Facility DEC ID: 5414000189

PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 5-4140-00189/00004
Effective Date: Expiration Date:

Permit Issued To:GLOBALFOUNDRIES U.S. INC.
2600 GREAT AMERICA WAY
SANTA CLARA, CA 95054

Contact: Taryn Dausman
400 Stone Break Road Extension
Malta, NY 12020

Facility: FAB 8
LUTHER FOREST TECHNOLOGY CAMPUS|400 Stone Break Rd Ext
Malta, NY 12020

Description:
A semiconductor wafer clean room facility with associated manufacturing space and support facilities (such as boiler systems and continuous power supply generators).

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: BETH A MAGEE
NYSDEC - WARRENSBURG SUBOFFICE
232 GOLF COURSE RD
WARRENSBURG, NY 12885-1172

Authorized Signature: _____ Date: ___ / ___ / _____

Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

PAGE LOCATION OF CONDITIONS

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 3: Applications for permit renewals, modifications and transfers
Applicable State Requirement: 6 NYCRR 621.11

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.

Item3.2:
The permittee must submit a renewal application at least 180 days before the expiration of permits for Title V and State Facility Permits.

Item 3.3
Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

Facility DEC ID: 5414000189

Condition 4: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:
The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

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

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

Condition 5: Submission of application for permit modification or renewal-REGION 5 SUBOFFICE - WARRENSBURG
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:
Submission of applications for permit modification or renewal are to be submitted to:
NYSDEC Regional Permit Administrator
Region 5 Sub-office
Division of Environmental Permits
232 Golf Course Road
Warrensburg, NY 12885-1172
(518) 623-1281

Permit ID: 5-4140-00189/00004 **Facility DEC ID: 5414000189**

Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:GLOBALFOUNDRIES U.S. INC.
2600 GREAT AMERICA WAY
SANTA CLARA, CA 95054

Facility: FAB 8
LUTHER FOREST TECHNOLOGY CAMPUS|400 Stone Break Rd Ext
Malta, NY 12020

Authorized Activity By Standard Industrial Classification Code:
3674 - SEMICONDUCTORS & RELATED DEVICES

Permit Effective Date: Permit Expiration Date:

PAGE LOCATION OF CONDITIONS

PAGE

EU=F-00004,Proc=407

37 39 6 NYCRR 212-1.7 (b): Compliance Demonstration
38 40 6 NYCRR 212-1.7 (b): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

41 41 ECL 19-0301: Contaminant List
42 42 6 NYCRR 201-1.4: Malfunctions and Start-up/Shutdown Activities
43 43 6 NYCRR Subpart 201-5: Emission Unit Definition
44 44 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
45 45 6 NYCRR 201-5.3 (c): Compliance Demonstration
45 46 6 NYCRR 201-5.4 (e): Compliance Demonstration
47 47 6 NYCRR 201-6.5 (a): CLCPA Applicability
47 48 6 NYCRR 211.1: Air pollution prohibited

Emission Unit Level

47 49 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
54 50 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

NOTE: * preceding the condition number indicates capping.

FEDERALLY ENFORCEABLE CONDITIONS

Renewal 1/DRAFT ****** 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 - 6 NYCRR 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 - 6 NYCRR 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 - 6 NYCRR 200.7

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

required to operate such device effectively.

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

(a) Except as otherwise provided by this Part, construction or operation of a new, modified or existing air contamination source without a registration or permit issued pursuant to this Part is prohibited.

(b) If an existing facility or emission source was subject to the permitting requirements of this Part at the time of construction or modification, and the owner or operator failed to apply for a permit or registration as described in this Part, the owner or operator must apply for a permit or registration in accordance with the provisions of this Part. The facility or emission source is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing emission sources.

Item E: Recycling and Salvage - 6 NYCRR 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 F: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 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 G: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 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 H: Proof of Eligibility for Sources Defined as Trivial

Activities - 6 NYCRR 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 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: **Required Emission Tests - 6 NYCRR 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 6 NYCRR Subpart 202-1.

Item J: **Open Fires Prohibitions - 6 NYCRR 215.2**
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item K: **Permit Exclusion - ECL 19-0305**
The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item L: **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: Accidental release provisions.
Effective for entire length of Permit

Applicable Federal Requirement:40 CFR Part 68

Item 1.1:
If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;

b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:

1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,

2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center
C/O CSC
8400 Corporate Dr
Carrollton, Md. 20785

Condition 2: Facility Permissible Emissions
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-7.1

Item 2.1:
The sum of emissions from the emission units specified in this permit shall not equal or exceed the following
Potential To Emit (PTE) rate for each regulated contaminant:

CAS No: 000630-08-0 PTE: 196,000 pounds per year
Name: CARBON MONOXIDE

CAS No: 0NY100-00-0 PTE: 48,000 pounds per year
Name: TOTAL HAP

CAS No: 0NY210-00-0 PTE: 180,000 pounds per year
Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0 PTE: 90,000 pounds per year
Name: VOC

Condition 3: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-7.1

Item 3.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR 201-6.1 (a)
6 NYCRR Subpart 227-2

Item 3.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 3.3:
The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 3.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 3.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 3.6:
The Compliance Demonstration activity will be performed for the Facility.

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

Item 3.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The facility is capping out of Title V and NOX RACT requirements by limiting nitrogen oxides emissions, facility wide, to 90 tons per year on a 12 month rolling total basis. The facility will maintain monthly fuel consumption records for natural gas and #2 oil and monthly hours of operations for the generators. Emissions shall be calculated using the emission specific emission factors for manufacturing processes, natural gas fired combustion devices, oil fired boilers and diesel fired emergency generators.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 90 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 4: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-7.1

Item 4.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR 201-6.1

Item 4.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 4.3:
The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request.

Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 4.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 4.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 4.6:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 4.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The facility is capping out of Title V and requirements by limiting carbon monoxide emissions, facility wide, to 98 tons per year on a 12 month rolling total basis. The facility will maintain monthly fuel consumption records for natural gas and #2 oil and monthly hours of operations for the generators. Emissions shall be calculated using the emission specific emission factors for manufacturing processes, natural gas fired combustion devices, oil fired boilers and diesel fired emergency generators.

Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 98 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 5: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-7.1

Item 5.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR 201-6.1 (a)

Item 5.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 5.3:
The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 5.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 5.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 5.6:
The Compliance Demonstration activity will be performed for the Facility.

