREMENTS

The following conditions are federally enforceable.

Condition 1-1: Compliance Demonstration

Effective between the dates of 09/09/2002 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-7.2

Item 1-1.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 1-1.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

THE FACILITY MUST HAVE A TOTAL EMISSION RATE OF LESS THAN 100 TONS PER YEAR OF CARBON MONOXIDE (CO) AS DETERMINED BY SUMMARIZING THE INDIVIDUAL MONTHLY (CO) EMISSIONS DURING ANY CONSECUTIVE 12 MONTH



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PERIOD. DAILY RECORDS SHALL BE KEPT SUMMARIZING THE STEAM TO (CO) RATIO AS DESCRIBED ON THE ATTACHMENT (A)(2) CONVERSION EQUATIONS AND THE ATTACHMENT (B) DCS SYSTEM CALCULATIONS FOR THE HCL FURNACE. THESE DAILY (CO) CONCENTRATIONS WILL BE USED TO CALCULATE THE MONTHLY (CO) TOTALS. RECORDS SHALL BE MAINTAINED AT THE FACILITY FOR A PERIOD OF (5) YEARS AND SHALL BE AVAILABLE TO THE DEPARTMENT UPON REQUEST. AN ANNUAL REPORT MUST BE SUBMITTED TO THE REGION 9 REGIONAL AIR POLLUTION CONTROL ENGINEER (RAPCE).

Monitoring Frequency: DAILY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2003.
Subsequent reports are due every 12 calendar month(s).

Condition 1-2: Compliance Demonstration
Effective between the dates of 09/09/2002 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-7.2

Item 1-2.1:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 1-2.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

THE FACILITY MUST HAVE A TOTAL EMISSION RATE OF LESS THAN 100 TONS PER YEAR OF OXIDES OF NITROGEN (NOX) AS DETERMINED BY SUMMARIZING THE INDIVIDUAL (NOX) EMISSIONS DURING ANY CONSECUTIVE TWELVE MONTH PERIOD. DAILY RECORDS SHALL BE KEPT SUMMARIZING THE STEAM TO (NOX) RATIO AS DESCRIBED ON THE ATTACHMENT (A) CONVERSION EQUATIONS. THESE DAILY (NOX) CONCENTRATIONS WILL BE USED TO CALCULATE

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THE MONTHLY (NOX) TOTALS. RECORDS SHALL BE MAINTAINED AT THE FACILITY FOR A PERIOD OF (5) YEARS AND SHALL BE AVAILABLE TO THE DEPARTMENT UPON REQUEST. AN ANNUAL REPORT MUST BE SUBMITTED TO THE REGION 9 REGIONAL AIR POLLUTION CONTROL ENGINEER (RAPCE).

Monitoring Frequency: DAILY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2003.
Subsequent reports are due every 12 calendar month(s).

Condition 1-3: Compliance Demonstration
Effective between the dates of 09/09/2002 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 225-1.2

Item 1-3.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 007704-34-9 SULFUR

Item 1-3.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:
A SAMPLE OF EVERY INCOMING LOAD OF FUEL OIL MUST BE TESTED FOR SULFUR CONTENT WITH THE LIMIT NOT TO EXCEED 0.05 PERCENT BY WEIGHT.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR
Upper Permit Limit: 0.05 percent by weight
Reference Test Method: ASTM D 4294
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.



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The initial report is due 10/30/2002.

Subsequent reports are due every 3 calendar month(s).

Condition 18: Compliance Demonstration

Effective between the dates of 02/27/2002 and Permit Expiration Date

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

Item 18.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 18.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

No person shall operate a stationary combustion
installation which exhibits greater than 20 percent
opacity (six minute average), except for one six minute
per hour of not more than 27 percent opacity

Parameter Monitored: OPACITY

Upper Permit Limit: 27 percent

Reference Test Method: 40 CFR 60 Appendix B

Monitoring Frequency: CONTINUOUS

Averaging Method: 6 MINUTE AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 4/30/2002.

Subsequent reports are due every 3 calendar month(s).

Condition 1-4: Recycling and emissions reduction.

Effective between the dates of 09/09/2002 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 82

Item 1-4.1: The permittee shall comply with all applicable provisions of 40 CFR Part 82.

**** Emission Unit Level ****

Condition 22: Compliance Demonstration

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Applicable Federal Requirement: 6NYCRR 212.9(b)

Item 22.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: A-00001

Process: A01

Regulated Contaminant(s):

CAS No: 007782-50-5 CHLORINE

Item 22.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission Point 35904 is associated with the Hypo Recycle after scrubber. Scrubbing liquid (used to remove chlorine) is sampled and analyzed to determine sodium hydroxide concentration, NOT TO FALL BELOW 1% BY WEIGHT AT ANY TIME. Records shall be maintained verifying that pump is running and there is a flow to the scrubber. This will be a visual inspection by the operator once per shift. Emission Points 35901, 35902 and 35903 are three sparge tanks which vent through the after scrubber. They were not added to the compliance monitoring for that reason.

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL CHANGE

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 23: Compliance Demonstration

Effective between the dates of 02/27/2002 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.9(b)

Item 23.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: A-00001

Process: A02

Regulated Contaminant(s):

CAS No: 007782-50-5 CHLORINE

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Item 23.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission point 36901 is associated with this process. Scrubbing liquid (used to remove chlorine) shall be sampled and analyzed to determine the sodium hydroxide concentration, NOT TO FALL BELOW 4% BY WEIGHT AT ANY TIME. Records shall be kept verifying that pump is running and there is flow to the scrubber. This shall be a visual inspection by the operator once per shift.

