

PERMIT Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility Permit ID: 8-2628-01165/00001

Effective Date: 03/07/2022 Expiration Date: 03/06/2032

Permit Issued To:LI-CYCLE NORTH AMERICA HUB INC

874 WALKER RD STE C DOVER, DE 19904

Contact: TIM G JOHNSTON

LI-CYCLE NORTH AMERICA HUB INC 2351 ROYAL WINDSOR DR UNIT 10

MISSISSAUGA, ON L5J 4S7

(647) 493-3169

Facility: LI-CYCLE NORTH AMERICA HUB #1

50 & 205 MCLAUGHLIN RD

GREECE, NY

Contact: TIM G JOHNSTON

LI-CYCLE NORTH AMERICA HUB INC 2351 ROYAL WINDSOR DR UNIT 10

MISSISSAUGA, ON L5J 4S7

(647) 493-3169

Description:

Initial Air State Facility (ASF) Permit for the construction and operation of a proposed manufacturing facility, referred to as its "Li-Cycle America Hub #1" in the Town of Greece, New York. When fully developed, the facility will use hydrometallurgical processes to manufacture battery grade products from black mass concentrate, a material that is derived from spent lithium-ion batteries. The facility consists of a hydrometallurgical manufacturing plant, in which chemical reagents are used and stored, a raw materials and final products storage and logistics warehouse, an administrative building, a QA/QC laboratory, and a visitor/education center.

The proposed facility has a single Emission Unit (U-00001) consisting of the solid raw material handling and hydrometallurgical processes used to extract, refine, and produce products from the black mass concentrate. These process emissions sources are subject to 6 NYCRR Part 212 for Process Emissions Sources and comply with applicable requirements through meeting the ambient guideline concentrations and/or installation and operation of pollution control devices.

This initial ASF permit establishes a federally enforceable emissions cap under 6 NYCRR 201-7.1 for VOC to limit facility emissions below Major Source Thresholds. Associated monitoring conditions are included to ensure compliance with the cap.

In addition, Processes P1A and P1B are part of a Chemical Manufacturing Process Unit (CMPU) and are subject to requirements for solid metal hazardous air pollutants (HAPs) under



40 CFR 63, Subpart VVVVVV – NESHAP for Chemical Manufacturing Area Sources. The remaining processes are not subject to requirements under the NESHAP since they are either not part of a CMPU, do not produce a product or isolated intermediate, or only contain metal HAP in a liquid solution or other form that does not result in particulate metal HAP emissions.

The facility operates two (2) permit-exempt diesel-fired emergency generators that are are subject to 40 CFR 60, Subpart IIII NSPS for Stationary Compression Ignition Internal Combustion Engines. The facility must comply with the applicable requirements of 40 CFR 60, Subpart IIII.

The permit-exempt cold cleaning parts washer is exempt from permitting. However, applicable requirements under 6 NYCRR Subpart 226-1 are included as facility level conditions.

Pursuant to the requirements of Section 7(2) of the Climate Leadership and Community Protection Act (CLCPA), the Department has requested and received information regarding the project's consistency with the CLPCA.

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:	KIMBERLY A MERCHANT				
	6274 E AVON LIMA RD				
	AVON, NY 14414-9519				
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.



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DEC GENERAL CONDITIONS

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- 5 3 Applications for permit renewals, modifications and transfers
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- 6 5 Submission of application for permit modification or renewal-REGION 8 HEADQUARTERS



DEC GENERAL CONDITIONS **** General Provisions **** GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 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.

Division of Air Resources



Facility DEC ID: 8262801165

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 8
HEADQUARTERS
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 8 Headquarters Division of Environmental Permits 6274 Avon-Lima Road Avon, NY 14414-9519 (585) 226-2466



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:LI-CYCLE NORTH AMERICA HUB INC 874 WALKER RD STE C DOVER, DE 19904

Facility: LI-CYCLE NORTH AMERICA HUB #1

50 & 205 MCLAUGHLIN RD

GREECE, NY

Authorized Activity By Standard Industrial Classification Code: 2819 - INDUSTRIAL INORGANIC CHEMICALS

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FEDERALLY ENFORCEABLE CONDITIONS

FINAL **** 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)



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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: Acceptable Ambient Air Quality

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 200.6

Item 1.1:

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

Condition 2: Maintenance of Equipment

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 200.7

Item 2.1:

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

Condition 3: Recycling and Salvage

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 201-1.7

Item 3.1:

Where practical, the owner or operator of an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.



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Condition 4: Exempt Sources - Proof of Eligibility

Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 4.1:

The owner or operator of an emission source or activity that is listed as being exempt may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all records necessary for demonstrating compliance with this Subpart on-site for a period of five years, and make them available to representatives of the department upon request.

Condition 5: Trivial Sources - Proof of Eligibility

Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 5.1:

The owner or operator of an emission source or activity that is listed as being trivial in this Section may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request.

Condition 6: Accidental release provisions.

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement:40 CFR Part 68

Item 6.1:

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 7: Recycling and Emissions Reduction



Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 82, Subpart F

Item 7.1:

The permittee shall comply with all applicable provisions of 40 CFR Part 82.

Condition 8: Facility Permissible Emissions

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 201-7.1

Item 8.1:

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: 0NY998-00-0 PTE: 96,000 pounds per year

Name: VOC

Condition 9: Capping Monitoring Condition

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 201-7.1

Item 9.1:

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 Subpart 201-6

Item 9.2:

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

Item 9.3:

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 9.4:

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.



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Item 9.5:

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 9.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 9.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

To limit facility potential-to-emit (PTE) emissions of Volatile Organic Compounds (VOC) below the 50 tons per year Major Source Threshold, total facility VOC emissions are limited to a maximum of 48 tons per year, on a rolling twelve-month basis.

To demonstrate compliance with this limit, the facility must determine the actual 12-month rolling VOC emissions (in tons per year) from the facility on a monthly basis. VOC emissions should be calculated using production or equipment throughput data, sampling or testing data, control device manufacturer's information, published emission factors, or other information as appropriate.

Additionally, the activated carbon system (Control ID CAC01) for process P07, Emission Point P019 required under 6 NYCRR 212-2.3(b) for control of petroleum distillates also effectively controls VOC emissions. The emissions calculations should account for VOC emissions reductions from use of this control. The facility must comply with the control and monitoring requirements for Process P07, Emission Point P019 under 6 NYCRR 212-2.3(b) elsewhere in this permit.

Records of emissions, supporting information, and reports must be maintained for a period of at least five years and made available to the Department upon request.