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

Item 5.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The facility is capping out of Title V requirements by limiting emissions of volatile organic compounds (VOCs) to less than 45 tons per year, facility wide, on a 12 month rolling total basis. Emissions will be calculated based on material usage and control efficiencies demonstrated during stack testing.

Parameter Monitored: VOC's
Upper Permit Limit: 45 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 6: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 201-7.1

Item 6.1:
Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6 NYCRR 201-6.1 (a)
40 CFR Part 63, Subpart BBBBB

Item 6.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 6.3:
The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 6.4:
On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 6.5:
The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 6.6:
The Compliance Demonstration activity will be performed for the Facility.

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

Item 6.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The facility is capping out of Title V and the semiconductor NESHAP requirements by limiting emissions of total hazardous air pollutants (HAPs) to less than 24 tons per year and limiting individual HAPs to less than 10 tons per year, facility wide, on a 12 month rolling total basis.
HAP emissions will be based on emissions testing for Chlorine, Hydrogen Chloride and Hydrogen Fluoride and emission factors determined based on the above testing for other HAPs.

Parameter Monitored: TOTAL HAP
Upper Permit Limit: 24 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 7: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 7.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10

Emission Unit: F-00001
Process: F11

Emission Unit: F-00004
Process: 407

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

Item 7.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:
Hydrogen chloride emissions from acid scrubbers shall not exceed 0.50 parts per million. Stack testing will be performed at one or more of the selected emission points. Testing frequency will be once every 5 years and additionally at the Department's discretion.

Parameter Monitored: HYDROGEN CHLORIDE
Upper Permit Limit: 0.50 parts per million (by volume)
Reference Test Method: Method 26A
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 8: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 8.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10

Emission Unit: F-00001
Process: F11

Emission Unit: F-00004
Process: 407

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

Item 8.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
Control efficiency of thermal oxidizers must meet or exceed 90% for individul volatile organic compounds (VOCs). An overall control efficiency of 98% using Method 25A or an emission limit of 10 parts per million by volume measured as methane (whichever is less stringent) may be used as a surrogate to demonstrate compliance. Stack testing will be performed at one or more of the selected emission points. Testing frequency will be once every 5 years and additionally at the Department's discretion.

Parameter Monitored: VOC's
Upper Permit Limit: 98 percent reduction by weight
Reference Test Method: Method 25A
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 9: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 9.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10

Emission Unit: F-00001
Process: F11

Emission Unit: F-00004
Process: 407

Regulated Contaminant(s):
CAS No: 007664-39-3 HYDROGEN FLUORIDE

Item 9.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
Hydrogen fluoride emissions from acid scrubbers shall not exceed 0.92 parts per million. Stack testing will be performed at one or more of the selected emission points. Testing frequency will be once every 5 years and additionally at the Department's discretion.

Parameter Monitored: HYDROGEN FLUORIDE
Upper Permit Limit: 0.92 parts per million (by volume)
Reference Test Method: Method 26A
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 10: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 10.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10

Emission Unit: F-00001
Process: F11

Emission Unit: F-00004
Process: 407

Regulated Contaminant(s):
CAS No: 007782-50-5 CHLORINE

Item 10.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
Chlorine emissions from acid scrubbers shall not exceed 0.26 parts per million. Stack testing will be performed at one or more of the selected emission points. Testing frequency will be once every 5 years and additionally at the Department's discretion.

Parameter Monitored: CHLORINE
Upper Permit Limit: 0.26 parts per million (by volume)
Reference Test Method: Method 26A
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 11: Visible Emissions Limited
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 211.2

Item 11.1:
Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Condition 12: Compliance Demonstration

Effective for entire length of Permit

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

Item 12.1:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 12.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process source, except only the emission of uncombined water. Visible emissions monitoring will be conducted at the request of the Department to demonstrate compliance with this limit.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 13: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 13.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00004
Process: 407 Emission Source: A127A

Emission Unit: F-00004
Process: 407 Emission Source: AS124

Emission Unit: F-00004
Process: 407 Emission Source: AS125

Emission Unit: F-00004
Process: 407 Emission Source: AS126

Emission Unit: F-00004
Process: 407 Emission Source: AS127

Item 13.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber water recirculation flow rate for acid scrubbers in TDC Acid Scrubber Bank 1 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber water recirculation flow rate must be maintained at or above the minimum level established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value.
The current limit is a minimum of 350 gallons per minute (gpm) for these scrubbers.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 350 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 14: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 14.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10 Emission Source: CS478

Emission Unit: F-00001
Process: F10 Emission Source: CS479

Emission Unit: F-00001
Process: F10 Emission Source: CS480

Item 14.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber pH for caustic scrubbers in Fab 8.1 Scrubber Bank 3 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring. Scrubber pH must be maintained at or below the maximum value established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value. The current limit is a maximum pH of 3.0 for these scrubbers.

Parameter Monitored: ACIDITY/ALKALINITY
Upper Permit Limit: 3 pH (STANDARD) units
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 15: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 15.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10 Emission Source: CS478

Emission Unit: F-00001
Process: F10 Emission Source: CS479

Emission Unit: F-00001
Process: F10 Emission Source: CS480

Item 15.2:
Compliance Demonstration shall include the following monitoring:

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

Scrubber water recirculation flow rate for caustic scrubbers in Fab 8.1 Caustic Scrubber Bank 3 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber water recirculation flow rate must be maintained at or above the minimum level established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value.
The current limit is a minimum of 235 gallons per minute (gpm) for these scrubbers.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 235 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 16: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 16.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00004
Process: 407 Emission Source: A127A

Emission Unit: F-00004
Process: 407 Emission Source: AS124

Emission Unit: F-00004
Process: 407 Emission Source: AS125

Emission Unit: F-00004
Process: 407 Emission Source: AS126

Emission Unit: F-00004
Process: 407 Emission Source: AS127

Item 16.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL

DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber pH for acid scrubbers in TDC Acid Scrubber Bank 1 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber pH must be maintained at or above the minimum value established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value. The current limit is a minimum pH of 9.5 for these scrubbers.

Parameter Monitored: ACIDITY/ALKALINITY
Lower Permit Limit: 9.5 pH (STANDARD) units
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 17: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 17.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F11 Emission Source: CS471

Emission Unit: F-00001
Process: F11 Emission Source: CS472

Emission Unit: F-00001
Process: F11 Emission Source: CS473

Item 17.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber pH for caustic scrubbers in Extension Caustic Scrubber Bank 2 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and

routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber pH must be maintained at or below the maximum value established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value. The current limit is a maximum pH of 3.3 for these scrubbers.