Monitoring Frequency: DAILY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 24: Compliance Demonstration
Effective between the dates of 02/27/2002 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.9(b)

Item 24.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: A-00001

Process: A03

Regulated Contaminant(s):

CAS No: 007782-50-5 CHLORINE

Item 24.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission Point 83001 is associated with the West Cistern. Scrubbing liquid (used to remove chlorine) shall be sampled and analyzed to determine sodium hydroxide concentration, NOT TO FALL BELOW 0.2% BY WEIGHT AT ANY TIME. Records shall be kept verifying that the pump is running and there is flow to the scrubber. This shall be a visual inspection by the operator once per shift.

Monitoring Frequency: DAILY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 25: Compliance Demonstration



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Effective between the dates of 02/27/2002 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.9(b)

Item 25.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: A-00001

Process: A03

Regulated Contaminant(s):

CAS No: 007782-50-5 CHLORINE

Item 25.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission Point 83002 is associated with the East Cistern.

Scrubbing liquid (used to remove chlorine) shall be sampled and analyzed to determine the sodium hydroxide concentration, NOT TO FALL BELOW 0.2% BY WEIGHT AT ANY TIME. Records shall be kept verifying that the pump is running and there is flow to the scrubber. This shall be a visual inspection by the operator once per shift.

Monitoring Frequency: DAILY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 26: Compliance Demonstration

Effective between the dates of 02/27/2002 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.9(b)

Item 26.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: A-00001

Process: A04

Regulated Contaminant(s):

CAS No: 007782-50-5 CHLORINE

Item 26.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES



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Monitoring Description:

Emission Point 00017 is associated with this process. Scrubbing liquid (used to remove chlorine) shall be sampled and analyzed to determine sodium hydroxide concentration, NOT TO FALL BELOW 2% BY WEIGHT AT ANY TIME. Records shall be kept verifying that the pump is running and there is flow to the scrubber. This shall be a visual inspection by the operator once per shift.

Monitoring Frequency: PER BATCH OF PRODUCT/RAW MATERIAL CHANGE

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 27: Compliance Demonstration
Effective between the dates of 02/27/2002 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 212.9(b)

Item 27.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: A-00001 Emission Point: 36701
Process: A05

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

Item 27.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission Point 36701 is a packed gas absorption system. Olin shall maintain and monitor a minimum flow of 15 gpm through the scrubber. Records verifying flow through the scrubber shall be recorded by the operator once per shift.

Monitoring Frequency: PER SHIFT

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY



STATE ONLY ENFORCEABLE CONDITIONS

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

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

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

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

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

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



law.

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state only enforceable.

Condition 1-5: Contaminant List

Effective between the dates of 09/09/2002 and Permit Expiration Date

Applicable State Requirement: ECL 19-0301

Item 1-5.1:

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

CAS No: 000630-08-0
Name: CARBON MONOXIDE

CAS No: 007782-50-5
Name: CHLORINE

CAS No: 007647-01-0
Name: HYDROGEN CHLORIDE

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN

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

CAS No: 007704-34-9
Name: SULFUR

Condition 28: Unavoidable noncompliance and violations

Effective between the dates of 02/27/2002 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-1.4

Item 28.1:

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



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

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

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

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

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

Condition 31: Emission Unit Definition

Effective between the dates of 02/27/2002 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 31.1(From Mod 1):

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

Emission Unit: A-00001

Emission Unit Description:

EMISSION UNIT A00001 CONTAINS PROCESSING

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EQUIPMENT UTILIZED TO; 1) LIQUEFY CHLORINE
2) PRODUCE HYDROCHLORIC ACID, 3) PRODUCE
RAW BLEACH, AND 4) SCRUB CHLORINE FROM
CHLORINE LIQUEFACTION TAIL GAS AND
MISCELLANEOUS VENT STREAMS. CHLORINE
STREAMS PROCESSED BY THIS EMISSION UNIT
INCLUDE: 1) TANK CAR AND LINE SNIFF GAS, 3)
TANK CAR VENTS, 4) CHLORINE CELL (OLIN)
CHLORINE GAS. PROCESSES WHICH COMPRISE
THIS EMISSION UNIT INCLUDE: 1) TANK CAR AND
LINE SNIFF GAS ARE SCRUBBED USING CAUSTIC
SOLUTION. 2) CHLORINE IS LIQUEFIED BY 2
CARRIER AND 1 FES LIQUEFACTION SYSTEMS.
UNDER TYPICAL OPERATION MEMBRANE CELL
CHLORINE IS LIQUEFIED BY ONE CARRIER AND
THE FES AND SODIUM CELL CHLORINE IS
LIQUEFIED BY ONE CARRIER. ALL THREE
LIQUEFIERS ARE CONFIGURED TO HANDLE EITHER
OF THE TWO CHLORINE STREAMS. 3) TANK CAR
VENT GAS CAN BE DIRECTED TO EITHER CARRIER
OR FES SYSTEMS. 4) HYDROCHLORIC ACID
PRODUCTION FURNACES. 5) RAW BLEACH STORAGE
TANKS (NOTE: RAW BLEACH FROM CISTERNS). 6)
CHLORINE SCRUBBING SYSTEM CONSISTING OF 3
BATCH CAUSTIC SPARGE TANKS, AFTER SCRUBBER
AND (2) SPARGE TANKS WITH TRAY TOWER
SCRUBBERS (CISTERNS).