Parameter Monitored: VOC

Upper Permit Limit: 48 tons per year Monitoring Frequency: MONTHLY

Averaging Method: 12 MONTH AVERAGE - ROLLED MONTHLY



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Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2023.

Subsequent reports are due every 12 calendar month(s).

Condition 10: Visible Emissions Limited

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 211.2

Item 10.1:

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 11: Maintain all process emission sources, including the associated air pollution control and monitoring equipment Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 212-1.5 (g)

Item 11.1:

This Condition applies to:

Emission Unit: U00001

Item 11.2:

At all times, the facility owner or operator must operate and maintain all process emission sources, including the associated air pollution control and monitoring equipment, in a manner consistent with safety, good air pollution control practices, good engineering practices and manufacturers' recommendations for minimizing emissions.

Condition 12: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 212-1.5 (g)

Item 12.1:

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

Emission Unit: U-00001

Process: P02 Emission Source: CWS01

Emission Unit: U-00001

Process: P03 Emission Source: CDC01

Emission Unit: U-00001



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Process: P03 **Emission Source: CDC02**

Emission Unit: U-00001

Process: P03 **Emission Source: CDC03**

Emission Unit: U-00001

Process: P03 **Emission Source: CDC04**

Emission Unit: U-00001

Process: P03 **Emission Source: CDC05**

Emission Unit: U-00001

Process: P03 Emission Source: CDC06

Emission Unit: U-00001

Process: P03 **Emission Source: CDC07**

Emission Unit: U-00001

Process: P03 **Emission Source: CDC08**

Emission Unit: U-00001

Process: P03 **Emission Source: CDC09**

Emission Unit: U-00001

Process: P04 **Emission Source: CWS04**

Emission Unit: U-00001

Process: P06 **Emission Source: CCS01**

Emission Unit: U-00001

Process: P07 **Emission Source: CAC01**

Emission Unit: U-00001

Process: P1A **Emission Source: CWS02**

Emission Unit: U-00001

Process: P1A **Emission Source: CWS03**

Item 12.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To ensure on-going compliance with the applicable requirements of 6 Part 212 the facility owner or operator must prepare and follow an Air Pollution Control Monitoring Plan for control devices CWS01, CDC01 - CDC09, CWS04, CCS01, and CAC01. The plan must be maintained on-site and control devices should be operated, maintained, and monitored in accordance with the plan when the process/control device are in operation.



This plan may be combined with the monitoring plan required under 40 CFR 63.11496(f)(5) specified elsewhere in this permit at the facility owner or operator's discretion.

The monitoring plan should include:

- (1) Identification of each emissions control device;
- (2) Maintenance and quality assurance schedule for each emissions control device and associated monitoring equipment;
- (3) The list of operating parameters monitored for each emissions control device;
- (4) Operating parameter ranges and associated monitoring frequency/averaging method;
- (5) Monitoring data and records to be kept to demonstrate compliance with the parameter ranges, and
- (6) Procedures or corrective actions for emissions control device malfunctions.

Operating parameters and ranges included in the plan should be based on, operating data and experience, performance test data, manufacturer's specifications, or other information, as appropriate. Changes to the monitoring plan and operating parameter ranges may be revised based on updated testing, operating, or engineering data.

A copy of the initial monitoring plan must be submitted to the Department prior to the facility commencing operation. The monitoring plan must be made available to the Department upon request.

Following completion of the initial testing requirements required elsewhere in this permit, the facility must submit an application for a permit modification within one year of facility startup to establish the determined control device monitoring as permit conditions.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 13: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 13.1:

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

Emission Unit: U-00001 Emission Point: EP001



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Emission Unit: U-00001 Emission Point: EP002

Emission Unit: U-00001 Emission Point: EP003

Emission Unit: U-00001 Emission Point: EP004

Emission Unit: U-00001 Emission Point: EP005

Emission Unit: U-00001 Emission Point: EP006

Emission Unit: U-00001 Emission Point: EP007

Emission Unit: U-00001 Emission Point: EP008

Emission Unit: U-00001 Emission Point: EP009

Emission Unit: U-00001 Emission Point: EP010

Emission Unit: U-00001 Emission Point: EP018

Emission Unit: U-00001 Emission Point: EP020

Emission Unit: U-00001 Emission Point: EP021

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 13.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions from any process emission source for which an application was received by the department after July 1, 1973 are restricted as follows:

No facility owner or operator shall cause or allow emissions of particulate that exceed 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry gas basis, except in instances where determination of permissible emission rate using process weight for a specific source category emitting solid particulate is based upon Table 5 and Table 6 of Subdivisions 212-2.5(a) and (b) of this Part.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.050 grains per dscf

Reference Test Method: USEPA Reference Test Method 5

Monitoring Frequency: UPON REQUEST OF REGULATORY AGENCY

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY



Condition 14: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 14.1:

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

Emission Unit: U-00001 Emission Point: EP001 Process: P02 Emission Source: CWS01

Emission Unit: U-00001 Emission Point: EP004 Process: P03 Emission Source: CDC01

Emission Unit: U-00001 Emission Point: EP005 Process: P03 Emission Source: CDC02

Emission Unit: U-00001 Emission Point: EP006 Process: P03 Emission Source: CDC03

Emission Unit: U-00001 Emission Point: EP007 Process: P03 Emission Source: CDC04

Emission Unit: U-00001 Emission Point: EP008 Process: P03 Emission Source: CDC05

Emission Unit: U-00001 Emission Point: EP009 Process: P03 Emission Source: CDC06

Emission Unit: U-00001 Emission Point: EP010 Process: P03 Emission Source: CDC07

Emission Unit: U-00001 Emission Point: EP020 Process: P03 Emission Source: CDC08

Emission Unit: U-00001 Emission Point: EP021 Process: P03 Emission Source: CDC09

Emission Unit: U-00001 Emission Point: EP018 Process: P06 Emission Source: CCS01

Emission Unit: U-00001 Emission Point: EP002 Process: P1A Emission Source: CWS02

Emission Unit: U-00001 Emission Point: EP003 Process: P1A Emission Source: CWS03

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES



Item 14.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

To ensure on-going compliance with 6 NYCRR 212-2.4(b), the facility owner or operator must perform monthly inspections of the particulate control devices (wet scrubbers CWS01, CWS02, CWS03, CCS01 and dust collectors CDC01-CDC09). If the control equipment is not operating properly, corrective action must be taken as soon as possible.

Routine maintenance of the control devices will be performed in accordance with facility operating procedures or manufacturer's recommendations. A copy of the manufacturer's operating instructions for each control device shall be maintained on-site.

