

**New York State Department of Environmental Conservation**

**Permit Review Report**

**Permit ID: 9-2911-00112/00233    Renewal Number: 1**



**12/13/2006**

**Facility Identification Data**

Name: OXYCHEM NIAGARA - MAIN PLANT  
Address: 47TH ST & BUFFALO AVE  
NIAGARA FALLS, NY 14302-0344

**Owner/Firm**

Name: OCCIDENTAL CHEMICAL CORP  
Address: 5005 LBJ FREEWAY  
DALLAS, TX 75244, USA  
Owner Classification: Corporation/Partnership

**Permit Contacts**

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

Division of Air Resources:  
Name: LAWRENCE F STILLER  
Address: 270 MICHIGAN AVENUE  
BUFFALO, NY 14203-2999

Air Permitting Contact:  
Name: JAMES J CZAPLA  
Address: OCCIDENTAL CHEMICAL CORPORATION  
47TH ST AND BUFFALO AVE  
NIAGARA FALLS, NY 14302-0344  
Phone:7162787534

**Permit Description**

**Introduction**

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

**Summary Description of Proposed Project**

Application for renewal of Air Title V Facility.

**Attainment Status**

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OXYCHEM NIAGARA - MAIN PLANT is located in the town of NIAGARA FALLS in the county of NIAGARA.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

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

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

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

**Facility Description**

Occidental Chemical Corporation's Niagara Falls Facility consists of two main sections; chlorine/caustic production and the specialty chemicals/chlorine derivatives production.

This permit is a renewal of the existing Title V permit.

This permit is for the chlorine/caustic production portion of the facility. Air emission points are associated with both the production area and the support facilities for the chlorine/caustic portion of the facility as follows:

- A. Chlorine and Caustic - Chemicals produced in this area include but are not limited to: 1. Chlorine; 2. Sodium Hydroxide; 3. Hydrogen; 4. Sodium Hypochlorite; 5. Gypsum.
- B. Support Facilities include: 1. Storage; 2. General Building Ventilation Systems; 3. Product Loading/Packaging; 4. Maintenance Facilities; 5. Cell Reconstruction.

Emission units associated with plant operations are as follows:

- B-00001 Chlor-alkali hydrogen vents
- B-00002 Chlor-alkali process acid storage tanks



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- B-00003 Chlor-alkali process miscellaneous
- C-00001 "C" Area chlor-alkali process scrubbers
- E-00001 HCl acid scrubber vent
- H-00001 "H" Area chlor-alkali process scrubbers
- I-00001 Waste storage buildings ventilation systems
- J-00001 Chlor-alkali process cell construction
- L-00001 Painting booths

The facility operation is permitted primarily under the following regulations:

- 1) 6 NYCRR Part 201-6 requires the facility to obtain a Title V permit
- 2) 6 NYCRR Part 212 requires process sources to install air emission control devices depending on the type of contaminant emitted and the emission rate potential
- 3) 6 NYCRR Part 229 regulates volatile organic liquid storage tanks
- 4) 40 CFR 60 Subpart 61 M National Emission Standard for Asbestos
- 5) 40 CFR 60 Subpart 61 FF National Emission Standard for Benzene Waste Operations

**Permit Structure and Description of Operations**

The Title V permit for OXYCHEM NIAGARA - MAIN PLANT is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process.

A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device.

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

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

OXYCHEM NIAGARA - MAIN PLANT is defined by the following emission unit(s):  
Emission unit B00001 - Chlor-alkali Hydrogen Vents

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Hydrogen is produced by the electrolysis of brine in the No. 1 and No. 2 cell rooms using H4 diaphragm cells. Heat from the hydrogen is used to warm the incoming brine. The hydrogen cooler is a direct contact spray tower (Note: Brine is sprayed directly into the hot hydrogen stream). Under normal operation, the hydrogen is compressed and piped to local manufacturers. The hydrogen that can not be consumed is automatically vented through the hydrogen vent EPBR001.

Additional hydrogen venting can also occur as follows:

- 1) EP-B2405 and EP-B1801 (No.1 and No.2 compressor automatic hydrogen vent): Hydrogen vents through an automatic valve at the discharge of each compressor to maintain pressure and avoid pressure increase that could overload a compressor motor or a pressure decrease that would draw in air;
- 2) EP-B2402 and EP-B2403 (No. 1 Cell Room seal vent stack) : The hydrogen gas stream is maintained at a slight positive pressure to prevent influx of air. If excessive pressure is reached in the hydrogen discharge piping from the cells, the water or brine seal will blow and hydrogen will be vented to the atmosphere;
- 3) EPB2503 (No. 2 cell room seal vent stack): The hydrogen gas stream is maintained at a slight positive pressure to prevent influx of air. If excessive pressure is reached in the hydrogen discharge piping from the cells, the water or brine seal will blow and hydrogen will be vented to the atmosphere;
- 4) EP-B2404 and EP-B2504 (No. 1 and No. 2 Cell Room low pressure hydrogen vents): Low pressure hydrogen vents are utilized to vent hydrogen that cannot be handled by the process (Note: Normally about 5 percent of production). Hydrogen is vented when the hydrogen cooling/compression system is down for maintenance, startup or shutdown.