Parameter Monitored: ACIDITY/ALKALINITY
Upper Permit Limit: 3.3 pH (STANDARD) units
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 18: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 18.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10 Emission Source: CS003

Emission Unit: F-00001
Process: F10 Emission Source: CS004

Emission Unit: F-00001
Process: F10 Emission Source: CS005

Item 18.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber water recirculation flow rate for caustic scrubbers in Fab 8.1 Caustic Scrubber Bank 1 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of

continuous monitoring.
Scrubber water recirculation flow rate must be maintained at or above the minimum level established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value.
The current limit is a minimum of 520 gallons per minute (gpm) for these scrubbers.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 520 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 19: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 19.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10 Emission Source: CS468

Emission Unit: F-00001
Process: F10 Emission Source: CS469

Emission Unit: F-00001
Process: F10 Emission Source: CS470

Item 19.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber water recirculation flow rate for caustic scrubbers in Fab 8.1 Caustic Scrubber Bank 2 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities.
Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber water recirculation flow rate must be maintained at or above the minimum level established during the most recent stack test. If there has been no stack test, the

parameter will be the manufacturer's recommended value. The current limit is a minimum of 405 gallons per minute (gpm) for these scrubbers.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 405 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 20: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 20.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10 Emission Source: CS468

Emission Unit: F-00001
Process: F10 Emission Source: CS469

Emission Unit: F-00001
Process: F10 Emission Source: CS470

Item 20.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber pH for caustic scrubbers in Fab 8.1 Scrubber Bank 2 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber pH must be maintained at or below the maximum value established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value. The current limit is a maximum pH of 3.0 for these scrubbers.

Parameter Monitored: ACIDITY/ALKALINITY

Upper Permit Limit: 3.0 pH (STANDARD) units
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 21: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 21.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F10 Emission Source: CS003

Emission Unit: F-00001
Process: F10 Emission Source: CS004

Emission Unit: F-00001
Process: F10 Emission Source: CS005

Item 21.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber pH for caustic scrubbers in Fab 8.1 Caustic Scrubber Bank 1 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber pH must be maintained at or below the maximum value established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value. The current limit is a maximum pH of 4.5 for these scrubbers.

Parameter Monitored: ACIDITY/ALKALINITY
Upper Permit Limit: 4.5 pH (STANDARD) units
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 22: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 22.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F11 Emission Source: CS028

Emission Unit: F-00001
Process: F11 Emission Source: CS029

Emission Unit: F-00001
Process: F11 Emission Source: CS030

Item 22.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber water recirculation flow rate for caustic scrubbers in the Extension Caustic Scrubber Bank 1 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities.
Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber water recirculation flow rate must be maintained at or above the minimum level established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value.
The current limit is a minimum of 650 gallons per minute (gpm) for these scrubbers.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 650 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 23: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 23.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F11 Emission Source: CS471

Emission Unit: F-00001
Process: F11 Emission Source: CS472

Emission Unit: F-00001
Process: F11 Emission Source: CS473

Item 23.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber water recirculation flow rate for caustic scrubbers in the Extension Caustic Scrubber Bank 2 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities.
Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber water recirculation flow rate must be maintained at or above the minimum level established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value.
The current limit is a minimum of 650 gallons per minute (gpm) for these scrubbers.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 650 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 24: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 24.1:
The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: F-00001
Process: F11 Emission Source: CS028

Emission Unit: F-00001
Process: F11 Emission Source: CS029

Emission Unit: F-00001
Process: F11 Emission Source: CS030

Item 24.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber pH for caustic scrubbers in Extension Caustic Scrubber Bank 1 will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber pH must be maintained at or below the maximum value established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value. The current limit is a maximum pH of 3.3 for these scrubbers.

Parameter Monitored: ACIDITY/ALKALINITY
Upper Permit Limit: 3.3 pH (STANDARD) units
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 25: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-2.3 (b)

Item 25.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 25.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL

DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

Processes controlled by oxidizers may operate without the oxidizer in operation (or operating below baseline temperature) for a maximum of 2% of the time. The compliance demonstration for this condition shall be based on the Oxidizer Operating Ratio, which is calculated by summing the deficient oxidizer hours and dividing by the required oxidizer hours. Deficient oxidizer hours = the number of hours during the time period when a required oxidizer is operating below the required combustion temperature. Required operating hours = the number of hours of production multiplied by the number of required oxidizers. One oxidizer is required when solvent exhaust flow is less than the rated capacity (in CFM) of one oxidizer; two oxidizers are required when solvent exhaust flow is greater than the rated capacity (in CFM) of one oxidizer. This provision shall not limit any rights under 6NYCRR 201-1.4 and 1.5.

Baseline temperature is established by the most recent emissions test (or manufacturers recommendation if a stack test has not yet been conducted).

Parameter Monitored: OPERATING HOURS
Upper Permit Limit: 2 percent
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 26: Compliance Demonstration
Effective for entire length of Permit

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

Item 26.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: F-00001

Emission Unit: F-00004

Regulated Contaminant(s):
CAS No: 0NY075-00-0 PARTICULATES

Item 26.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

Emissions of solid particulates are limited to less than 0.050 grains of particulates per cubic foot of exhaust

gas, expressed at standard conditions on a dry gas basis. Compliance testing will be conducted at the discretion of the department.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.05 grains per dscf
Reference Test Method: Method 5
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 27: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 225-1.2 (d)

Item 27.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 27.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:

Owners or operators of emission sources that fire distillate oil are limited to a 0.0015 percent sulfur content by weight of the fuel. Compliance with the sulfur-in-fuel limitation is based on fuel vendor receipts. All fuel vendor receipts must be maintained on site or at a Department approved alternative location for a minimum of five years.

Note - Process sources and incinerators must comply with the above requirements on or after July 1, 2023.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 28: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60.48c(a), NSPS Subpart Dc

Item 28.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 28.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The owner or operator of each affected facility shall submit notification of the date of construction and actual startup, as provided by 40 CFR 60.7. This notification shall include the design heat input capacity of the affected unit and identification of the fuels to be combusted at the facility.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 29: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63, Subpart JJJJJJ

Item 29.1:
Facilities that are area sources of HAP with industrial, commercial, or institutional boilers must comply with applicable portions of 40 CFR 63 JJJJJJ.