The facility owner or operator must maintain a log and/or records indicating the date and results of each monthly inspection, any routine maintenance activities performed on the control device, and any repairs or other corrective action taken. The log and/or records must be maintained at the facility for a period of at least five years and made available to the Department upon request.

Monitoring Frequency: MONTHLY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 15: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 15.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 15.2:

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.



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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 16: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 226-1.3

Item 16.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 16.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Owners or operators conducting solvent cleaning processes must:

- (a) store solvent in covered containers and transfer or dispose of waste solvent in such a manner that less than 20 percent of the waste solvent (by weight) can evaporate into the atmosphere;
- (b) maintain equipment to minimize leaks and fugitive emissions:
- (c) display at the equipment location a conspicuous summary of proper operating procedures consistent with minimizing emissions of VOCs;
- (d) keep the degreaser cover closed except when parts are being placed into or being removed from the degreaser, the cover needs to be open in order or remove solvent from the degreaser, no solvent is in the degreaser, or manually cleaning parts in a cold cleaning degreaser;
- (e) create and maintain a record of solvent consumption for five years. This record must be retained for five years and made available to the department upon request;
- (f) not clean sponges, fabric, wood, leather, paper products and other absorbent materials in a degreaser; and
- (g) if using a cold cleaning degreaser that is subject to paragraph 6 NYCRR 226-1.4(a)(4), retain a record of the following three items for five years and provide these records to the Department upon request. An invoice, bill



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of sale, a certificate covering multiple sales, manufacturers published information, or other appropriate documentation acceptable to the Department may be used to comply with this requirement:

- (1) name and address of the solvent supplier;
- (2) the type of solvent including the product or vendor identification number; and
- (3) the VOC content of the cleaning solution in grams per liter (gm/l) or the vapor pressure of the solvent measured in mm Hg at 20 degrees Celsius (68 degrees Fahrenheit) as appropriate to verify compliance.

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 17: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 226-1.4 (a)

Item 17.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 17.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

The following control requirements must be used by an owner or operator conducting solvent cold cleaning degreasing if the internal volume of the machine is greater than two gallons:

- (1) a cover which can be easily operated and
- (2) an internal drainage facility (under cover), if practical,
- (3) A control system that limits VOC emissions to those achievable with equipment having a freeboard ratio greater than or equal to 0.5, or a water cover when the solvent is insoluble in and heavier than water. Remote reservoir degreasers are exempt from this requirement.
- (4) cleaning solution with a maximum VOC content of 25 grams per liter at 20 degrees Celsius must be used. This requirement does not apply to degreasers:
- (i) used in special and extreme solvent cleaning;
- (ii) for which the owner or operator has received Department approval of a demonstration that compliance with the requirement of a cleaning solution with a maximum VOC content of 25 grams per liter at 20°C will result in unsafe operating conditions; or
- (iii) that are located in a permanent total enclosure having control equipment that is designed and operated with an overall VOC removal efficiency of 90 percent or



greater.

Parameter Monitored: VOC CONTENT Upper Permit Limit: 25 grams per liter

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY

TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 18: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 6 NYCRR 226-1.5 (a)

Item 18.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 18.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC

OPERATIONS

Monitoring Description:

For cold cleaning degreasing, the clean parts shall be drained at least 15 seconds or until dripping ceases.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: DEGREASING UNITS Parameter Monitored: DURATION Lower Permit Limit: 15 seconds

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 19: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 19.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 19.2:

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. The Department reserves the right to perform or require the



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performance of a Method 9 compliance test at any time.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent

Reference Test Method: EPA Method 9

Monitoring Frequency: UPON REQUEST OF REGULATORY AGENCY

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 20: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 60, NSPS Subpart A

Item 20.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 20.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Owners or operators of affected sources that are subject to 40 CFR 60 must comply with the applicable general provisions of 40 CFR 60, Subpart A. The facility owner or operator is responsible for complying with all applicable, administrative, and reporting requirements.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 21: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 60, NSPS Subpart IIII

Item 21.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 21.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Emission sources at this facility include stationary compression ignition internal combustion engines that are subject to 40 CFR 60, Subpart IIII. The owner or operator must comply with applicable portions of 40 CFR 60, Subpart IIII

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING



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DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 22: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63, Subpart A

Item 22.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 22.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Owners or operators of affected sources that are subject to 40 CFR 63 must comply with the applicable general provisions of 40 CFR 63, Subpart A. The facility owner or operator is responsible for complying with all applicable, administrative, and reporting requirements.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 23: Performance Testing
Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.7, Subpart A

Item 23.1:

This Condition applies to:

Emission Unit: U00001 Emission Point: EP002 Process: P1A Emission Source: CWS02

Emission Unit: U00001 Emission Point: EP003 Process: P1A Emission Source: CWS03

Item 23.2:

Except as provided in 40 CFR 63.7(a)(4) for force majeure, an owner or operator of an affected source required to conduct performance testing by a relevant standard, and unless a waiver of performance testing is obtained under 40 CFR 63.7(h) or the conditions of 40 CFR 63.7(c)(3)(ii)(B) apply, must perform such tests within 180 days of the compliance date for such source.



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Condition 24: Process Vessel Cover

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement:40CFR 63.11495(a)(1), Subpart VVVVVV

Item 24.1:

This Condition applies to:

Emission Unit: U00001

Process: P1A

Emission Unit: U00001

Process: P1B

Item 24.2:

Each process vessel must be equipped with a cover or lid that must be closed at all times when it is in organic HAP service or metal HAP service, except for manual operations that require access, such as material addition and removal, inspection, sampling and cleaning. This requirement does not apply to process vessels containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).

Condition 25: Inspections

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11495(a)(3), Subpart VVVVVV

Item 25.1:

This Condition applies to:

Emission Unit: U00001

Process: P1A

Emission Unit: U00001

Process: P1B

Item 25.2:

The owner or operator must conduct inspections of process vessels and equipment for each chemical manufacturing process unit (CMPU) in organic HAP service or metal HAP service, as specified in paragraphs (i) through (v), to demonstrate compliance with 40 CFR 63.11495(a)(1) and to determine that the process vessels and equipment are sound and free of leaks. Alternatively, except when the subject CMPU contains metal HAP as particulate, inspections may be conducted while the subject process vessels and equipment are in VOC service, provided that leaks can be detected when in VOC service.

- (i) Inspections must be conducted at least quarterly.
- (ii) For these inspections, detection methods incorporating sight, sound, or smell are acceptable.



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Indications of a leak identified using such methods constitute a leak unless the owner or operator demonstrates that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, the owner or operator must still perform the inspection and demonstration in the next quarterly monitoring period.