Notes:

- 1) Hydrogen emissions are trivial activities per 6 NYCRR Part 201-3.3(c)(94).
- 2) A negligible amount of sodium chloride/sodium hydroxide is entrained as particulates with the hydrogen gas.

Emission unit B00001 is associated with the following emission points (EP):

B1801, B2402, B2403, B2404, B2405, B2503, B2504, BR001

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

Process: B01 is located at Building B18 -

Hydrogen is produced in No. 1 and No. 2 diaphragm cell circuits via the electrolysis of brine. The gas is maintained at a slight positive pressure to prevent influx of air. Both circuit hydrogen headers are equipped with water or brine seals for pressure relief. During high pressure upsets, the hydrogen is vented to the atmosphere. The hydrogen is passed through direct contact brine spray coolers. The two hydrogen streams are then compressed and sent to customers or vented to the atmosphere. 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.

Emission unit B00002 - Chlor-Alkali Process Acid Storage Tanks

The chlor-alkali process utilizes both sulfuric acid and aqueous hydrochloric acid. The sulfuric acid, used for chlorine drying, is delivered to the plant in bulk shipments. During filling of the plant storage tanks, displaced air is emitted to the atmosphere. No provision are provided for controlling these intermittent emissions.

Aqueous Hydrochloric Acid (<37%) is utilized to neutralize excess NaOH and Na<sub>2</sub>CO<sub>3</sub> in the cell feed

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brine, and brine sludge acidification to remove Na<sub>2</sub>SO<sub>4</sub> and recover CO<sub>2</sub>. Dilute HCl is used to clean cell parts. This acid is either produced at the Niagara Plant or shipped in from offsite and is transferred into Chlor-Alkali storage tanks as required. Tank vents are routed to the cell liquor sump where a spray of cell liquor (NaOH and NaCl) is utilized to scrub out and neutralize any HCl contained in the gas stream.

Emission unit B00002 is associated with the following emission points (EP):  
B1901, B1902, B2502

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

Process: B02 is located at Building N OF B19 -

Sulfuric acid is shipped to the Niagara Plant in bulk shipments (primarily by tank trucks). During filling of the plant storage tanks, displaced air from the tanks is emitted to the atmosphere. The acid is used primarily for chlorine gas drying in the chlor-alkali process. There is no provision for controlling the intermittent emissions from these tanks.

Process: B03 is located at Building B25 -

Aqueous Hydrochloric Acid (<37%) is utilized to neutralize excess NaOH and Na<sub>2</sub>CO<sub>3</sub> in the cell feed brine, and brine sludge acidification to remove Na<sub>2</sub>SO<sub>4</sub> and recover CO<sub>2</sub>. Dilute HCl is used to clean cell parts. This acid is either produced at the Niagara Plant or shipped in from offsite and is transferred into Chlor-Alkali storage tanks as required. Tank vents are routed to the cell liquor sump where a spray of cell liquor (NaOH and NaCl) is utilized to scrub out and neutralize any HCl contained in the gas stream.

Emission unit B00003 - Chlor-Alkali Process Miscellaneous

The Chlor-Alkali Process produces chlorine, sodium hydroxide and hydrogen by the electrolysis of sodium chloride brine solution in electrolytic cells. It consists of the following elements:

- 1) Brine purification and processing,
- 2) Brine Electrolysis,
- 3) Chlorine gas handling,
- 4) Cell Liquor and caustic handling, and
- 5) Hydrogen handling.

The Chlor-Alkali Process contains a myriad of equipment that is not associated with these specific emission units which have been developed to include specific portions of the process. These specific emission units include:

- 1) B-00001: Chlor-Alkali Hydrogen Vents,
- 2) B-00002: Chlor-Alkali Process Acid Storage Tanks
- 3) C-00001: "C" Area Chlor-Alkali Process Scrubbers
- 4) H-00001: "H" Area Chlor-Alkali Process Scrubbers
- 5) J-00001: Chlor-Alkali Process Cell Construction

This emission unit is intended to contain those emission points which are included in the Chlor-Alkali process but are not associated with the previously noted five specific emission units. Such points include but are not limited to those emission points which are associated with the chlorine liquefaction refrigeration systems and the caustic concentration, purification and storage systems.