Building(s): 365
367
369
47
65
83

Item 31.2(From Mod 1):

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

Emission Unit: A-00007

Emission Unit Description:

EMISSION UNIT A-00007 CONSISTS OF TWO
75,000 POUND PER HOUR OF 150 PSIG STEAM
PACKAGED BOILERS TO PROVIDE STEAM FOR
PRODUCTION OF CHLORINE AND SODIUM
HYDROXIDE. THEY CAN BURN HYDROGEN, NATURAL
GAS AND #2 FUEL OIL SEPARATELY AND IN
COMBINATION. ONE BOILER IS SUFFICIENT TO
SUPPLY THE PLANT STEAM REQUIREMENTS EXEPT



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FOR THE WINTER MONTHS OR IF STEAM WILL BE SOLD WHEN BOTH BOILERS WILL BE REQUIRED. THE BOILERS WILL OPERATE SLIGHTLY ABOVE 50% CAPACITY WHEN BOTH ARE OPERATED. STEAM GENERATED MAY BE SOLD TO NEARBY FACILITIES IF YEARLY (NOX) LIMITS ARE MAINTAINED.

Building(s): 391

Item 31.3(From Mod 0):

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

Emission Unit: A-00002

Emission Unit Description:

EMISSION UNIT A00002 CONTAINS PROCESSING EQUIPMENT UTILIZED TO REMOVE IMPURITIES FROM SODIUM CHLORIDE BRINE PRIOR TO ELECTROLYSIS. PROCESSES WHICH COMPRISE THIS EMISSION UNIT INCLUDE: 1) PRECOAT PREPARATION FOR BRINE FILTRATION SYSTEM. 2) REDUCING AGENT (SODIUM BISULFITE) STORAGE TANKS, 3) SODIUM CARBONATE SLURRY SYSTEM AND TANK, 4) CALCIUM CARBONATE SLUDGE DIGESTION PROCESS AND 5) SODIUM CARBONATE PRODUCTION PROCESS.

Building(s): 371
382
385

Item 31.4(From Mod 0):

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

Emission Unit: A-00003

Emission Unit Description:

EMISSION UNIT A00003 CONSISTS OF AN ION EXCHANGE SYSTEM AND ASSOCIATED PROCESS TANKS. THE ION EXCHANGE SYSTEM IS UTILIZED TO SOFTEN BRINE TO THE LEVEL REQUIRED FOR MEMBRANE CELL OPERATION.

Building(s): 374

Item 31.5(From Mod 0):

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

Emission Unit: A-00004

Emission Unit Description:

EMISSION UNIT A00004 CONSISTS OF STORAGE TANKS ASSOCIATED WITH THE HCL SYNTHESIS

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UNIT. THESE INCLUDE AN ACID CONDENSATE TANK AND A SCRUBBER SURGE TANK.

Building(s): 367

Item 31.6(From Mod 0):

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

Emission Unit: A-00005

Emission Unit Description:

EMISSION UNIT A00005 CONTAINS PROCESSING EQUIPMENT UTILIZED IN THE CONCENTRATION AND STORAGE OF SODIUM HYDROXIDE. THE SODIUM HYDROXIDE EVAPORATION SYSTEM (AFTER CONDENSERS ON STEAM JET EJECTORS) AND STORAGE TANKS ARE VENTED TO THE ATMOSPHERE. THE UTILIZATION OF THE EVAPORATION SYSTEM AND STORAGE TANKS RESULTS IN THE EMISSION OF REGULATED AIR POLLUTANTS AT INSIGNIFICANT EMISSION LEVELS AS DEFINED BY 6 NYCRR PART 201-6.3 (d) (7). THIS IS BASED ON A POTENTIAL TO EMIT CRITERIA CONTAMINANTS OF LESS THAN 2.5 TONS/YEAR.

Building(s): 363

Item 31.7(From Mod 0):

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

Emission Unit: A-00006

Emission Unit Description:

EMISSION UNIT A00006 CONTAINS PROCESSING EQUIPMENT UTILIZED TO PROCESS HYDROGEN. THE HYDROGEN IS PRODUCED IN 12 MEMBRANE ELECTROLYZERS. THE GAS IS MAINTAINED AT A SLIGHT POSITIVE PRESSURE TO PREVENT THE INFLUX OF AIR. THE GAS IS COMPRESSED AND EITHER SENT TO USERS (SUCH AS HCL SYNTHESIS UNIT) OR IS VENTED.

Building(s): 367
369

Condition 33: Air pollution prohibited
Effective between the dates of 02/27/2002 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 211.2

Item 33.1:



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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 34: Emission Point Definition By Emission Unit
Effective between the dates of 02/27/2002 and Permit Expiration Date**

Applicable State Requirement: 6NYCRR 201-5

Item 34.1(From Mod 0):

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

Emission Unit: A-00001

Emission Point: 00017

Height (ft.): 50 Diameter (in.): 12
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 47

Emission Point: 35904

Height (ft.): 60 Diameter (in.): 23
NYTMN (km.): 4777.3 NYTME (km.): 173. Building: 359

Emission Point: 36501

Height (ft.): 26 Diameter (in.): 1
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 365

Emission Point: 36502

Height (ft.): 18 Diameter (in.): 1
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 65

Emission Point: 36503

Height (ft.): 18 Diameter (in.): 1
Building: 65

Emission Point: 36701

Height (ft.): 76 Diameter (in.): 8
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 367

Emission Point: 36704

Height (ft.): 75 Diameter (in.): 6



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NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 367
Emission Point: 36705		
Height (ft.): 75	Diameter (in.): 6	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 367
Emission Point: 36709		
Height (ft.): 60	Diameter (in.): 23	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 367
Emission Point: 36901		
Height (ft.): 60	Diameter (in.): 6	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 369
Emission Point: 74001		
Height (ft.): 32	Diameter (in.): 4	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 74
Emission Point: 74002		
Height (ft.): 32	Diameter (in.): 4	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 74
Emission Point: 83001		
Height (ft.): 44	Diameter (in.): 6	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 83
Emission Point: 83002		
Height (ft.): 44	Diameter (in.): 6	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 83

Item 34.2(From Mod 0):