Condition 30: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 30.1:
Facilities that have reciprocating internal combustion engines must comply with applicable portions of 40 CFR 63 Subpart ZZZZ.

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

Condition 31: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 227-1.4 (a)

Item 31.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: B-00001

Item 31.2:
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 period per hour of not more than 27 percent opacity. Visible emissions monitoring will be conducted at the request of the Department to demonstrate compliance with this limit.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 32: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60, NSPS Subpart Dc

Item 32.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: B-00001

Item 32.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Facilities with industrial, commercial, or institutional boilers must comply with applicable portions of 40 CFR 60 subpart Dc.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 33: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 33.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: F-00001
Process: F10

Item 33.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The oxidizer combustion chamber temperature for thermal oxidizers will be monitored and recorded on a continuous basis whenever the associated process equipment is operating, except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous temperature monitoring.
Chamber temperature must be maintained at or above the minimum temperature established during the most recent stack test. If there has been no stack test, the minimum temperature will be the manufacturers recommended temperature. The current limit is a minimum temperature of 1295 degrees F for oxidizers in Processes F10.

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 1295 degrees Fahrenheit
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 34: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 34.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: F-00001
Process: F10

Item 34.2:
Compliance Demonstration shall include the following monitoring:

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

Scrubber water recirculation flow rate for acid scrubbers will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber water recirculation flow rate must be maintained at or above the minimum level established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value.
The current limit is a minimum of 720 gallons per minute (gpm) for scrubbers in Process F10.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 720 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 35: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 35.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: F-00001
Process: F10

Item 35.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber pH for acid scrubbers will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber pH must be maintained at or above the minimum value established during the most recent stack test. If

there has been no stack test, the parameter will be the manufacturer's recommended value. The current limit is a minimum pH of 7 for scrubbers in Process F10.

Parameter Monitored: ACIDITY/ALKALINITY
Lower Permit Limit: 7 pH (STANDARD) units
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 36: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 36.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: F-00001
Process: F11

Item 36.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber pH for acid scrubbers will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber pH must be maintained at or above the minimum value established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value. The current limit is a minimum pH of 10 for scrubbers in Process F11.

Parameter Monitored: ACIDITY/ALKALINITY
Lower Permit Limit: 10 pH (STANDARD) units
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 37: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 37.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: F-00001
Process: F11

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

Item 37.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The oxidizer combustion chamber temperature for thermal oxidizers will be monitored and recorded on a continuous basis whenever the associated process equipment is operating, except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous temperature monitoring.
Chamber temperature must be maintained at or above the minimum temperature established during the most recent stack test. If there has been no stack test, the minimum temperature will be the manufacturers recommended temperature. The current limit is a minimum temperature of 1295 degrees F for oxidizers in Processes F11.

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 1295 degrees Fahrenheit
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 38: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 38.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: F-00001
Process: F11

Item 38.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber water recirculation flow rate for acid scrubbers will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber water recirculation flow rate must be maintained at or above the minimum level established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value.
The current limit is a minimum of 650 gpm for scrubbers in Process F11.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 650 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 39: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 39.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: F-00004
Process: 407

Item 39.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber water recirculation flow rate for caustic scrubbers will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine

maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber water recirculation flow rate must be maintained at or above the minimum level established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value.
The current limit is a minimum of 100 gpm for scrubbers in Process 407.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 100 gallons per minute
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 40: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 40.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: F-00004
Process: 407

Item 40.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Scrubber pH for caustic scrubbers will be monitored and recorded on a continuous basis whenever the associated process equipment is operating except during quality assurance and routine maintenance activities. Records of monitoring data and support information must be retained for a period of at least 5 years from the date of monitoring. Support information includes all calibration and maintenance records and all recordings of continuous monitoring.
Scrubber pH must be maintained at or below the maximum value established during the most recent stack test. If there has been no stack test, the parameter will be the manufacturer's recommended value. The current limit is a maximum pH of 4.0 for scrubbers in Process 407.

Parameter Monitored: ACIDITY/ALKALINITY
Upper Permit Limit: 4 pH (STANDARD) units
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 3-hour average
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: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined in 6 NYCRR subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

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

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

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

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

Item B: **Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)**
Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance

with 6 NYCRR Part 616 - Public Access to Records. Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

Item C: **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 41: Contaminant List
Effective for entire length of Permit

Applicable State Requirement:ECL 19-0301

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

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

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

CAS No: 007664-39-3
Name: HYDROGEN FLUORIDE

CAS No: 007782-50-5
Name: CHLORINE

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

CAS No: 0NY100-00-0
Name: TOTAL HAP

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

CAS No: 0NY998-00-0
Name: VOC

Condition 42: Malfunctions and Start-up/Shutdown Activities
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-1.4

Item 42.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment maintenance and start-up/shutdown activities when they are expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when required by a permit condition or upon request by the department. Such reports shall state whether an exceedance occurred and if it was unavoidable, include the time, frequency and duration of the exceedance, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous monitoring and quarterly reporting requirements need not submit additional reports of exceedances to the department.

(c) In the event that air contaminant emissions exceed any applicable emission standard due to a malfunction, the facility owner or operator shall notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. In addition, the facility owner or operator shall compile and maintain a record of all malfunctions. Such records shall be maintained at the facility for a period of at least five years and must be made available to the department upon request. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, the air contaminants emitted, and the resulting emission rates and/or opacity.

(d) The department may also require the facility owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or

malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 43: Emission Unit Definition
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 43.1:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 0-THERS
Emission Unit Description:
This unit consists of waste storage and treatment tanks installed in the CUB building, select chemical storage tanks in excess of 10,000 gallons capacity and wastewater collection tanks within the FAB and TDC buildings. These operations are anticipated to exhaust at only trace levels. Operations in the CUB building include acid scrubbers to control emissions.

Building(s): CUB
FAB

Item 43.2:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: B-00001
Emission Unit Description:
Fifteen boilers, sized 29 mmBtu/hr to 59 mmBtu/hr, provide hot water for process and comfort heat. Four are dual fueled (Number 2 oil or natural gas) and the remainder fire natural gas only. There are also combustion units which are exempt from permitting - smaller boilers and diesel fired emergency generators.