Emission unit B00003 is associated with the following emission points (EP):

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B0501, B0502, B0503, B0504, B0505, B0506, B0507, B0508, B1903

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

Process: B04

The chlor-alkali process utilizes OXSOL 1000 (3,4-dichlorobenzotrifluoride) as the heat transfer material in the Cell No. 1 and Cell No. 2 liquefaction plant's cooling systems.

Process: B05

Sodium hydroxide is produced in the H-4 Chlor-Alkali Process diaphragm cell circuits via the electrolysis of brine. The cell liquor resulting from this process contains approximately 12-15% caustic and roughly an equivalent amount of unreacted NaCl. The liquor is evaporated up to 50 percent caustic using a quadruple effect evaporator system. The caustic is then cooled using non contact cooling. During the evaporation and cooling steps, additional salt crystallizes and is removed using settling, centrifuge and filtration. The concentration, purification, and storage of the caustic includes a number of tanks which are vented to the atmosphere. The utilization of these 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 (particulates consisting of Sodium Hydroxide and Sodium Chloride) of less than 2.5 tons per year.

Emission unit C00001 - "C" Area Chlor-Alkali Process Scrubbers

The "C" Area Chlor-Alkali process scrubbers are utilized to scrub out and neutralize chlorine contained in the off gas vent streams from several sources within the No. 1 and No. 2 Chlor-Alkali Process Cell Rooms. These vents include the following:

- 1) Vent gas from No. 1 and No. 2 chlorine liquefaction facilities
- 2) Vent from waste sulfuric acid storage tanks
- 3) Blow down from tank car unloading facilities
- 4) Off gas from bleach reactor and vent from bleach storage tank
- 5) Off gases from purging equipment involved with chlorine handling systems prior to implementing maintenance procedures
- 6) Emergency chlorine header seal blow vents from No. 1 and No. 2 Circuits (B Area)

The emission points contained in this emission unit include the following:

- 1) C0612: Scrubbed gases from the sparge tanks, waste sulfuric acid trailer loading system, and the waste sulfuric acid storage tanks vents which are tied into a spray tower. The spray tower removes any chlorine that may have passed through the sparge tanks. Emissions from the trailer and acid tanks are negligible. This system operates in conjunction with emission point C3101.
- 2) C3101: Scrubbed gases from the sparge tanks, one bleach reactor, and one bleach storage tank are passed through a spray tower. The spray tower removes any chlorine that may have passed through the sparge tanks or is vented from the bleach reactor or storage tank. This system operates in conjunction with emission point C0612.
- 3) C3410: This vent is the exit from a vent scrubber that is scrubbing CO<sub>2</sub>, HCl and Cl<sub>2</sub> gases from the brine head tank vent. Alkaline sodium chloride brine is the scrubbing liquid. Alkaline brine contact removes the CO<sub>2</sub> and a small amount of HCl and Cl<sub>2</sub>. The scrubber liquid is returned to the process.
- 4) C0613 and C3102 Emergency scrubbers for No.1 and No. 2 Chlorine header seal blows.

It should be noted that the tanks associated with emission points C0612 and C3101 are interchangeable

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and the process can operate with one EVS Junior scrubber (caustic scrubbers associated with these emission points) down for maintenance.

Emission unit C00001 is associated with the following emission points (EP):  
C0612, C0613, C3101, C3102, C3410

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

Process: C01

The vent gases from the final step of the chlorine liquefaction processes are sparged into one or more of the six vent absorber tanks. These tanks contain sodium hydroxide and catalyst (note: aids in decomposition of hypochlorite). Off gases from these absorbers are vented to a spray scrubber which also uses an alkaline solution to scrub out any remaining chlorine prior to discharge into the atmosphere. Vents from the chlorine storages, and tank car blow down are also sparged into one of the six vent absorber tanks. In addition vents from the intermittent sources such as the waste sulfuric acid storage tanks, waste sulfuric acid trailer and tank car loading and equipment evacuations prior to maintenance are vented directly to the spray scrubber. Also, the bleach reactor and bleach storage tanks can be vented directly to the spray scrubber. The above sources operate in conjunction with Process Unit C03 Chlorine Scrubbing, No. 2 EVS Jr. (east).

It should be noted that the tanks associated with emission points C0612 and C3101 are interchangeable and the process can operate with one EVS Junior scrubber (caustic scrubbers associated with these emission points) down for maintenance.

Process: C02

The chlor-alkali circuit No. 1 contains a water seal on the main chlorine header. If an emergency occurs with the resultant excessive pressure, the seal is blown and the chlorine is routed to an emergency scrubber. A caustic solution neutralizes the chlorine released to the scrubber during periods of excessive system pressure. In addition, this scrubber, in the future, may occasionally be utilized to remove chlorine from miscellaneous vent streams.