- (iii) As an alternative to conducting inspections, as specified in paragraph (ii), the owner or operator may use Method 21 of 40 CFR part 60, appendix A–7, with a leak definition of 500 ppmv to detect leaks. The owner or operator may also use Method 21 with a leak definition of 500 ppmv to determine if indications of a leak identified during an inspection conducted in accordance with paragraph (ii) are due to a condition other than loss of HAP. The procedures in this paragraph may not be used as an alternative to the inspection required by paragraph (ii) for process vessels that contain metal HAP as particulate.
- (iv) Inspections must be conducted while the subject CMPU is operating.
- (v) No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service or metal HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required.

Condition 26: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11495(a)(4), Subpart VVVVVV

Item 26.1:

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

Emission Unit: U-00001

Process: P1A

Emission Unit: U-00001

Process: P1B

Item 26.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The owner or operator must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph, a leak will be considered "repaired" if a condition specified in paragraph (i), (ii), or (iii) is met.

(i) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or



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(ii) No bubbles are observed at potential leak sites during a leak check using soap solution, or

(iii) The system will hold a test pressure.

In the event there is a delay of repair, semiannual compliance reports are required as specified in 40 CFR 63.11501(d)

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 27: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11495(a)(5), Subpart VVVVVV

Item 27.1:

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

Emission Unit: U-00001

Process: P1A

Emission Unit: U-00001

Process: P1B

Item 27.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The owner or operator must keep records of the dates and results of each inspection event, the dates of equipment repairs, and, if applicable, the reasons for any delay in repair.

In the event there is a delay of repair, semiannual compliance reports are required as specified in 40 CFR 63.11501(d)

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 28: General Duty

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11495(d), Subpart VVVVV



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Item 28.1:

This Condition applies to:

Emission Unit: U00001

Process: P1A

Item 28.2:

At all times, the owner or operator must operate and maintain any affected chemical manufacturing process unit (CMPU), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU.

Condition 29: Compliance Demonstration
Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11496(f), Subpart VVVVV

Item 29.1:

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

Emission Unit: U-00001

Process: P1A

Regulated Contaminant(s):

CAS No: 0NY510-00-0 40 CFR 63 - TOTAL METAL HAP

Item 29.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

The owner or operator of a chemical manufacturing process unit (CPMU) from which collective uncontrolled metal HAP emissions from all metal HAP process vents are equal to or greater than 400 lb/yr must reduce collective uncontrolled emissions of total metal HAP by greater than or equal to 95 percent by weight by routing emissions from a sufficient number of the metal process vents through a closed-vent system to any combination of control devices, according to the requirements of 40 CFR 63.11496(f)(3), (4), or (5). The requirements of this paragraph do not apply to metal HAP process vents from CPMU containing only metal HAP that are in a liquid solution or other form that will not result in particulate emissions of metal HAP (e.g., metal HAP that is in ingot, paste, slurry, or moist pellet form or other form).



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To demonstrate compliance with this requirement, the facility owner or operator will install and operate control devices on Emission Points EP002 and EP003 to reduce metal HAP emissions from each emission point by greater than or equal to 95 percent by weight.

Upper Permit Limit: 95 percent by weight Reference Test Method: EPA Method 5, 5D or 29 Monitoring Frequency: SINGLE OCCURRENCE Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 30: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11496(f)(5), Subpart VVVVVV

Item 30.1:

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

Emission Unit: U-00001 Emission Point: EP002 Process: P1A Emission Source: CWS02

Emission Unit: U-00001 Emission Point: EP003 Process: P1A Emission Source: CWS03

Item 30.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Per 40 CFR 63.11496(f)(5), the owner or operator of a new source using a control device other than a baghouse to comply with the HAP metals emission limits specified in Table 4 of Subpart VVVVV must comply with the initial compliance and monitoring requirements of 40 CFR 63.11496(f)(3)(i)-(iii).

In accordance with 40 CFR 63.11496(f)(3)(iii), if the owner or operator elects to conduct a performance test, the performance test must be conducted according to requirements in 40 CFR 63.11410(j)(1). As an alternative to conducting a performance test using Method 5 or 5D to determine the concentration of PM, the owner or operator may use Method 29 in 40 CFR Part 60, appendix A–8 to determine the concentration of HAP metals. The owner or operator has demonstrated initial compliance if the overall reduction of either HAP metals or total PM is equal to or greater than 95 percent.



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Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 31: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11496(f)(5), Subpart VVVVVV

Item 31.1:

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

Emission Unit: U-00001 Emission Point: EP002 Process: P1A Emission Source: CWS02

Emission Unit: U-00001 Emission Point: EP003 Process: P1A Emission Source: CWS03

Item 31.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Per 40 CFR 63.11496(f)(5), the owner or operator of a new source using a control device other than a baghouse to comply with the HAP metals emission limits specified in Table 4 of subpart VVVVVV must comply with the initial compliance and monitoring requirements of 40 CFR 63.11496(f)(3)(i)-(iii).

In accordance with 40 CFR 63.11496(f)(3)(ii), the owner or operator must conduct a performance test or an engineering assessment for each chemical manufacturing process unit subject to a HAP metals emissions limit in Table 4 to subpart VVVVVV and report the results in his/her Notification of Compliance Status. Each performance test or engineering assessment must be conducted under representative operating conditions, and sampling for each performance test must be conducted at both the inlet and outlet of the control device. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 32: Compliance Demonstration
Effective between the dates of 03/07/2022 and 03/06/2032



Applicable Federal Requirement: 40CFR 63.11496(f)(5), Subpart VVVVVV

Item 32.1:

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

Emission Unit: U-00001 Emission Point: EP002 Process: P1A Emission Source: CWS02

Emission Unit: U-00001 Emission Point: EP003 Process: P1A Emission Source: CWS03

Item 32.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Per 40 CFR 63.11496(f)(5), the owner or operator of a new source using a control device other than a baghouse to comply with the HAP metals emission limits specified in Table 4 of subpart VVVVVV must comply with the initial compliance and monitoring requirements of 40 CFR 63.11496(f)(3)(i)-(iii).

In accordance with 40 CFR 63.11496(f)(3)(i), the owner or operator must prepare a monitoring plan containing the information listed below:

- (A) A description of the device;
- (B) Results of a performance test or engineering assessment conducted in accordance with 40 CFR 63.11496(f)(3)(ii) verifying the performance of the device for reducing HAP metals or particulate matter (PM) to the levels required by subpart VVVVV;
- (C) Operation and maintenance plan for the control device (including a preventative maintenance schedule consistent with the manufacturer's instructions for routine and long-term maintenance) and continuous monitoring system.
- (D) A list of operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limits; and
- (E) Operating parameter limits based on either monitoring data collected during the performance test or established in the engineering assessment.