Building(s): BGY2
CUB
MCUB

Item 43.3:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: C-00001
Emission Unit Description:
This emission unit consists of twenty-two (22) Continuous Power Syatem generator units located in the electrical service buildings (ESB and ESB2). At ESB, each unit is a 2280 KW unit by MTU Model 16V 4000 G43. At ESB2, each

unit is a 2280 KW unit by MTU Model 16V 4000 G83. All engines are certified Tier 2. These engines are used for emergency power and for demand response.

Building(s): ESB
ESB2

Item 43.4:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: F-00001
Emission Unit Description:
This unit consists of the various fabrication operations at the facility which utilize products containing acids, caustics, volatile organic compounds (VOCs) and hazardous air pollutants. Acid and caustic emissions are controlled by scrubbers and VOC emissions are controlled by thermal oxidizers. Operations associated with this emission unit are located in the FAB Building and HPM Dispense Building. The ammonium hydroxide (NH4OH) generation system will be located inside the HPM Dispense Building, consisting of an NH3 purification unit, two NH4OH generation units, and two 12,000-liter generation tanks. The 18,000-gallon NH3 tank, two vaporizers, and two chillers will be located outside of the HPM Dispense Building. The indoor pre-existing and permitted NH4OH storage tanks, TANKA and TANKB, will receive the NH4OH generated on-site.

Building(s): CUB
FAB
HPM

Item 43.5:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: F-00004
Emission Unit Description:
Various fabrication operations at the facility which utilize products containing acids, caustics, VOCs and HAPs. Acid and caustic emissions are controlled by scrubbers and VOCs are controlled by oxidizers. Operations associated with this emission unit are located in the TDC building.

Building(s): MCUB
TDC

Condition 44: Renewal deadlines for state facility permits
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-5.2 (c)

Item 44.1:
The owner or operator of a facility having an issued state facility 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.

Condition 45: Compliance Demonstration
Effective for entire length of Permit

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

Item 45.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 45.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation
Region 5
232 Golf Course Rd.
Warrensburg, NY 12885

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 46: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-5.4 (e)

Item 46.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 46.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The objective of this condition is to maximize operational flexibility at the facility by building into the State Facility Permit the capability to make certain changes using a protocol. Changes made under an approved protocol are not subject to the permit modification provisions under Part 201-5.4. The protocol described below applies only to changes which do not violate

applicable requirements or contravene federally enforceable monitoring, recordkeeping, reporting or compliance certification permit terms and conditions. Further, the changes are not modifications under any provision of Title 1 of the Act and do not exceed emissions allowable under the permit.

The owner or operator will evaluate the impact of proposed changes in the aggregate use and emissions of a contaminant. The impact of operational changes on fenceline concentrations will be evaluated using approved air dispersion model emission factors. The expected concentrations at the fenceline will be compared against Air Guideline Concentration (AGC) values as established in DAR-1:

a) Case 1: projected contaminant emission impact is less than 10% of the AGC. The owner or operator may proceed with the change.
b) Case 2: projected contaminant emission impact is greater than 10% but less than 30% of the AGC. The owner or operator will include a summary of these changes in the annual compliance report.
c) Case 3: Projected comtaminant emission impact is greater than 30% and less than 100% of the AGC. The owner or operator shall submit notification to the Department at least 7 days prior to the anticipated start date.The owner or operator may evaluate and submit to the Department the impact of the proposed change with an approved dispersion model using site specific factors.

In cases where an AGC or interim AGC has not been developed for a specific contaminant, the guidelines detailed in DAR-1 will be followed.

Alterations and maintenance of equipment:
1) Exhaust system changes:
a) maintenance or replacement with in-kind control equipment components may proceed by the owner or operator.
b)Installation or alteration of any permitted air cleaning installations, device or control equipment require the owner or operator to submit written notification to the Department at least 30 days in advance.

2) Emission source changes:
a) The owner or operator shall maintain a current emission source list. An update to the emission source list shall be included with
the annual capping certification.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 47: CLCPA Applicability
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-6.5 (a)

Item 47.1:
Pursuant to The New York State Climate Leadership and Community Protection Act (CLCPA) and Article 75 of the Environmental Conservation Law, emission sources shall comply with regulations to be promulgated by the Department to ensure that by 2030 statewide greenhouse gas emissions are reduced by 40% of 1990 levels, and by 2050 statewide greenhouse gas emissions are reduced by 85% of 1990 levels.

Condition 48: Air pollution prohibited
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.1

Item 48.1:
No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

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

Condition 49: Emission Point Definition By Emission Unit
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 49.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-THERS

Emission Point: 00060
Height (ft.): 58 Diameter (in.): 30
NYTMN (km.): 4758.379 NYTME (km.): 601.501 Building: CUB

Emission Point: 00061
Height (ft.): 58 Diameter (in.): 30
NYTMN (km.): 4758.365 NYTME (km.): 601.544 Building: CUB

Emission Point: 00069
Height (ft.): 58 Diameter (in.): 30
NYTMN (km.): 4758.363 NYTME (km.): 601.538 Building: CUB

Emission Point: 00070
Height (ft.): 58 Diameter (in.): 30
NYTMN (km.): 4758.365 NYTME (km.): 601.545 Building: CUB

Item 49.2:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: B-00001

Emission Point: 00058
Height (ft.): 33 Diameter (in.): 40
NYTMN (km.): 4758.265 NYTME (km.): 601.516 Building: CUB

Emission Point: 00059
Height (ft.): 33 Diameter (in.): 40
NYTMN (km.): 4758.28 NYTME (km.): 601.514 Building: CUB

Emission Point: 00063
Height (ft.): 33 Diameter (in.): 40
NYTMN (km.): 4758.265 NYTME (km.): 601.526 Building: CUB

Emission Point: 00064
Height (ft.): 33 Diameter (in.): 28
NYTMN (km.): 4758.281 NYTME (km.): 601.525 Building: CUB

Emission Point: 00067
Height (ft.): 33 Diameter (in.): 40
NYTMN (km.): 4758.282 NYTME (km.): 601.536 Building: CUB

Emission Point: 00104
Height (ft.): 93 Diameter (in.): 36
NYTMN (km.): 4758.305 NYTME (km.): 601.648 Building: MCUB

Emission Point: 00105
Height (ft.): 93 Diameter (in.): 36
NYTMN (km.): 4758.31 NYTME (km.): 601.645 Building: MCUB

Emission Point: 00106
Height (ft.): 93 Diameter (in.): 36
NYTMN (km.): 4758.316 NYTME (km.): 601.648 Building: MCUB