Process: C03

The vent gases from the final step of the chlorine liquefaction processes are sparged into one or more of the six vent absorber tanks. These tanks contain sodium hydroxide and catalyst (note: aids in decomposition of hypochlorite). Off gases from these absorbers are vented to a spray scrubber which also uses an alkaline solution to scrub out any remaining chlorine prior to discharge into the atmosphere. Vents from the chlorine storages and tank car blow down are also sparged into one of the six vent absorber tanks. In addition vents from the bleach reactor and bleach storage tanks are vented directly to the spray scrubber. Also the intermittent sources such as the waste sulfuric acid storage tanks, waste sulfuric acid trailer and tank car loading and equipment evacuations prior to maintenance are vented directly to the spray scrubber. The above sources operate in conjunction with Process Unit C01- Chlorine Scrubbing, No. 1 EVS Jr. (west).

It should be noted that the tanks associated with emission points C0612 and C3101 are interchangeable and the process can operate with one EVS Junior scrubber (caustic scrubbers associated with these emission points) down for maintenance.

Process: C04

The chlor-alkali circuit No. 2 contains a water seal on the main chlorine header. If an emergency occurs with resultant excessive pressure, the seal is blown and the chlorine is routed to an emergency scrubber. A caustic solution neutralizes the chlorine released to the scrubber during periods of excessive system pressure. In addition, the scrubber in the future may occasionally be utilized to remove chlorine from

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miscellaneous vent streams.

Process: C05

Either alkaline brine or acidic brine can be used in the chlorine production process. When it is desirable to use acidic brine, brine is acidified in the brine head tank using hydrochloric acid. During the acidizing process, carbon dioxide and small quantities of both hydrochloric acid and chlorine may be liberated. A spray type scrubber is utilized when adding acid to brine to scrub the vent from the brine head tank using alkaline brine. The scrubber exit brine is returned to the process. On occasion condensate could be used as a substitute for the brine.

Emission unit E00001 - HCl Acid Scrubber Vent

A scrubber (packed tower) is utilized to remove Hydrogen chloride from contaminated vapor generated by the HCl storage and unloading operations. Emission sources include the following:

- 1) Two (33,000 gallon each) Hydrochloric Acid (<37%) storage tanks,
- 2) Four Hydrochloric Acid tank car loading hoods,
- 3) Two Hydrochloric Acid tank trailer loading hoods.

The circulating scrubber liquid is a weak solution of Hydrochloric Acid (up to 32% weight percent HCl).

Emission unit E00001 is associated with the following emission points (EP):

E2001

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

Process: E01 is located at Building E2 -

Product grade hydrochloric acid (<37%) is stored in tanks (2 @ 33,000 gallons each). The loading system can either load tank cars or trailers for shipment as a product when the facility is making hydrochloric acid or can receive tank cars and trailers as a raw material for the chlorine production operation. Vents from storage these storage tanks and transfer system are vented to a packed scrubber which utilizes water as the circulating scrubber liquid.

Emission unit H00001 - "H" Area Chlor-Alkali Process Scrubbers

Cell liquor, produced by the diaphragm cell electrolysis of the brine, typically is a 12-15 percent solution of sodium hydroxide and contains, roughly, an equivalent amount of unreacted salt. During the caustic concentration process, salt crystallizes and is removed by primary centrifuges. The salt is reslurried with water for sulfate removal and the salt is separated by the secondary centrifuges.

Emission unit H00001 is associated with the following emission points (EP):

H2401, H2402, H2403

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

Process: H01 is located at Building H24 -

Several process tanks contained in the caustic evaporation and salt removal process are vented to a water scrubber. These tanks include filter cake, hot surge tank, centrifuge feed, primary salt slurry, and secondary salt slurry tanks. The vents from these tanks are tied together. An exhaust fan pulls air from these vents which is contaminated with trace quantities of sodium chloride and sodium hydroxide through the scrubber system, which utilizes water sprays to remove the entrained contaminants from the gas stream.

Process: H02 is located at Building H24 -

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The "H" Area salt removal centrifuges included two primary and two secondary centrifuges which remove salt from the caustic streams during the caustic concentration process. The exhaust air from the centrifuges is contaminated with small quantities of sodium chloride and sodium hydroxide. The exhaust air from the primary centrifuges is fed to a spray type scrubber to remove any entrained sodium chloride and sodium hydroxide before the air is exhausted to the atmosphere. A similar air exhaust and scrubber system is utilized with the secondary centrifuges.

Emission unit I00001 - Solid Waste Storage Building Ventilation System

Currently this building (T28) is used as a storage area for gypsum, product, raw material and equipment. Fans can be used to ventilate the building.