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

Emission Unit: A-00002		
Emission Point: 36601		
Height (ft.): 7	Diameter (in.): 2	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 382
Emission Point: 37701		
Height (ft.): 40	Diameter (in.): 4	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 385
Emission Point: 37702		
Height (ft.): 50	Diameter (in.): 6	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 385



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Emission Point: 37703			
Height (ft.): 27	Diameter (in.): 12		
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 371	
Emission Point: 37707			
Height (ft.): 30	Diameter (in.): 12		
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 371	
Emission Point: 37708			
Height (ft.): 35	Diameter (in.): 4		
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 371	
Emission Point: 37801			
Height (ft.): 36	Diameter (in.): 12		
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 385	

Item 34.3(From Mod 0):

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

Emission Unit: A-00003			
Emission Point: 37704			
Height (ft.): 12	Diameter (in.): 3		
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 374	
Emission Point: 37705			
Height (ft.): 35	Diameter (in.): 3		
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 374	
Emission Point: 37706			
Height (ft.): 9	Diameter (in.): 3		
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 374	
Emission Point: 37709			
Height (ft.): 21	Diameter (in.): 3		
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 374	

Item 34.4(From Mod 0):

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

Emission Unit: A-00004			
Emission Point: 36706			
Height (ft.): 3	Diameter (in.): 2		
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 367	
Emission Point: 36707			



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Height (ft.): 13	Diameter (in.): 3	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 367
Emission Point: 36708		
Height (ft.): 22	Diameter (in.): 3	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 371

Item 34.5(From Mod 0):

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

Emission Unit: A-00005

Emission Point: 36801		
Height (ft.): 43	Diameter (in.): 8	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 363
Emission Point: 36802		
Height (ft.): 57	Diameter (in.): 2	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 363
Emission Point: 36803		
Height (ft.): 38	Diameter (in.): 3	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 363
Emission Point: 36804		
Height (ft.): 25	Diameter (in.): 8	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 363
Emission Point: 36805		
Height (ft.): 55	Diameter (in.): 4	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 29
Emission Point: 36806		
Height (ft.): 27	Diameter (in.): 3	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 363
Emission Point: 36807		
Height (ft.): 33	Diameter (in.): 6	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 29
Emission Point: 36808		
Height (ft.): 33	Diameter (in.): 6	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 29
Emission Point: 36809		
Height (ft.): 32	Diameter (in.): 4	
NYTMN (km.): 4777.7	NYTME (km.): 172.2	Building: 29



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Emission Point: 36810
Height (ft.): 40 Diameter (in.): 4
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 83

Emission Point: 36811
Height (ft.): 11 Diameter (in.): 6
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 83

Item 34.6(From Mod 0):

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

Emission Unit: A-00006

Emission Point: 36702
Height (ft.): 71 Diameter (in.): 2
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 367

Emission Point: 36902
Height (ft.): 72 Diameter (in.): 4
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 369

Emission Point: 45002
Height (ft.): 90 Diameter (in.): 4
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 369

Item 34.7(From Mod 0):

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

Emission Unit: A-00007

Emission Point: 39101
Height (ft.): 50 Diameter (in.): 54
NYTMN (km.): 4777.3 NYTME (km.): 172.2 Building: 391

Emission Point: 39102
Height (ft.): 50 Diameter (in.): 54
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 391

Emission Point: 39103
Height (ft.): 45 Diameter (in.): 4
NYTMN (km.): 4777.7 NYTME (km.): 172.2 Building: 391

Condition 35: Process Definition By Emission Unit
Effective between the dates of 02/27/2002 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

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Facility DEC ID: 9291100068



Item 35.1(From Mod 1):

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

Emission Unit: A-00001

Process: A02

Process Description:

PROCESS A02 IS A CHLORINE SCRUBBING PROCESS WHICH IS UTILIZED TO SCRUB VARIOUS CHLORINE CONTAINING VENT STREAMS (PURGE STREAM GENERATED BY MEMBRANE ELECTROLYZERS DURING START-UP AND VENT STREAM ASSOCIATED WITH THE DEPLETED BRINE VACUUM DECHLORINATION SYSTEM). THE CHLORINE SCRUBBING PROCESS CONSISTS OF A CIRCULATING CAUSTIC SPRAY TOWER TYPE SCRUBBER. THE PURGE STREAM GENERATED BY THE ELECTROLYZERS TYPICALLY LASTS APPROXIMATELY 30 MINUTES DURING EACH START-UP. THE DEPLETED BRINE FROM THE ELECTROLYTIC CELLS IS DECHLORINATED BY THE USE OF VACUUM JETS OR A VACUUM PUMP.

Emission Source/Control: A0203 - Control

Control Type: SODIUM-ALKALI SCRUBBING

Emission Source/Control: A0201 - Process

Emission Source/Control: A0202 - Process

Item 35.2(From Mod 1):

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

Emission Unit: A-00001

Process: A05

Process Description:

PROCESS A05 IS UTILIZED TO SYNTHESIZE HCL. CHLORINE LIQUEFACTION TAIL GAS AND SUPPLEMENTAL PRODUCT CHLORINE AND HYDROGEN ARE REACTED IN A TWO STAGE SYNTHESIS UNIT. STAGE ONE CONTAINS A FURNACE (REACTS CHLORINE AND HYDROGEN TO FORM HCL) AND AN ABSORBER WHICH PRODUCES HYDROCHLORIC ACID BY ABSORBING HCL IN WATER. STAGE TWO USES FRESH WATER TO REMOVE TRACES OF HCL AND VENTS THROUGH THE TAILS TOWERS TO THE ATMOSPHERE. A SECOND HCL SYNTHESIS UNIT IS

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OPERATED IN PARALLEL AND BOTH UNITS CAN SYNTHESIZE EITHER TYPE OF CHLORINE FEED. THREE HCL STORAGE TANKS ARE UTILIZED FOR STORAGE OF ACID PRODUCED IN THE SYNTHESIS UNITS. THE ACID STORAGE TANKS ARE VENTED TO A PACKED TOWER SCRUBBER WHICH UTILIZES WATER FOR ABSORPTION OF HCL.