Emission Point: 00107
Height (ft.): 93 Diameter (in.): 36
NYTMN (km.): 4758.322 NYTME (km.): 601.647 Building: MCUB

Emission Point: 00108
Height (ft.): 93 Diameter (in.): 36
NYTMN (km.): 4758.328 NYTME (km.): 601.647 Building: MCUB

Emission Point: 00109
Height (ft.): 93 Diameter (in.): 36
NYTMN (km.): 4758.334 NYTME (km.): 601.646 Building: MCUB

Emission Point: 00110
Height (ft.): 93 Diameter (in.): 36
NYTMN (km.): 4758.34 NYTME (km.): 601.646 Building: MCUB

Emission Point: BGYB1
Height (ft.): 18 Diameter (in.): 20
NYTMN (km.): 4758.41 NYTME (km.): 601.74 Building: BGY2

Item 49.3:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: C-00001

Emission Point: 00131
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.51 NYTME (km.): 601.35 Building: ESB

Emission Point: 00132
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.525 NYTME (km.): 601.349 Building: ESB

Emission Point: 00133
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.51 NYTME (km.): 601.346 Building: ESB

Emission Point: 00134
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.525 NYTME (km.): 601.346 Building: ESB

Emission Point: 00135
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.51 NYTME (km.): 601.343 Building: ESB

Emission Point: 00136
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.524 NYTME (km.): 601.343 Building: ESB

Emission Point: 00137
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.509 NYTME (km.): 601.335 Building: ESB

Emission Point: 00138
Height (ft.): 33 Diameter (in.): 18

NYTMN (km.): 4758.523 NYTME (km.): 601.334 Building: ESB

Emission Point: 00139
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.508 NYTME (km.): 601.331 Building: ESB

Emission Point: 00140
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.523 NYTME (km.): 601.331 Building: ESB

Emission Point: 00141
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.508 NYTME (km.): 601.328 Building: ESB

Emission Point: 00142
Height (ft.): 33 Diameter (in.): 18
NYTMN (km.): 4758.523 NYTME (km.): 601.327 Building: ESB

Emission Point: 00241
Height (ft.): 38 Diameter (in.): 18
NYTMN (km.): 4758.388 NYTME (km.): 601.616 Building: ESB2

Emission Point: 00242
Height (ft.): 38 Diameter (in.): 18
NYTMN (km.): 4758.388 NYTME (km.): 601.619 Building: ESB2

Emission Point: 00243
Height (ft.): 38 Diameter (in.): 18
NYTMN (km.): 4758.388 NYTME (km.): 601.624 Building: ESB2

Emission Point: 00244
Height (ft.): 38 Diameter (in.): 18
NYTMN (km.): 4758.389 NYTME (km.): 601.628 Building: ESB2

Emission Point: 00245
Height (ft.): 38 Diameter (in.): 18
NYTMN (km.): 4758.389 NYTME (km.): 601.632 Building: ESB2

Emission Point: 00246
Height (ft.): 38 Diameter (in.): 18
NYTMN (km.): 4758.389 NYTME (km.): 601.636 Building: ESB2

Emission Point: 00247
Height (ft.): 38 Diameter (in.): 18
NYTMN (km.): 4758.389 NYTME (km.): 601.64 Building: ESB2

Emission Point: 00248
Height (ft.): 38 Diameter (in.): 18
NYTMN (km.): 4758.389 NYTME (km.): 601.644 Building: ESB2

Emission Point: 00249
Height (ft.): 38 Diameter (in.): 18

NYTMN (km.): 4758.39 NYTME (km.): 601.648 Building: ESB2

Emission Point: 00250
Height (ft.): 38 Diameter (in.): 18
NYTMN (km.): 4758.39 NYTME (km.): 601.652 Building: ESB2

Item 49.4:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: F-00001

Emission Point: 00001
Height (ft.): 96 Diameter (in.): 52
NYTMN (km.): 4758.195 NYTME (km.): 601.348 Building: FAB

Emission Point: 00002
Height (ft.): 96 Diameter (in.): 40
NYTMN (km.): 4758.195 NYTME (km.): 601.348 Building: FAB

Emission Point: 00003
Height (ft.): 96 Diameter (in.): 40
NYTMN (km.): 4758.21 NYTME (km.): 601.339 Building: FAB

Emission Point: 00004
Height (ft.): 96 Diameter (in.): 40
NYTMN (km.): 4758.215 NYTME (km.): 601.339 Building: FAB

Emission Point: 00005
Height (ft.): 96 Diameter (in.): 40
NYTMN (km.): 4758.218 NYTME (km.): 601.338 Building: FAB

Emission Point: 00006
Height (ft.): 96 Diameter (in.): 48
NYTMN (km.): 4758.235 NYTME (km.): 601.337 Building: FAB

Emission Point: 00007
Height (ft.): 96 Diameter (in.): 48
NYTMN (km.): 4758.238 NYTME (km.): 601.337 Building: FAB

Emission Point: 00008
Height (ft.): 96 Diameter (in.): 48
NYTMN (km.): 4758.244 NYTME (km.): 601.336 Building: FAB

Emission Point: 00009
Height (ft.): 96 Diameter (in.): 48
NYTMN (km.): 4758.249 NYTME (km.): 601.336 Building: FAB

Emission Point: 00010
Height (ft.): 96 Diameter (in.): 48
NYTMN (km.): 4758.253 NYTME (km.): 601.336 Building: FAB

Emission Point: 00011

Height (ft.): 96 Diameter (in.): 48
NYTMN (km.): 4758.259 NYTME (km.): 601.335 Building: FAB

Emission Point: 0001A
Height (ft.): 96 Diameter (in.): 26
NYTMN (km.): 4758.195 NYTME (km.): 601.348 Building: FAB

Emission Point: 00024
Height (ft.): 96 Diameter (in.): 58
NYTMN (km.): 4758.419 NYTME (km.): 601.336 Building: FAB

Emission Point: 00025
Height (ft.): 96 Diameter (in.): 58
NYTMN (km.): 4758.419 NYTME (km.): 601.332 Building: FAB

Emission Point: 00026
Height (ft.): 96 Diameter (in.): 58
NYTMN (km.): 4758.418 NYTME (km.): 601.328 Building: FAB

Emission Point: 00027
Height (ft.): 96 Diameter (in.): 58
NYTMN (km.): 4758.418 NYTME (km.): 601.324 Building: FAB

Emission Point: 00028
Height (ft.): 96 Diameter (in.): 50
NYTMN (km.): 4758.424 NYTME (km.): 601.324 Building: FAB