Emission unit I00001 is associated with the following emission points (EP):  
I0001

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

Process: I04 is located at Building T28 -

One bagged waste storage building (T28) is located on the south side of Buffalo Avenue at the Niagara facility. This building is vented by ventilation fans to the atmosphere. Currently, the building is used to store gypsum, product, raw materials, salt and equipment.

Emission unit J00001 - Chlor-Alkali Process Cell Construction

Diaphragms used in the electrolytic diaphragm cells have a limited life and must be renewed periodically.

The cathode is stripped of the spent wet diaphragm asbestos by washing with high pressure water. The spent slurry is filtered and the wet filter cake is sent off-site for disposal at a permitted industrial landfill. The cathode is then repaired and redeposited with an asbestos diaphragm.

The dry asbestos is unwrapped in a sealed glove box. The asbestos is then sucked into a vacuum mix tank using a vacuum compressor to completely wet the asbestos. A polymer is added to the slurry prior to its vacuum deposition onto a cathode. Any asbestos entrained in the exit line from the tank is either removed in the screen prior to the centrifugal compressor or in the water discharge from the compressor. The reconstituted diaphragm is placed in a natural gas fired oven to both dry and heat the polymer which binds the asbestos coating together

Emission unit J00001 is associated with the following emission points (EP):

J1301, J1304, J1305

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

Process: J01 Each H4 diaphragm cell must be periodically removed from service, disassembled, and rebuilt. One of the primary reasons for doing this is to replace the asbestos diaphragm that is attached to the cell's cathode. The first step in the diaphragm renewal is to wash the old diaphragm off the cathode with high pressure water. The removed asbestos is then dewatered and sent to an industrial landfill. The bare cathode is immersed in a bath of hydrochloric acid for rust removal, if needed. The cathode is then ready for the diaphragm depositing. A vacuum pump is utilized to transfer asbestos to the wet mix tank. The cathode is connected to the vacuum source and immersed in an asbestos slurry. The vacuum draws the slurry through the cathode and deposits the asbestos on the cathode screen. Once the depositing is complete, the cathode is allowed to air dry. Lastly, the cathode is placed in a natural gas fired oven and

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baked. This not only dries and hardens the asbestos diaphragm, but also fuses the polymers that bind the asbestos coating together.

Emission unit L00001 - Painting Booths

Paint booths are utilized for painting small valves, instruments, and electrical motors prior to their installation in the field. These paints are applied using either brushes or paint spray cans. Each paint booth is equipped with paint filters for removal of particulates prior to exhausting ventilation to the atmosphere.

Emission unit L00001 is associated with the following emission points (EP):

L0201

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

Process: L01 is located at Building L2 -

A paint booth is utilized for painting small valves, instruments, and motors prior to their installation in the field. These paints are applied using either a brush or paint spray cans. The paint booth is equipped with paint filters for removal of particulate prior to exhausting ventilation air to the atmosphere.

**Title V/Major Source Status**

OXYCHEM NIAGARA - MAIN PLANT is subject to Title V requirements. This determination is based on the following information:

Oxychem is a major source (greater than 10 tons/yr) of a speciated hazardous air pollutant (HAP), namely, hydrogen chloride, as well as a major source (greater than 25 tons/yr emission)of various other HAP's.

**Program Applicability**

The following chart summarizes the applicability of OXYCHEM NIAGARA - MAIN PLANT with regards to the principal air pollution regulatory programs:

<b>Regulatory Program</b>	<b>Applicability</b>
PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	YES
NESHAP (MACT - 40 CFR Part 63)	NO
NSPS	NO
TITLE IV	NO
TITLE V	YES

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TITLE VI	NO
RACT	YES
SIP	YES

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**NOTES:**

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

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

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

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

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

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

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

**RACT**            Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of

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meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

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

**Compliance Status**

Facility is in compliance with all requirements

**SIC Codes**

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

<b>SIC Code</b>	<b>Description</b>
2812	ALKALIES AND CHLORINE
2819	INDUSTRIAL INORGANIC CHEMICALS

**SCC Codes**

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

<b>SCC Code</b>	<b>Description</b>
3-01-008-01	CHEMICAL MANUFACTURING CHEMICAL MANUFACTURING - CHLORO-ALKALI PRODUCTION Liquefaction (Diaphragm Cell Process)
3-01-008-99	CHEMICAL MANUFACTURING CHEMICAL MANUFACTURING - CHLORO-ALKALI PRODUCTION Other Not Classified
3-01-830-01	CHEMICAL MANUFACTURING CHEMICAL MANUFACTURING - GENERAL PROCESSES