The plan must be maintained on-site and be available on request. The owner or operator must operate and maintain the control device according to a site-specific monitoring plan at all times. The facility owner or operator must keep records of monitoring results to demonstrate continuous compliance.



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Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 33: General Provisions

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11501(a), Subpart VVVVV

Item 33.1:

This Condition applies to:

Emission Unit: U00001

Item 33.2:

The owner or operator must meet the requirements of the General Provisions in 40 CFR part 63, subpart A, as shown in Table 9 of subpart VVVVV. The General Provisions in other parts do not apply except when a requirement in an overlapping standard, which the owner or operator determined is at least as stringent as subpart VVVVVV and with which he/she has opted to comply, requires compliance with general provisions in another part.

Condition 34: Notification of Compliance Status Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11501(b), Subpart VVVVV

Item 34.1:

This Condition applies to:

Emission Unit: U00001

Item 34.2:

The notification of compliance status required by 40 CFR 63.9(h) must include the following additional information as applicable:

- (1) This certification of compliance, signed by a responsible official:
- (i) "This facility complies with the management practices in 40 CFR 63.11495."
- (ii) "This facility complies with the requirements in 40 CFR 63.11496 for HAP emissions from process vents."
- (iii) "This facility complies with the requirements in 40 CFR 63.11496 and 63.11497 for surge control vessels, bottoms receivers, and storage tanks."
- (iv) "This facility complies with the requirements in 40 CFR 63.11498 to treat wastewater streams."



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- (v) "This facility complies with the requirements in 40 CFR 63.11499 for heat exchange systems."
- (2) An owner or operator that complies with the alternative standard as specified in Table 2 of subpart VVVVVV or Table 3 of subpart VVVVVV, include the information specified in 40 CFR 63.1258(b)(5), as applicable.
- (3) An owner or operator that establishes an operating limit for a parameter that will not be monitored continuously in accordance with 40 CFR 63.11496(g)(4) and 63.2450(k)(6), provide the information as specified in 40 CFR 63.11496(g)(4) and 63.2450(k)(6).
- (4) A list of all transferred liquids that are reactive or resinous materials, as defined in 40 CFR 63.11502(b).
- (5) An owner or operator that complies with provisions in an overlapping rule in accordance with 40 CFR 63.11500, identify the affected chemical manufacturing process unit, heat exchange system, and/or wastewater system; provide a list of the specific provisions with which he/she will comply; and demonstrate that the provisions with which he/she will comply are at least as stringent as the otherwise applicable requirements, including monitoring, recordkeeping, and reporting requirements, in this subpart VVVVVV.

Condition 35: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11501(d), Subpart VVVVVV

Item 35.1:

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

Emission Unit: U-00001

Item 35.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The owner or operator must submit semiannual compliance reports that contain the information specified in paragraphs (1) through (7), as applicable. Reports are required only for semiannual periods during which the owner or operator experienced any of the events described in paragraphs (1) through (8).

- (1) Deviations. The owner or operator must clearly identify any deviation from the requirements of this subpart.
- (2) Delay of repair for a large heat exchange system. The owner or operator must include the information specified in 40 CFR 63.104(f)(2) each time he/she invokes the delay of repair provisions for a heat exchange system with a

cooling water flow rate equal to or greater than 8,000 gal/min.

- (3) Delay of leak repair. The owner or operator must provide the following information for each delay of leak repair beyond 15 days for any process equipment, storage tank, surge control vessel, bottoms receiver, and each delay of leak repair beyond 45 days for any heat exchange system with a cooling water flow rate less than 8,000 gal/min: information on the date the leak was identified, the reason for the delay in repair, and the date the leak was repaired.
- (4) Process change. The owner or operator must report each process change that affects a compliance determination and submit a new certification of compliance with the applicable requirements in accordance with the procedures specified in 40 CFR 63.15001(b).
- (5) Data for the alternative standard. If the owner or operator complies with the alternative standard, as specified in Table 2 of subpart VVVVVV or Table 3 of subpart VVVVVV, report the information required in 40 CFR 63.1258(b)(5).
- (6) Overlapping rule requirements. Report any changes in the overlapping provisions with which the owner or operator complies.
- (7) Reactive and resinous materials. Report any transfer of liquids that are reactive or resinous materials, as defined in 40 CFR 63.11502(b), and not included in the notification of compliance status.
- (8) Malfunctions. If a malfunction occurred during the reporting period, the report must include the number of instances of malfunctions that caused emissions in excess of a standard. For each malfunction that caused emissions in excess of a standard, the report must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions. The report must also include a description of actions the owner or operator took during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.11495(d), including actions taken to correct a malfunction.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR) Reports due 30 days after the reporting period.



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The initial report is due 7/30/2022. Subsequent reports are due every 6 calendar month(s).

Condition 36: Affirmative Defense Effective between the dates of 03/07/2022 and 03/06/2032

Applicable Federal Requirement: 40CFR 63.11501(e), Subpart VVVVVV

Item 36.1:

This Condition applies to:

Emission Unit: U00001

Item 36.2:

Affirmative defense for violation of emission standards during malfunction. In response to an action to enforce the standards set forth in 40 CFR 63.11495 through 63.11499, the owner or operator may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed if the owner or operator fails to meet his/her burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not available for claims for injunctive relief.

- (1) To establish the affirmative defense in any action to enforce such a standard, the owner or operator must timely meet the notification requirements in paragraph (2), and must prove by a preponderance of evidence that:
- (i) The violation:
- (A) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and
- (B) Could not have been prevented through careful planning, proper design, or better operation and maintenance practices; and
- (C) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and
- (D) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and
- (ii) Repairs were made as expeditiously as possible when a violation occurred. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and
- (iii) The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and
- (iv) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
- (v) All possible steps were taken to minimize the impact of the violation on ambient air quality,



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the environment and human health; and

- (vi) All emissions monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and
- (vii) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and
- (viii) At all times, the affected CMPU was operated in a manner consistent with good practices for minimizing emissions; and
- (ix) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the malfunction event at issue. The analysis must also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.
- (2) Report. An owner or operator seeking to assert an affirmative defense must submit a written report to the Administrator, with all necessary supporting documentation, that he/she has met the requirements set forth in paragraph (1). This affirmative defense report must be included in the first periodic compliance report, deviation report, or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance report, deviation report, or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance report, deviation report, or excess emission report due after the initial occurrence of the violation of the relevant standard.