Emission Source/Control: A0502 - Control
Control Type: PACKED-GAS ABSORPTION SYSTEM

Emission Source/Control: A0501 - Process
Design Capacity: 30,000 gallons

Emission Source/Control: A0503 - Process

Emission Source/Control: A0504 - Process

Emission Source/Control: A0505 - Process

Emission Source/Control: A0506 - Process

Emission Source/Control: A0507 - Process

Emission Source/Control: A0508 - Process

Emission Source/Control: A0509 - Process

Emission Source/Control: A0510 - Process

Emission Source/Control: A0511 - Process
Design Capacity: 30,000 gallons

Emission Source/Control: A0512 - Process
Design Capacity: 60,000 gallons

Item 35.3(From Mod 1):

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

Emission Unit: A-00007

Process: A62

Process Description:

TWO 75000 LB/YR PACKAGED BOILERS EQUIPPED WITH HIGH EFFICIENCY LOW NOX BURNERS WILL PROVIDE PLANT SITE WITH 150 PSIG STEAM. INPUT IS APPROXIMATELY 90 MILLION BTU'S/HR WITH AN OUTPUT EFFICIENCY OF 80%. BOILERS



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WILL FIRE HYDROGEN, HYDROGEN WITH NATURAL GAS, HYDROGEN WITH #2 FUEL OIL, NATURAL GAS OR #2 FUEL OIL. THE #2 FUEL OIL WILL ONLY BE USED AS AN EMERGENCY BACKUP FUEL WHEN HYDROGEN AND NATURAL GAS ARE NOT AVAILABLE.

Emission Source/Control: A6201 - Combustion
Design Capacity: 75,000 pounds per hour

Emission Source/Control: A6202 - Combustion
Design Capacity: 75,000 pounds per hour

Item 35.4(From Mod 0):

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

Emission Unit: A-00001

Process: A01

Process Description:

PROCESS A01 IS A CHLORINE SCRUBBING PROCESS WHICH IS UTILIZED TO SCRUB VARIOUS CHLORINE CONTAINING VENT STREAMS (TAIL GAS FROM SODIUM CELL AND CHLORINE CELL LIQUEFACTION SYSTEMS). THE TAIL GAS FROM THE SODIUM CELL LIQUEFACTION SYSTEM IS NORMALLY ROUTED TO THE HCL FURNACES. THE CHLORINE SCRUBBING PROCESS CONSISTS OF THREE CAUSTIC SPARGE TANKS AND A CIRCULATING CAUSTIC AFTER SCRUBBER WHICH HAS FOUR LAYERS OF COUNTER DIRECTIONAL SPRAY NOZZLES. THE CAUSTIC SPARGE TANKS ARE BATCH OPERATED. AT THE BEGINNING OF ITS BATCH CYCLE EACH CAUSTIC SPARGE TANK IS CHARGED WITH FRESH CAUSTIC SOLUTION (TYPICALLY 14-18 % BY WEIGHT SODIUM HYDROXIDE). CHLORINE IS VENTED TO A SPARGE TANK UNTIL THE CAUSTIC CONCENTRATION IS DEPLETED TO APPROXIMATELY 1 PERCENT. THE ON LINE SPARGE TANK IS VENTED TO THE CAUSTIC AFTER SCRUBBER FOR REMOVAL OF ADDITIONAL CHLORINE PRIOR TO ATMOSPHERIC VENTING. THE AFTER SCRUBBER HAS BEEN DESIGNED TO HANDLE THE ENTIRE CHLORINE LOADING TO THE SPARGE TANK IF A PROBLEM SHOULD OCCUR. WHEN THE CAUSTIC CONCENTRATION IN A SPARGE TANK REACHES 1 PERCENT, THE TANK IS TAKEN OFF LINE AND THE

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CHLORINE FLOW IS DIVERTED TO ANOTHER SPARGE TANK WHICH CONTAINS FRESH CAUSTIC SOLUTION. A CATALYST IS PRESENT IN THE CONTENTS OF THE OFF LINE SPARGE TANK TO AID IN THE DECOMPOSITION OF SODIUM HYPOCHLORITE TO SODIUM CHLORIDE. UPON COMPLETION OF THE DECOMPOSITION PROCESS, THE CONTENTS OF THE SPARGE TANK WILL BE RECYCLED TO OLINS BRINE SYSTEM.

Emission Source/Control: A0108 - Control
Control Type: SODIUM-ALKALI SCRUBBING

Emission Source/Control: A0101 - Process

Emission Source/Control: A0102 - Process

Emission Source/Control: A0103 - Process

Emission Source/Control: A0104 - Process

Emission Source/Control: A0105 - Process
Design Capacity: 24,000 gallons

Emission Source/Control: A0106 - Process
Design Capacity: 24,000 gallons

Emission Source/Control: A0107 - Process
Design Capacity: 24,000 gallons

Item 35.5(From Mod 0):

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

Emission Unit: A-00001

Process: A03

Process Description:

PROCESS A03 IS A CHLORINE SCRUBBING PROCESS WHICH IS UTILIZED TO SCRUB VARIOUS CHLORINE CONTAINING VENT STREAMS WHICH INCLUDE THE FOLLOWING: 1) TAIL GASES FROM CHLORINE LIQUEFACTION WHEN THE HCL SYNTHESIS UNITS ARE NOT IN OPERATION, 2) SNIFF GAS COLLECTED FROM POINTS THAT ARE POTENTIAL SOURCES OF FUGITIVE CHLORIDE EMISSIONS, 3) SNIFF GAS COLLECTED FROM CHLORINE TANK CARS, 4) SULFURIC ACID STRIPPING AIR WHICH CONTAINS CHLORINE

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(ENTERS BELOW TRAY TOWERS ON CISTERNS).
THE CHLORINE CONTAINING VENT STREAMS WITH
THE EXCEPTION OF #4, ARE SPARGED INTO THE
CISTERNS AND THEN THROUGH THE CASCADE TRAY
TOWER TYPE CAUSTIC SCRUBBER . THE TWO
CISTERNS AND SCRUBBER ARE IN PARALLEL AND
ARE OPERATED ALTERNATELY.

Emission Source/Control: A0305 - Control
Control Type: SODIUM-ALKALI SCRUBBING

Emission Source/Control: A0306 - Control
Control Type: SODIUM-ALKALI SCRUBBING

Emission Source/Control: A0301 - Process

Emission Source/Control: A0302 - Process

Emission Source/Control: A0303 - Process

Emission Source/Control: A0304 - Process

Item 35.6(From Mod 0):

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

Emission Unit: A-00001

Process: A04

Process Description:

PROCESS A04 IS A CHLORINE SCRUBBING
PROCESS WHICH IS UTILIZED TO SCRUB VARIOUS
CHLORINE CONTAINING VENT STREAMS ASSOCIATED
WITH THE SODIUM HYPOCHLORITE PRODUCTION
FACILITY. THESE STREAMS INCLUDE VENTS FROM
(2) SODIUM HYPOCHLORITE PRODUCTION TANKS,
(3) SODIUM HYPOCHLORITE STORAGE TANKS, AND
A REWORK STORAGE TANK. THE CHLORINE
SCRUBBING PROCESS CONSISTS OF A CIRCULATING
PACKED TOWER TYPE SCRUBBER. IF THE
CONTENTS OF A SODIUM HYPOCHLORITE
PRODUCTION BATCH IS OVER CHLORINATED THEN
CHLORINE BREAKTHROUGH WILL OCCUR. THIS
CHLORINE WILL BE VENTED TO THE SCRUBBER.
TWO RAW BLEACH TANKS (WEAK CAUSTIC AND
CISTERN BLEACH) PROVIDE FEED STOCK TO THE
PRODUCTION TANKS. THESE TANKS VENT TO THE
ATMOSPHERE.



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Emission Source/Control: A0407 - Control
Control Type: SODIUM-ALKALI SCRUBBING

Emission Source/Control: A0401 - Process

Emission Source/Control: A0402 - Process

Emission Source/Control: A0403 - Process

Emission Source/Control: A0404 - Process

Emission Source/Control: A0405 - Process

Emission Source/Control: A0406 - Process

Emission Source/Control: A0408 - Process

Emission Source/Control: A0409 - Process

Emission Source/Control: A0410 - Process

Item 35.7(From Mod 0):

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

Emission Unit: A-00001

Process: A06

Process Description:

FREON COMPOUNDS ARE UTILIZED AS REFRIGERANTS IN THE FACILITY'S PROCESSING OPERATIONS. FREON EMISSIONS AT THE FACILITY ARE PRIMARILY FUGITIVE IN NATURE AND OCCUR AS INCIDENTAL LOSSES. THE AMOUNTS OF SUCH EMISSIONS ARE ESTIMATED SOLELY ON THE BASIS OF MATERIAL BALANCES. RECORDS MAINTAINED BY OLIN PERSONNEL IN CONJUNCTION WITH THOSE PROVIDED BY SERVICE CONTRACTORS INDICATE THE AMOUNT OF REFRIGERANT ADDED TO THE VARIOUS SYSTEMS AND THE AMOUNTS RECYCLED OR RECOVERED. THE AMOUNTS OF REFRIGERANTS ADDED TO THE REFRIGERATION SYSTEMS ARE ASSUMED TO BE EQUAL TO THE AMOUNTS LOST TO THE ATMOSPHERE. OLIN WILL COMPLY WITH ALL APPLICABLE REQUIREMENTS UNDER 40 CFR 82 (STRATOSPHERIC OZONE DEPLETING SUBSTANCES). THIS WILL INCLUDE (AS APPLICABLE) PRODUCT LABELING; MAINTENANCE, SERVICE, REPAIRS,

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AND DISPOSAL OF REFRIGERANT CONTAINING
EQUIPMENT, APPLIANCES, AND MOTOR VEHICLES;
LEAK REPAIR REQUIREMENTS; AND RECORDKEEPING
REQUIREMENTS FOR REFRIGERANT PURCHASED.

Emission Source/Control: A0601 - Process

Emission Source/Control: A0602 - Process

Emission Source/Control: A0603 - Process

Item 35.8(From Mod 0):

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

Emission Unit: A-00002

Process: A21

Process Description:

PROCESS A21 INVOLVES THE PREPARATION OF A
PRECOAT SLURRY AND BODY FEED. THIS IS
TYPICALLY PREPARED TWICE PER DAY. IT IS
UTILIZED TO PRECOAT PRESSURE FILTERS AND IS
ALSO USED AS BODY FEED OF CHEMICALLY
TREATED AND CLARIFIED BRINE. THE BAGS OF
FILTER AID ARE MANUALLY PUT THROUGH A
DEBAGGING DEVICE MOUNTED OVER EACH OF THE
TANKS. THE DEBAGGERS ARE EQUIPPED WITH
DUST COLLECTORS.