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3-01-011-98 Storage/Transfer
CHEMICAL MANUFACTURING
CHEMICAL MANUFACTURING - HYDROCHLORIC ACID
Handling and Storage (99.9% Removal)
3-01-071-03 CHEMICAL MANUFACTURING
CHEMICAL MANUFACTURING - HYDROGEN
HYDROGEN STORAGE
3-01-870-34 CHEMICAL MANUFACTURING
CHEMICAL MANUFACTURING - INORGANIC CHEMICAL STORAGE (FIXED
ROOF TANKS)
HYDROCHLORIC ACID: WORKING LOSS
3-01-870-09 CHEMICAL MANUFACTURING
CHEMICAL MANUFACTURING - INORGANIC CHEMICAL STORAGE (FIXED
ROOF TANKS)
Sulfuric Acid: Breathing Loss
5-04-106-21 SITE REMEDIATION
SITE REMEDIATION - THERMAL DESORPTION
THERMAL DESORBER: INDIRECT HEAT TRANSFER
4-02-001-01 SURFACE COATING OPERATIONS
SURFACE COATING APPLICATION - GENERAL
Paint: Solvent-Base

Facility Emissions Summary

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

Table with 3 columns: Cas No., Contaminant Name, and PTE. The PTE column is further divided into lbs/yr and Range. Rows include ASBESTOS (HAP), BENZENE (HAP), CARBON MONOXIDE, CHLORINE (HAP), HAP, and HYDROGEN CHLORIDE (HAP).

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007664-39-3	HYDROGEN FLUORIDE (HAP)	> 0 but < 10 tpy
007439-92-1	LEAD (HAP)	> 0 but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN	>= 2.5 tpy but < 10 tpy
0NY075-00-0	PARTICULATES	>= 2.5 tpy but < 10 tpy
000127-18-4	PERCHLOROETHYLENE (HAP)	> 0 but < 10 tpy
0NY075-00-5	PM-10	>= 2.5 tpy but < 10 tpy
001310-73-2	SODIUM HYDROXIDE	> 0 but < 2.5 tpy
007446-09-5	SULFUR DIOXIDE	>= 10 tpy but < 25 tpy
007664-93-9	SULFURIC ACID	> 0 but < 2.5 tpy
007791-25-5	SULFURYL CHLORIDE	>= 2.5 tpy but < 10 tpy
0NY998-00-0	VOC	>= 10 tpy but < 25 tpy

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

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

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

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

- (1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;
- (2) The equipment at the permitted facility causing the emergency was at the time being properly operated;
- (3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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

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

**Item B: Public Access to Recordkeeping for Title V Facilities - 6NYCRR Part 201-1.10(b)**

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

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616 - Public Access to records and Section 114(c) of the Act.

**Item C:            Timely Application for the Renewal of Title V Permits - 6 NYCRR Part 201-6.3(a)(4)**

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

**Item D:            Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)**

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

**Item E:            Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)**

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

**Item F:            Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)**

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

**Item G:            Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR Part 201-6.5(a)(5)**

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

**Item H:            Property Rights - 6 NYCRR Part 201-6.5(a)(6)**

This permit does not convey any property rights of any sort or any

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exclusive privilege.

**Item I:            Severability - 6 NYCRR Part 201-6.5(a)(9)**

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

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

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

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

**Item K:            Reopening for Cause - 6 NYCRR Part 201-6.5(i)**

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

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following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

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

**Item L:**

**Permit Exclusion - ECL 19-0305**

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

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

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

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

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

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

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

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

**Regulatory Analysis**

<b>Location Facility/EU/EP/Process/ES</b>	<b>Regulation</b>	<b>Short Description</b>	<b>Condition</b>
FACILITY	ECL 19-0301	Powers and Duties of the Department with respect	50

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FACILITY	40CFR 61-FF	Benzene Emissions from Benzene waste operations	29
J-00001	40CFR 61-M	Asbestos standards for: asbestos mills, manufacturing operations using asbestos, and other sources	49
FACILITY	40CFR 68	Chemical accident prevention provisions	20
FACILITY	40CFR 68-A.10 (d)	Applicability	30
FACILITY	40CFR 82-B	Protection of Stratospheric Ozone - servicing of motor vehicle air conditioners	31
FACILITY	40CFR 82-F	Protection of Stratospheric Ozone - recycling and emissions reduction	21
FACILITY	40CFR 82-G	Protection of Stratospheric Ozone - significant new alternatives policy program	32
FACILITY	6NYCRR 200.6	Acceptable ambient air quality.	1
FACILITY	6NYCRR 200.7	Maintenance of equipment.	10
FACILITY	6NYCRR 201-1.4	Unavoidable noncompliance and violations	51
FACILITY	6NYCRR 201-1.7	Recycling and Salvage	11
FACILITY	6NYCRR 201-1.8	Prohibition of reintroduction of collected contaminants to the air	22
FACILITY	6NYCRR 201-3.2 (a)	Exempt Activities - Proof of eligibility	12
FACILITY	6NYCRR 201-3.3 (a)	Trivial Activities - proof of eligibility	13
FACILITY	6NYCRR 201-5.3 (b)	Permit Content and Terms of Issuance - permit conditions	52
FACILITY	6NYCRR 201-6	Title V Permits and the Associated Permit Conditions	23, 24, 33, 34
FACILITY	6NYCRR 201-6.5 (a) (4)	General conditions	14
FACILITY	6NYCRR 201-6.5 (a) (7)	General conditions	
Fees 2			
FACILITY	6NYCRR 201-6.5 (a) (8)	General conditions	15
FACILITY	6NYCRR 201-6.5 (c)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	3
FACILITY	6NYCRR 201-6.5 (c) (2)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	4
FACILITY	6NYCRR 201-6.5 (c) (3)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	25