Emission Point: 00029
Height (ft.): 96 Diameter (in.): 50
NYTMN (km.): 4758.43 NYTME (km.): 601.323 Building: FAB

Emission Point: 0002A
Height (ft.): 96 Diameter (in.): 26
NYTMN (km.): 4758.2 NYTME (km.): 601.35 Building: FAB

Emission Point: 00030
Height (ft.): 96 Diameter (in.): 50
NYTMN (km.): 4758.434 NYTME (km.): 601.323 Building: FAB

Emission Point: 00088
Height (ft.): 96 Diameter (in.): 40
NYTMN (km.): 4758.192 NYTME (km.): 601.348 Building: FAB

Emission Point: 00111
Height (ft.): 96 Diameter (in.): 40
NYTMN (km.): 4758.443 NYTME (km.): 601.332 Building: FAB

Emission Point: 00112
Height (ft.): 96 Diameter (in.): 40
NYTMN (km.): 4758.477 NYTME (km.): 601.331 Building: FAB

Emission Point: 00113

Height (ft.): 96 Diameter (in.): 40
NYTMN (km.): 4758.453 NYTME (km.): 601.331 Building: FAB

Emission Point: 00114
Height (ft.): 96 Diameter (in.): 18
NYTMN (km.): 4758.445 NYTME (km.): 601.334 Building: FAB

Emission Point: 00115
Height (ft.): 96 Diameter (in.): 18
NYTMN (km.): 4758.448 NYTME (km.): 601.329 Building: FAB

Emission Point: 0011A
Height (ft.): 96 Diameter (in.): 48
NYTMN (km.): 4758.264 NYTME (km.): 601.335 Building: FAB

Emission Point: 00441
Height (ft.): 96 Diameter (in.): 18
NYTMN (km.): 4758.444 NYTME (km.): 601.33 Building: FAB

Emission Point: 00468
Height (ft.): 96 Diameter (in.): 38
NYTMN (km.): 4758.223 NYTME (km.): 601.338 Building: FAB

Emission Point: 00469
Height (ft.): 96 Diameter (in.): 38
NYTMN (km.): 4758.227 NYTME (km.): 601.338 Building: FAB

Emission Point: 00470
Height (ft.): 96 Diameter (in.): 38
NYTMN (km.): 4758.231 NYTME (km.): 601.337 Building: FAB

Emission Point: 00471
Height (ft.): 97 Diameter (in.): 52
NYTMN (km.): 4758.47 NYTME (km.): 601.38 Building: FAB

Emission Point: 00472
Height (ft.): 97 Diameter (in.): 52
NYTMN (km.): 4758.47 NYTME (km.): 601.41 Building: FAB

Emission Point: 00473
Height (ft.): 97 Diameter (in.): 52
NYTMN (km.): 4758.48 NYTME (km.): 601.43 Building: FAB

Emission Point: 00478
Height (ft.): 64 Diameter (in.): 14
NYTMN (km.): 4758.31 NYTME (km.): 601.287 Building: HPM

Emission Point: 00479
Height (ft.): 64 Diameter (in.): 14
NYTMN (km.): 4758.313 NYTME (km.): 601.287 Building: HPM

Emission Point: 00480

Height (ft.): 64 Diameter (in.): 14
NYTMN (km.): 4758.315 NYTME (km.): 601.287 Building: HPM

Emission Point: 0088A
Height (ft.): 96 Diameter (in.): 40
NYTMN (km.): 4758.2 NYTME (km.): 601.35 Building: FAB

Item 49.5:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: F-00004

Emission Point: 00121
Height (ft.): 110 Diameter (in.): 12
NYTMN (km.): 4758.205 NYTME (km.): 601.661 Building: TDC

Emission Point: 00122
Height (ft.): 110 Diameter (in.): 12
NYTMN (km.): 4758.202 NYTME (km.): 601.662 Building: TDC

Emission Point: 00123
Height (ft.): 110 Diameter (in.): 12
NYTMN (km.): 4758.198 NYTME (km.): 601.661 Building: TDC

Emission Point: 00124
Height (ft.): 110 Diameter (in.): 38
NYTMN (km.): 4758.224 NYTME (km.): 601.656 Building: TDC

Emission Point: 00125
Height (ft.): 110 Diameter (in.): 38
NYTMN (km.): 4758.219 NYTME (km.): 601.656 Building: TDC

Emission Point: 00126
Height (ft.): 110 Diameter (in.): 38
NYTMN (km.): 4758.212 NYTME (km.): 601.656 Building: TDC

Emission Point: 00127
Height (ft.): 110 Diameter (in.): 38
NYTMN (km.): 4758.207 NYTME (km.): 601.656 Building: TDC

Emission Point: 0127A
Height (ft.): 110 Diameter (in.): 38
NYTMN (km.): 4758.228 NYTME (km.): 601.655 Building: TDC

Condition 50: Process Definition By Emission Unit
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 50.1:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 0-THERS
Process: OTH Source Classification Code: 3-13-065-00
Process Description:
This unit consists of waste storage and treatment tanks installed in the CUB building, select chemical storage tanks in excess of 10,000 gallons capacity and wastewater collection tanks within the FAB and TDC buildings. These operations are anticipated to exhaust at only trace levels, and the operations in the CUB include acid scrubbers to control emissions.

Emission Source/Control: OTH60 - Control
Control Type: WET SCRUBBER

Emission Source/Control: OTH61 - Control
Control Type: WET SCRUBBER

Emission Source/Control: OTH69 - Control
Control Type: WET SCRUBBER

Emission Source/Control: OTH70 - Control
Control Type: WET SCRUBBER

Emission Source/Control: OTHCT - Process

Item 50.2:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-00001
Process: B01 Source Classification Code: 1-02-005-02
Process Description: Boilers using #2 oil.

Emission Source/Control: B0001 - Combustion
Design Capacity: 57.9 million Btu per hour

Emission Source/Control: B0002 - Combustion
Design Capacity: 57.9 million Btu per hour

Item 50.3:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-00001
Process: BO2 Source Classification Code: 1-02-006-02
Process Description: Boilers using natural gas.