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 37: Contaminant List

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable State Requirement: ECL 19-0301

Item 37.1:

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

CAS No: 000126-73-8

Name: TRIBUTYL PHOSPHATE

CAS No: 000298-07-7

Name: PHOSPHORIC ACID, BIS(2-ETHYLHEXYL) ESTER C16H35O4P

CAS No: 007440-02-0

Name: NICKEL METAL AND INSOLUBLE COMPOUNDS



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CAS No: 007783-06-4

Name: HYDROGEN SULFIDE

CAS No: 026896-20-8

Name: NEODECANOIC ACID

CAS No: 064742-47-8

Name: DISTILLATES (PETROLEUM), HYDROTREATED LIGHT

CAS No: 083411-71-6

Name: PHOSPHINIC ACID, BIS (2,4,4, TRIMETHYLPENTYL)

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

CAS No: 0NY510-00-0

Name: 40 CFR 63 - TOTAL METAL HAP

CAS No: 0NY998-00-0

Name: VOC

Condition 38: Malfunctions and Start-up/Shutdown Activities

Effective between the dates of 03/07/2022 and 03/06/2032

Applicable State Requirement: 6 NYCRR 201-1.4

Item 38.1:

- (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.



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- (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 39: Emission Unit Definition Effective between the dates of 03/07/2022 and 03/06/2032

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 39.1:

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

Emission Unit: U-00001 Emission Unit Description:

Hydrometallurgical processes used to extract, refine and produce nickel sulfate and cobalt sulfate from black mass concentrate. (Black mass concentrate is derived from lithium ion batteries).

Many of the pieces of process equipment identified within this permit (including other pieces of equipment that are not subject to permitting requirements) are part of a "Chemical Manufacturing Process Unit" (CMPU) as defined under 40 CFR 63, Subpart VVVVVV (Chemical Manufacturing Area Source MACT). However, only the equipment listed in Processes P1A and P1B are subject to requirements under this MACT regulation.

Condition 40: Renewal deadlines for state facility permits

Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 40.1:

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 41: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

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



Item 41.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 41.2:

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 8 6274 East Avon-Lima Rd. Avon, NY 14414

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 42: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 42.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 42.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

In accordance with 6 NYCRR 201-5.4(d), facility owner or operators may make changes that meet all of the below criteria without the prior approval of the Department:

- (1) The change is not a significant modification as described in 6 NYCRR 201-5.4(b);
- (2) The change does not cause facility emissions to exceed any emission limitation or other condition in the facility's permit or result in emissions of a regulated contaminant not previously emitted or authorized under a permit;
- (3) The change does not cause the facility (i.e., emission unit, source, or point subject to air permitting requirements) to become subject to any additional applicable requirements or regulations under this Title; and
- (4) The change does not seek to establish or change a federally-enforceable emission cap or limit, or



the monitoring, record keeping, or reporting requirement associated with the emission cap or limit.

The owner or operator of the facility must notify the Department in writing at least 15 days in advance of making each such change. Per 6 NYCRR 201-5.4(e), advance notifications must include the following information:

- (1) identification of the emission unit(s), process(es), emission source(s), and emission point(s) affected by the proposed change;
- (2) date on which the change is to occur;
- (3) description of the proposed change;
- (4) if appropriate, the identification and description of emissions control technology and compliance terms; and
- (5) the identification of all contaminants emitted by the affected emission sources and calculations of the emission rate potential, potential to emit, and projected actual annual emission rates after the proposed change.

The facility owner or operator which has made a change pursuant to 6 NYCRR 201-5.4(d) must maintain a record of the date and description of each such change at the facility, and shall include each change in the facility's next permit renewal or modification application. These records shall be maintained at the facility until the changes are incorporated into the facility's permit and must be made available for review by Department representatives upon request.

The Department may require a permit modification to impose applicable requirements or permit conditions if it determines that changes proposed pursuant to the advanced notification requirements do not meet the established criteria, or that the changes may have a significant air quality impact. In such cases, the Department shall require that the facility owner or operator not undertake the proposed changes until a permit modification is issued. The Department's determination shall include a listing of any additional information necessary to complete its review of the proposed changes.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 43: Air pollution prohibited
Effective between the dates of 03/07/2022 and 03/06/2032

Applicable State Requirement: 6 NYCRR 211.1



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Item 43.1:

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.

Condition 44: Compliance Demonstration
Effective between the dates of 03/07/2022 and 03/06/2032

Applicable State Requirement: 6 NYCRR 212-1.5 (e) (2)

Item 44.1:

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

Emission Unit: U-00001 Emission Point: EP002

Process: P1A

Regulated Contaminant(s):

CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE

COMPOUNDS

Item 44.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

In accordance with the requirements of 6 NYCRR 212-1.5(e), a process emission source that emits a high toxicity air contaminant (HTAC) regulated by a federal NESHAP under 40 CFR Part 63 satisfies the requirements of Part 212 for the regulated HTAC by:

- 1) demonstrating compliance with the requirements of the NESHAP; and
- 2) demonstrating compliance with the applicable guideline concentrations in DEC Program Policy DAR-1.

The facility owner or operator demonstrated compliance for nickel sulfate in the Toxic Impact Assessment (TIA) modeling completed at the time of initial permitting and must comply with the applicable requirements of 40 CFR 63, Subpart VVVVVV specified elsewhere in this permit.

Consistent with the emission rates used in the TIA modeling, emissions of nickel sulfate from Emission Point EP002 are limited to a post-control emission rate of 0.012 pounds per hour. This emission rate will met be through



the installation and operation of Wet Scrubber 2 (Control ID CWS02).

The facility owner or operator must conduct an initial confirmatory stack test on EP002 within 180 days of the process commencing operation to demonstrate compliance with the above limit. The inlet emission rate during the test must be determined and presented in the final test report. The inlet emission rate may be based on sampling, mass balance, flow measurements, engineering calculations, or other methodology, as appropriate. Additionally, the initial stack test conditions and historical operating data will be used to establish the acceptable scrubber liquid flow rate range to be incorporated into the permit to ensure the control device is operating properly.

Testing must be conducted using EPA Method 29 or another method acceptable to the Department. Per 6 NYCRR 202-1, a stack test protocol must be submitted to the Department at least 30 days prior to conducting the test. A stack test report must be submitted to the Department in triplicate within 60 days of completing the test.

Subsequent testing must be completed once every five calendar years. The Department may require additional testing if the facility owner or operator intends to modify the process or control device operation in a manner that could result in increased emissions.

Records of completed stack tests and supporting documentation must be kept for a period of at least five years.