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FACILITY	6NYCRR 201-6.5 (d) (5)	Compliance schedules	16
FACILITY	6NYCRR 201-6.5 (e)	Compliance Certification	6
FACILITY	6NYCRR 201-6.5 (f) (6)	Off Permit Changes	17
FACILITY	6NYCRR 201-6.5 (g)	Permit shield	26
FACILITY	6NYCRR 202-1.1	Required emissions tests.	18
FACILITY	6NYCRR 202-2.1	Emission Statements - Applicability	7
FACILITY	6NYCRR 202-2.5	Emission Statements - record keeping requirements.	8
FACILITY	6NYCRR 211.2	General Prohibitions - air pollution prohibited.	53, 54
FACILITY	6NYCRR 211.3	General Prohibitions - visible emissions limited	19
B-00001	6NYCRR 212.4 (c)	General Process Emission Sources - emissions from new processes and/or modifications	35
H-00001/H2401/H01	6NYCRR 212.4 (c)	General Process Emission Sources - emissions from new processes and/or modifications	46
H-00001/H2402/H02	6NYCRR 212.4 (c)	General Process Emission Sources - emissions from new processes and/or modifications	47
H-00001/H2403/H02	6NYCRR 212.4 (c)	General Process Emission Sources - emissions from new processes and/or modifications	48
FACILITY	6NYCRR 212.6 (a)	General Process Emission Sources - opacity of emissions limited	27
B-00002/-/B02	6NYCRR 212.9 (b)	General Process Emission Sources - tables	36
B-00002/-/B03	6NYCRR 212.9 (b)	General Process Emission Sources - tables	37
B-00003/-/B05	6NYCRR 212.9 (b)	General Process Emission Sources - tables	39
C-00001/C0612/C01	6NYCRR 212.9 (b)	General Process Emission Sources - tables	40
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E-00001	6NYCRR 212.9 (b)	General Process Emission Sources - tables	45
FACILITY	6NYCRR 215	Open Fires	9
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**Applicability Discussion:**

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

ECL 19-301.

This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6NYCRR Part 200-.6

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

6NYCRR Part 200-.7

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

6NYCRR Part 201-1.4

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

6NYCRR Part 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6NYCRR Part 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6NYCRR Part 201-3.2(a)

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

6NYCRR Part 201-3.3(a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All

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required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6NYCRR Part 201-5.3(b)

Lists those contaminants subject to contaminant specific requirements

6NYCRR Part 201-6

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

6NYCRR 201-6.5(a)(4)

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

6NYCRR 201-6.5(a)(7)

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

6NYCRR 201-6.5(a)(8)

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

6NYCRR Part 201-6.5(c)

This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures;

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results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

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

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

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

This regulation specifies that the permit incorporate all reporting requirements associated with an applicable federal rule, the submittal of any required monitoring reports at least every 6 months, and the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

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

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

6NYCRR 201-6.5(d)(5)

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

6NYCRR Part 201-6.5(e)

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

6NYCRR 201-6.5(f)(6)

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

6NYCRR Part 201-6.5(g)

Permit Exclusion Provisions - specifies those actions, such as administrative orders,

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suits, claims for natural resource damages, etc that are not affected by the federally enforceable portion of the permit, unless they are specifically addressed by it.

#### 6NYCRR Part 202-1.1

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

#### 6NYCRR Part 202-2.1

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

#### 6NYCRR Part 202-2.5

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

#### 6NYCRR Part 211-.2

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

#### 6 NYCRR Part 211.3

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

#### 6 NYCRR Part 215

Prohibits open fires at industrial and commercial sites.

#### 40 CFR Part 68.

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

#### 40 CFR Part 82, Subpart F

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act Amendments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers,

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appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

### Facility Specific Requirements

In addition to Title V, OXYCHEM NIAGARA - MAIN PLANT has been determined to be subject to the following regulations:

#### 40CFR 61-A

This regulation, 40 CFR 61 Subpart A, lists the general provisions that a facility subject to a National Emissions Standard for Hazardous Air Pollutant is subject to.