Emission Source/Control: A2103 - Control
Control Type: FABRIC FILTER

Emission Source/Control: A2106 - Control
Control Type: FABRIC FILTER

Emission Source/Control: A2101 - Process

Emission Source/Control: A2102 - Process

Emission Source/Control: A2104 - Process

Emission Source/Control: A2105 - Process

Item 35.9(From Mod 0):

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

Emission Unit: A-00002

Process: A22

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Process Description:

PROCESS A22 INVOLVES THE DIGESTION OF CALCIUM CARBONATE SLUDGE. THE SLUDGE IS DIGESTED WITH HYDROCHLORIC ACID TO PRODUCE CALCIUM CHLORIDE. THE CARBON DIOXIDE OFF GAS WHICH CONTAINS TRACES OF HYDROGEN CHLORIDE CAN BE VENTED TO THE ATMOSPHERE OR REACTED WITH CAUSTIC TO PRODUCE SODIUM CARBONATE.

Emission Source/Control: A2201 - Process

Item 35.10(From Mod 0):

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

Emission Unit: A-00002

Process: A23

Process Description:

PROCESS A23 INVOLVES THE PRODUCTION OF SODIUM CARBONATE. OFF GAS FROM THE CALCIUM CARBONATE SLUDGE DIGESTER (CONTAINING CARBON DIOXIDE AND A TRACE OF HYDROGEN CHLORIDE) IS DIRECTED TO A PACKED TOWER WHERE THE CARBON DIOXIDE CAN BE REACTED WITH SODIUM HYDROXIDE TO PRODUCE SODIUM CARBONATE. THE HYDROGEN CHLORIDE WILL ALSO REACT WITH THE CAUSTIC. THE PROCESS IS NOW INACTIVE (1/31/2001).

Emission Source/Control: A2301 - Process

Item 35.11(From Mod 0):

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

Emission Unit: A-00002

Process: A24

Process Description:

PROCESS A24 INCLUDES 2 SODIUM BISULFITE STORAGE TANKS (30% SOLUTION) USED AS A REDUCING AGENT IN TREATING RESIDUAL CHLORINE CONTAINED IN DEPLETED BRINE. SODIUM BISULFITE IS TRANSFERRED FROM TANK TRUCK TRAILERS INTO THE LARGER STORAGE TANK (APPROXIMATELY 6,000 GALLONS) WHICH IS EQUIPPED WITH A WATER SCRUBBER (EP 37708) FOR USE DURING TRAILER UNLOADING TO REMOVE SMALL QUANTITIES OF SULFUR DIOXIDE. THE



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SMALLER TANK (EP 36301) IS FILLED FROM
TOTES AND IS VENTED DIRECTLY TO THE
ATMOSPHERE.

Emission Source/Control: A2403 - Control
Control Type: WET SCRUBBER

Emission Source/Control: A2401 - Process
Design Capacity: 6,000 gallons

Emission Source/Control: A2402 - Process
Design Capacity: 375 gallons

Item 35.12(From Mod 0):

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

Emission Unit: A-00002

Process: A25

Process Description:

PROCESS A25 INCLUDES A SODIUM CARBONATE
SLURRY TANK. THE SODIUM CARBONATE IS
DELIVERED BY HOPPER TRUCK. THE SODIUM
CARBONATE IS PNEUMATICALLY UNLOADED TO THE
SLURRY TANK THROUGH A DEVICE WHICH WETS THE
DRY SODIUM CARBONATE BEFORE DISCHARGE. THE
TANK VENT IS PASSED THROUGH A PACKED COLUMN
WET SCRUBBER PRIOR TO ATMOSPHERIC
DISCHARGE.

Emission Source/Control: A2502 - Control
Control Type: WET SCRUBBER

Emission Source/Control: A2503 - Control
Control Type: WET SCRUBBER

Emission Source/Control: A2501 - Process

Item 35.13(From Mod 0):

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

Emission Unit: A-00003

Process: A31

Process Description:

PROCESS A31 CONTAINS PROCESS TANKS
ASSOCIATED WITH AN ION EXCHANGE SYSTEM.
THESE TANKS INCLUDE THE FOLLOWING: 1) HCL
DILUTION TANK - STRONG HYDROCHLORIC ACID IS

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DILUTED TO 8% FOR USE IN REGENERATION OF ION EXCHANGE UNITS. 2) REGENERANT COLLECTION TANK - HYDROCHLORIC ACID (8%) AND WASHES (CAUSTIC, BRINE, AND WATER) GENERATED DURING ION EXCHANGE REGENERATION ARE COLLECTED IN A STORAGE TANK. AT THE END OF THE ION EXCHANGE SYSTEM REGENERATION CYCLE THE TANKS CONTENTS ARE PUMPED TO THE RETURN BRINE TANK. 3) REGENERANT SURGE TANK - TREATMENT CHEMICALS AND WASHES GENERATED DURING ION EXCHANGE REGENERATION ARE DRAINED TO THIS TANK PRIOR TO PUMPING TO THE REGENERANT COLLECTION TANK. THESE TANKS ARE VENTED DIRECTLY TO THE ATMOSPHERE. NO MONITORING IS REQUIRED FOR THIS PROCESS.