Upper Permit Limit: 0.012 pounds per hour Reference Test Method: EPA Method 29 Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 45: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

Applicable State Requirement: 6 NYCRR 212-1.5 (e) (2)

Item 45.1:

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

Emission Unit: U-00001 Emission Point: EP003

Process: P1A



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Regulated Contaminant(s):

CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE

COMPOUNDS

Item 45.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

In accordance with the requirements of 6 NYCRR 212-1.5(e), a process emission source that emits a high toxicity air contaminant (HTAC) regulated by a federal NESHAP under 40 CFR Part 63 satisfies the requirements of Part 212 for the regulated HTAC by:

- 1) demonstrating compliance with the requirements of the NESHAP; and
- 2) demonstrating compliance with the applicable guideline concentrations in DEC Program Policy DAR-1.

The facility owner or operator demonstrated compliance for nickel sulfate in the Toxic Impact Assessment (TIA) modeling completed at the time of initial permitting and must comply with the applicable requirements of 40 CFR 63, Subpart VVVVVV specified elsewhere in this permit.

Consistent with the emission rates used in the TIA modeling, emissions of nickel sulfate from Emission Point EP003 are limited to a post-control emission rate of 0.00000044 pounds per hour. This emission rate will met be through the installation and operation of Wet Scrubber 3 (Control ID CWS03).

The facility owner or operator must conduct an initial confirmatory stack test on EP003 within 180 days of the process commencing operation to demonstrate compliance with the above limit. The inlet emission rate during the test must be determined and presented in the final test report. The inlet emission rate may be based on sampling, mass balance, flow measurements, engineering calculations, or other methodology, as appropriate. Additionally, the initial stack test conditions and historical operating data will be used to establish the acceptable scrubber liquid flow rate range to be incorporated into the permit to ensure the control device is operating properly.

Testing must be conducted using EPA Method 29 or another method acceptable to the Department. Per 6 NYCRR 202-1, a stack test protocol must be submitted to the Department at least 30 days prior to conducting the test. A stack test report must be submitted to the Department in triplicate



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within 60 days of completing the test.

Subsequent testing must be completed once every five calendar years. The Department may require additional testing if the facility owner or operator intends to modify the process or control device operation in a manner that could result in increased emissions.

Records of completed stack tests and supporting documentation must be kept for a period of at least five years.

Upper Permit Limit: 0.00000044 pounds per hour

Reference Test Method: EPA Method 29 Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 46: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 46.1:

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

Emission Unit: U-00001 **Emission Point: EP001** Emission Unit: U-00001 **Emission Point: EP002** Emission Unit: U-00001 **Emission Point: EP003** Emission Unit: U-00001 **Emission Point: EP004 Emission Point: EP005** Emission Unit: U-00001 Emission Unit: U-00001 **Emission Point: EP006** Emission Unit: U-00001 Emission Point: EP007 Emission Unit: U-00001 **Emission Point: EP008 Emission Point: EP009** Emission Unit: U-00001 Emission Unit: U-00001 **Emission Point: EP010** Emission Unit: U-00001 Emission Point: EP018 Emission Unit: U-00001 Emission Point: EP020 Emission Unit: U-00001 **Emission Point: EP021**



Item 46.2:

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 emission source, except only the emission of uncombined water. The Department reserves the right to perform or require the performance of an EPA Reference Test Method 9 opacity evaluation at any time during facility operation.

The facility owner or operator shall conduct a visible emissions observation of all emission points specified by this condition once per day while the process is in operation. The facility owner or operator will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard specified below.

The facility owner or operator shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the limit specified (except the emission of uncombined water) are observed for three consecutive operating days from the same emission point, the facility owner or operator will notify the Department of the observations within one business day. The facility owner or operator will also perform an EPA Reference Test Method 9 opacity evaluation analysis of the affected emission point and submit the results to the Department.

Daily records of the visible emissions observations, any follow-up Method 9 observations, investigations, and corrective actions taken are to be maintained on site for a period of at least five years from the date of the record. Such records shall include the date and time of each observation, weather conditions, results of the observation, corrective actions taken, and explanations for days when weather conditions were prohibitive.

All records kept pursuant to this condition must be provided to the Department upon request.

Parameter Monitored: OPACITY Upper Permit Limit: 20 percent

Reference Test Method: EPA Reference Test Method 9



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Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 47: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 47.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 47.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

At least 180 days, but not more than eighteen months, prior to the date of permit expiration, the facility owner or operator must submit as part of their next Air State Facility permit renewal application an air dispersion modeling protocol for Department review and approval. Within 60 days of Department approval of the protocol, the facility owner or operator must submit an update to the air dispersion modeling. This should include a review of facility process sources, their emission rates, and applicability of 6 NYCRR Part 212.

Monitoring Frequency: UPON PERMIT RENEWAL

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 48: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 48.1:

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

Emission Unit: U-00001 Emission Point: EP019

Process: P07

Regulated Contaminant(s):

CAS No: 000298-07-7

PHOSPHORIC ACID, BIS (2-ETHYLHEXYL) ESTER C16H35O4P

CAS No: 026896-20-8 NEODECANOIC ACID

CAS No: 083411-71-6

PHOSPHINIC ACID, BIS (2,4,4, TRIMETHYLPENTYL) CAS No: 000126-73-8 TRIBUTYL PHOSPHATE



Item 48.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Facility process emissions of the above air contaminants have been assigned an Environmental Rating of B or C by the Department. In accordance with the requirements of 6 NYCRR 212-2.3(b), air contaminants must demonstrate compliance with the applicable guideline concentrations in DEC Program Policy DAR-1. The facility owner or operator demonstrated compliance with the applicable DAR-1 guideline concentrations for these air contaminants in the air dispersion modeling completed at the time of initial permitting.

The Emission Rate Potential of the above air contaminants is less than 10 lbs per hour. Therefore, per Table 4 of 6 NYCRR 212-2.3(b), no emissions control is required.

The facility owner or operator must maintain records of the air dispersion modeling and supporting information for at least five years.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 49: Compliance Demonstration
Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 49.1:

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

Emission Unit: U-00001 Emission Point: EP019 Process: P07 Emission Source: CAC01

Regulated Contaminant(s):

CAS No: 064742-47-8

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT

Item 49.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Facility process emissions of petroleum distillates have been assigned an Environmental Rating of B by the



Department. In accordance with the requirements of 6 NYCRR 212-2.3(b), air contaminants must demonstrate compliance with the applicable guideline concentrations in DEC Program Policy DAR-1. The facility owner or operator demonstrated compliance with the applicable DAR-1 guideline concentrations for these air contaminants in the air dispersion modeling completed at the time of initial permitting.