#### 40CFR 61-FF

This Subpart regulates the emission standards for benzene waste operations.

#### 40CFR 61-M

This regulation cites the provisions in the National Emission Standards for Hazardous Air Pollutants for Asbestos.

#### 40CFR 68-A.10 (d)

This describes the elements of the accidental release plan that is required to be included in the application for the Title V permit of this facility. Certain manufacturing processes are subject to these requirements as well as processes subject to OSHA 's safety management standards.

#### 40CFR 82-B

Subpart B of 40 CFR Part 82 implements section 609 of the Clean Air Act Amendments of 1990, as regarding the servicing of motor vehicle air conditioners (MVACs). It also implements section 608 of the Act regarding certain servicing, maintenance, repair and disposal of air conditioners in MVACs and MVAC-like appliances. The regulation applies to any person performing service on a motor vehicle as it involves the refrigerant in the motor vehicle air conditioner.

#### 40CFR 82-G

The purpose of this subpart is to implement section 612 of the Clean Air Act Amendments of 1990 regarding the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds. This program is referred to as the "Significant New Alternatives Policy" (SNAP) program. The objectives of this program are to identify substitutes for ozone-depleting compounds, to evaluate the acceptability of those substitutes, to promote the use of those substitutes believed to present lower overall risks to human health and the environment, relative to the class I and class II compounds being replaced, as well as to other substitutes for the same end-use, and to prohibit the use of those substitutes found, based on the same comparisons, to increase overall risks.

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The regulations in this subpart describe persons and substitutes subject to reporting requirements under the SNAP program and explain preparation and submission of notices and petitions on substitutes. The regulations also establish Agency procedures for reviewing and processing EPA's determinations regarding notices and petitions on substitutes. Finally, the regulations prohibit the use of alternatives which EPA has determined may have adverse effects on human health or the environment where EPA has identified alternatives in particular industrial use sectors that on an overall basis, reduce risk to human health and the environment and are currently or potentially available. EPA will only prohibit substitutes where it has identified other substitutes for a specific application that are acceptable and are currently or potentially available.

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### 6NYCRR 212.4 (c)

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

### 6NYCRR 212.6 (a)

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

### 6NYCRR 212.9 (b)

This section refers to Table 2 which specifies the degree of control required for Gases and Liquid Particulate Emissions (Environmental Rating of A, B, C or D) and Solid Particulate Emissions (Environmental Rating A or D) but excluding Volatile Organic Compound Emissions in the New York City Metropolitan Area.

### 6NYCRR 229.3 (e) (2) (v)

This section requires the tank to be equipped with conservation vents for storage of volatile organic liquids.

## Compliance Certification

Summary of monitoring activities at OXYCHEM NIAGARA - MAIN PLANT:

Location Facility/EU/EP/Process/ES	Type of Monitoring	Cond No.
FACILITY	record keeping/maintenance procedures	28
FACILITY	record keeping/maintenance procedures	29
J-00001	record keeping/maintenance procedures	49
FACILITY	record keeping/maintenance procedures	52
FACILITY	record keeping/maintenance procedures	24
FACILITY	record keeping/maintenance procedures	25
FACILITY	record keeping/maintenance procedures	5
FACILITY	record keeping/maintenance procedures	6
FACILITY	record keeping/maintenance procedures	7
FACILITY	record keeping/maintenance procedures	54
B-00001	record keeping/maintenance procedures	35



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H-00001/H2402/H02	record keeping/maintenance procedures	47
H-00001/H2403/H02	record keeping/maintenance procedures	48
FACILITY	monitoring of process or control device	27
	parameters as surrogate	
B-00002/-/B02	record keeping/maintenance procedures	36
B-00002/-/B03	monitoring of process or control device	37
	parameters as surrogate	
B-00003/-/B05	record keeping/maintenance procedures	39
C-00001/C0612/C01	monitoring of process or control device	40
	parameters as surrogate	
C-00001/C0613/C02	monitoring of process or control device	41
	parameters as surrogate	
C-00001/C3101/C03	monitoring of process or control device	42
	parameters as surrogate	
C-00001/C3102/C04	monitoring of process or control device	43
	parameters as surrogate	
C-00001/C3410/C05	monitoring of process or control device	44
	parameters as surrogate	
E-00001	monitoring of process or control device	45
	parameters as surrogate	
B-00003/-/B04	record keeping/maintenance procedures	38

**Basis for Monitoring**

Recordkeeping, monitoring of scrubber concentrations and flow rates and visual opacity readings are the basis for monitoring processes in the chlorine/caustic plant.