Emission Source/Control: A3101 - Process

Emission Source/Control: A3102 - Process

Emission Source/Control: A3103 - Process

Emission Source/Control: A3104 - Process

Emission Source/Control: A3105 - Process
Design Capacity: 14,000 gallons

Item 35.14(From Mod 0):

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

Emission Unit: A-00004

Process: A41

Process Description:

PROCESS A41 CONSISTS OF STORAGE TANKS ASSOCIATED WITH THE HCL SYNTHESIS UNIT. THESE TANKS INCLUDE THE FOLLOWING: 1) ACID CONDENSATE TANK - PRIOR TO MAINTENANCE, HYDROCHLORIC ACID HOLDUP AND WASHINGS FROM HCL SYNTHESIS UNITS ARE DRAINED INTO THIS TANK (NOTE: TANK VENT IS DIRECTED DOWNWARD TO A DRAIN IN CASE OF OVERFLOW.) 2) SCRUBBER SURGE TANK - HCL VENT SCRUBBER IN HCL SYNTHESIS AREA DRAINS INTO THIS TANK FROM WHICH IT IS RECIRCULATED TO THE HCL VENT SCRUBBER. THE LIQUID LEVEL IN THE TANK IS CONSTANT UNDER NORMAL OPERATING

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CONDITIONS. HOWEVER, WHEN ACID IS TRANSFERRED DURING STARTUP OR SHUTDOWN THERE IS INTERMITTENT OUTBREATHING. THESE TANKS ARE VENTED DIRECTLY TO THE ATMOSPHERE. NO MONITORING IS REQUIRED FOR THIS PROCESS.

Emission Source/Control: A4101 - Process

Emission Source/Control: A4102 - Process

Item 35.15(From Mod 0):

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

Emission Unit: A-00004

Process: A42

Process Description:

SULFURIC ACID (98%) IS UTILIZED FOR DRYING OF WET CHLORINE GAS. IT IS DELIVERED TO THE NIAGARA PLANT IN BULK SHIPMENTS (PRIMARILY BY RAIL CARS). DURING ACID TRANSFER INTO A STORAGE TANK, THE DISPLACED AIR IS VENTED TO THE ATMOSPHERE. NO MONITORING IS REQUIRED FOR THIS PROCESS.

Emission Source/Control: A4201 - Process

Item 35.16(From Mod 0):

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

Emission Unit: A-00005

Process: A51

Process Description:

THE STORAGE AND EVAPORATION OF WEAK SODIUM HYDROXIDE (32-35%) INCLUDES VARIOUS EQUIPMENT (STORAGE TANKS AND AFTER CONDENSERS ON STEAM JET EJECTORS) WHICH ARE VENTED TO THE ATMOSPHERE. THE UTILIZATION OF THIS EQUIPMENT RESULTS IN THE EMISSION OF REGULATED AIR POLLUTANTS AT INSIGNIFICANT EMISSION LEVELS AS DEFINED BY 6 NYCRR PART 201-63 (d)(7). THIS IS BASED ON A POTENTIAL TO EMIT CRITERIA CONTAMINANTS (PARTICULATES CONSISTING OF SODIUM HYDROXIDE AND SODIUM CHLORIDE) OF LESS THAN 2.5 TONS PER YEAR. NO MONITORING IS REQUIRED FOR THIS PROCESS.

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Emission Source/Control: A5101 - Process

Emission Source/Control: A5102 - Process

Item 35.17(From Mod 0):

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

Emission Unit: A-00005

Process: A52

Process Description:

SODIUM HYDROXIDE (PROCESS, 20% AND 50%) IS STORED IN VARIOUS STORAGE TANKS WHICH ARE VENTED TO THE ATMOSPHERE. THE UTILIZATION OF THESE STORAGE TANKS RESULTS IN THE EMISSION OF REGULATED AIR POLLUTANTS AT INSIGNIFICANT EMISSION LEVELS AS DEFINED BY 6 NYCRR PART 201-6.3 (d) (7). THIS IS BASED ON A POTENTIAL TO EMIT CRITERIA CONTAMINANTS OF LESS THAN 2.5 TONS/YEAR. NO MONITORING IS REQUIRED FOR THIS PROCESS.

Emission Source/Control: A5201 - Process

Emission Source/Control: A5202 - Process

Emission Source/Control: A5203 - Process

Emission Source/Control: A5204 - Process

Emission Source/Control: A5205 - Process

Emission Source/Control: A5206 - Process

Emission Source/Control: A5207 - Process

Emission Source/Control: A5208 - Process

Emission Source/Control: A5209 - Process

Item 35.18(From Mod 0):

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

Emission Unit: A-00006

Process: A61

Process Description:

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PROCESS A61 IS UTILIZED TO PROCESS HYDROGEN. THE GAS IS MAINTAINED AT A POSITIVE PRESSURE TO PREVENT THE INFLUX OF AIR. THE MAIN HYDROGEN HEADER IS EQUIPPED WITH A PRESSURE RELIEF DEVICE. DURING HIGH PRESSURE UPSETS, THE HYDROGEN IS VENTED TO THE ATMOSPHERE. THE HYDROGEN STREAM IS COMPRESSED AND EITHER SENT TO USERS (SUCH AS HCL SYNTHESIS UNIT) OR VENTED. INTERMITTENT VENTING OCCURS AT THE HYDROGEN FEED COMPRESSOR STATION. THE HYDROGEN FEED LINE TO THE HCL SYNTHESIS UNIT CONTAINS A NUMBER OF DOUBLE BLOCK AND BLEED VALVES. IN ADDITION MAINTENANCE OF ON-LINE DEVICES REQUIRES THAT THE LINE FIRST BE BLED OF HYDROGEN. THE VENTING OF THE HYDROGEN RESULTS IN THE EMISSION OF REGULATED AIR POLLUTANTS AT INSIGNIFICANT EMISSION LEVELS AS DEFINED BY 6 NYCRR PART 201-6.3 (d) (7). THIS IS BASED ON A POTENTIAL TO EMIT CRITERIA CONTAMINANTS OF LESS THAN 2.5 TONS/YR. NO MONITORING IS REQUIRED FOR THIS PROCESS.

Emission Source/Control: A6101 - Process

Emission Source/Control: A6102 - Process

Emission Source/Control: A6103 - Process