Emission Source/Control: B0001 - Combustion
Design Capacity: 57.9 million Btu per hour

Emission Source/Control: B0002 - Combustion
Design Capacity: 57.9 million Btu per hour

Emission Source/Control: B0003 - Combustion

Design Capacity: 57.9 million Btu per hour

Emission Source/Control: B0004 - Combustion
Design Capacity: 29.1 million Btu per hour

Emission Source/Control: B0005 - Combustion
Design Capacity: 57.9 million Btu per hour

Item 50.4:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-00001
Process: BT1 Source Classification Code: 1-02-004-02
Process Description: Operation of dual fuel boilers located in MCUB.

Emission Source/Control: B4104 - Combustion
Design Capacity: 59 million Btu per hour

Emission Source/Control: B4105 - Combustion
Design Capacity: 59 million Btu per hour

Item 50.5:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-00001
Process: BT2 Source Classification Code: 1-03-006-02

Emission Source/Control: B4104 - Combustion
Design Capacity: 59 million Btu per hour

Emission Source/Control: B4105 - Combustion
Design Capacity: 59 million Btu per hour

Emission Source/Control: B4106 - Combustion
Design Capacity: 59 million Btu per hour

Emission Source/Control: B4107 - Combustion
Design Capacity: 59 million Btu per hour

Emission Source/Control: B4108 - Combustion
Design Capacity: 59 million Btu per hour

Emission Source/Control: B4109 - Combustion
Design Capacity: 59 million Btu per hour

Emission Source/Control: B4110 - Combustion
Design Capacity: 59 million Btu per hour

Item 50.6:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: B-00001

Process: BT3 Source Classification Code: 1-02-006-02
Process Description:
Operation of boilers supporting vaporizer in Bulk Gas yard #2.

Emission Source/Control: B4111 - Combustion
Design Capacity: 25 million Btu per hour

Item 50.7:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: C-00001
Process: C01 Source Classification Code: 2-01-001-02
Process Description:
This process consists of twelve (12) continuous power system generator units located in the Electrical Systems Building. Each unit is a 2280 KW unit by MTU, Model 16V 4000 G43.

Emission Source/Control: C1A01 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1A02 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1A03 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1A04 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1A05 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1A06 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1B01 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1B02 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1B03 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1B04 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1B05 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C1B06 - Combustion
Design Capacity: 2,280 kilowatts

Item 50.8:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: C-00001
Process: C02 Source Classification Code: 2-01-001-02
Process Description:
This process consists of ten (10) continuous power system generator units located in the Electrical Systems Building 2. Each unit is a 2280 KW unit by MTU, Model 16V 4000 G83.

Emission Source/Control: C2G01 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C2G02 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C2G03 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C2G04 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C2G05 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C2G06 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C2G07 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C2G08 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C2G09 - Combustion
Design Capacity: 2,280 kilowatts

Emission Source/Control: C2G10 - Combustion
Design Capacity: 2,280 kilowatts

Item 50.9:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00001
Process: F01 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of chemical mechanical planarization operations.

Emission Source/Control: CM001 - Process

Item 50.10:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00001
Process: F02 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of metal plating operations.

Emission Source/Control: PL001 - Process

Item 50.11:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00001
Process: F03 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of etch operations.

Emission Source/Control: ET001 - Process

Item 50.12:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00001
Process: F04 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of photolithography operations.

Emission Source/Control: PH001 - Process

Item 50.13:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00001
Process: F05 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of diffusion operations.

Emission Source/Control: DF001 - Process

Item 50.14:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00001
Process: F06 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of implant operations.

Emission Source/Control: IM001 - Process

Item 50.15:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00001
Process: F07 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of thin film operations.

Emission Source/Control: TF001 - Process

Item 50.16:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00001
Process: F10 Source Classification Code: 3-13-065-00
Process Description:
Emission control device operations for Fabrication processes at FAB 8 Module 1. Emission control devices include acid scrubbers, caustic scrubbers and thermal oxidizers with concentrators.

Emission Source/Control: AS006 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS007 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS008 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS009 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS010 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS011 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS11A - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS003 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS004 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS005 - Control

Control Type: WET SCRUBBER

Emission Source/Control: CS468 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS469 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS470 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS478 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS479 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS480 - Control
Control Type: WET SCRUBBER

Emission Source/Control: OX001 - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: OX002 - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: OX01A - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: OX02A - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: OX088 - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: OX88A - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: 00F10 - Process

Emission Source/Control: TANKA - Process

Emission Source/Control: TANKB - Process

Emission Source/Control: TANKC - Process
Design Capacity: 18,000 gallons

Emission Source/Control: TANKD - Process

Emission Source/Control: TANKE - Process

Emission Source/Control: TANKF - Process

Emission Source/Control: TANKG - Process

Emission Source/Control: WB005 - Process
Design Capacity: 3,360 liters per minute

Emission Source/Control: WB015 - Process
Design Capacity: 3,360 liters per minute

Item 50.17:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00001
Process: F11 Source Classification Code: 3-13-065-00
Process Description:
Emission control device operations for fabrication processes. Emission control devices include acid scrubbers, caustic scrubbers and thermal oxidizers with concentrators. These devices control emissions from process sources located in 8.1 extension area.

Emission Source/Control: AS024 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS025 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS026 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS027 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS028 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS029 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS030 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS471 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS472 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS473 - Control
Control Type: WET SCRUBBER

Emission Source/Control: OX111 - Control

Control Type: THERMAL OXIDATION

Emission Source/Control: OX112 - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: OX113 - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: OX114 - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: OX115 - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: OX441 - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: 00F11 - Process

Item 50.18:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00004
Process: 407 Source Classification Code: 3-13-065-00
Process Description:
Emission control devices for Fabrication processes.
These incluse six acid scrubbers, three caustic scrubbers
and three rotary concentrator thermal oxidizers.

Emission Source/Control: A127A - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS124 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS125 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS126 - Control
Control Type: WET SCRUBBER

Emission Source/Control: AS127 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS121 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS122 - Control
Control Type: WET SCRUBBER

Emission Source/Control: CS123 - Control
Control Type: WET SCRUBBER

Emission Source/Control: 00F07 - Process

Item 50.19:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00004
Process: 408 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of etch operations.

Emission Source/Control: ET401 - Process

Item 50.20:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00004
Process: 409 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of diffusion operations.

Emission Source/Control: DF401 - Process

Item 50.21:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00004
Process: 410 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of thin film operations.

Emission Source/Control: TF401 - Process

Item 50.22:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: F-00004
Process: 411 Source Classification Code: 3-13-065-00
Process Description:
Fabrication processes consisting of process lab operations.

Emission Source/Control: LP401 - Process