Per Table 4 to 6 NYCRR 212-2.3(b), air contaminants that have been assigned an Environmental Rating of B and have an Emission Rate Potential greater than 10 lbs per hour must meet an air cleaning requirement of 90 percent (%).

To satisfy this requirement, the facility owner or operator must install and operate an activated carbon system (Control ID CAC01) on Emission Point EP019 to control petroleum distillate emissions from Process P07. The activated carbon system will consist of two (2) carbon beds in series with a total control efficiency of at least 90%. To ensure the activated carbon system is properly operating, the Total Hydrocarbon (THC) concentration at the outlet of the primary (first in series) bed must not exceed 20 ppm of THC.

To demonstrate compliance with this limit, the facility owner or operator must continuously monitor the THC concentration at the outlet of the primary carbon bed. THC concentration readings must be recorded at a minimum of once every 15 minutes. The THC monitoring device must be calibrated and maintained according to the manufacturer's recommendations and/or established operating procedures.

Once the outlet concentration in the primary bed reaches 20 ppm of THC, the primary bed will be removed and the secondary bed will be moved to the primary position. A new (fresh activated carbon) bed will be placed in the secondary position.

The facility owner or operator must maintain records of THC readings, calibration/maintenance of the THC monitoring device, and the date of carbon bed switch/replacement. Records must be kept for a minimum of at least five years and made available to the Department upon request.

This breakthrough monitoring limit is based on the activated carbon system initial manufacturer design specifications. Within one year of process startup the facility owner or operator must submit an engineering



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evaluation to the Department to reevaluate the breakthrough monitoring limit above. This evaluation must be based on a combination of actual operating data, THC readings, and test data, as appropriate. The Department may require confirmatory performance testing of the carbon bed system upon request to verify this limit.

Parameter Monitored: CONCENTRATION

Upper Permit Limit: 20 parts per million (by volume)

Monitoring Frequency: CONTINUOUS

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE -

SEE MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 50: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 50.1:

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

Emission Unit: U-00001 Emission Point: EP021

Process: P03

Regulated Contaminant(s):

CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE

COMPOUNDS

Item 50.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

Facility process emissions of nickel sulfate have been assigned an Environmental Rating of A by the Department. In accordance with the requirements of 6 NYCRR 212-2.3(b), air contaminants assigned an Environmental Rating of A with an Emission Rate Potential less than 0.1 lbs per hour must demonstrate compliance with the applicable guideline concentrations in DEC Program Policy DAR-1. The facility owner or operator demonstrated compliance for nickel sulfate in the air dispersion modeling completed at the time of initial permitting.

Consistent with the emission rates used in the modeling, emissions of nickel sulfate from Emission Point EP021 are limited to a post-control emission rate of 0.00039 pounds per hour based on a design control efficiency of 99 percent (%). This emission rate will met be through the installation and operation of Dust Collector 9 (Control ID



CDC09).

The facility owner or operator must conduct an initial confirmatory stack test on EP021 within 180 days of the process commencing operation to demonstrate compliance with the above limit. The inlet emission rate during the test must be determined and presented in the final test report. The inlet emission rate may be based on sampling, mass balance, flow measurements, engineering calculations, or other methodology, as appropriate. Additionally, the initial stack test conditions along with the historical performance will be used to establish the acceptable pressure drop range to be incorporated into the permit to ensure the control device is operating properly.

Testing must be conducted using EPA Method 29 or another method acceptable to the Department. Per 6 NYCRR 202-1, a stack test protocol must be submitted to the Department at least 30 days prior to conducting the test. A stack test report must be submitted to the Department in triplicate within 60 days of completing the test.

Subsequent testing must be completed once every five calendar years. The Department may require additional testing if the facility owner or operator intends to modify the process or control device operation in a manner that could result in increased emissions.

Records of completed stack tests and supporting documentation must be kept for a period of at least five years.

Parameter Monitored: NICKEL METAL AND INSOLUBLE COMPOUNDS

Upper Permit Limit: 0.00039 pounds per hour Reference Test Method: EPA Method 29 Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 51: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 51.1:

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

Emission Unit: U-00001 Emission Point: EP001

Process: P02



Regulated Contaminant(s):

CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE

COMPOUNDS

Item 51.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

Facility process emissions of nickel sulfate have been assigned an Environmental Rating of A by the Department. In accordance with the requirements of 6 NYCRR 212-2.3(b), air contaminants assigned an Environmental Rating of A with an Emission Rate Potential less than 0.1 lbs per hour must demonstrate compliance with the applicable guideline concentrations in DEC Program Policy DAR-1. The facility owner or operator demonstrated compliance for nickel sulfate in the air dispersion modeling completed at the time of initial permitting.

Consistent with the emission rates used in the modeling, emissions of nickel sulfate from Emission Point EP001 are limited to a post-control emission rate of 0.00021 pounds per hour based on a design control efficiency of 99 percent (%). This emission rate will met be through the installation and operation of Wet Scrubber 1 (Control ID CWS01).

The facility owner or operator must conduct an initial confirmatory stack test on EP001 within 180 days of the process commencing operation to demonstrate compliance with the above limit. The inlet emission rate during the test must be determined and presented in the final test report. The inlet emission rate may be based on sampling, mass balance, flow measurements, engineering calculations, or other methodology, as appropriate. Additionally, the initial stack test conditions along with the historical performance data will be used to establish the acceptable scrubber liquid flow rate range to be incorporated into the permit to ensure the control device is operating properly.

Testing must be conducted using EPA Method 29 or another method acceptable to the Department. Per 6 NYCRR 202-1, a stack test protocol must be submitted to the Department at least 30 days prior to conducting the test. A stack test report must be submitted to the Department in triplicate within 60 days of completing the test.

Subsequent testing must be completed once every five calendar years. The Department may require additional testing if the facility owner or operator intends to



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modify the process or control device operation in a manner that could result in increased emissions.

Records of completed stack tests and supporting documentation must be kept for a period of at least five years.

Parameter Monitored: NICKEL METAL AND INSOLUBLE COMPOUNDS

Upper Permit Limit: 0.00021 pounds per hour Reference Test Method: EPA Method 29 Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 52: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 52.1:

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

Emission Unit: U-00001 Emission Point: EP020

Process: P03

Regulated Contaminant(s):

CAS No: 007440-02-0 NICKEL METAL AND INSOLUBLE

COMPOUNDS

Item 52.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

Facility process emissions of nickel sulfate been assigned an Environmental Rating of A by the Department. In accordance with the requirements of 6 NYCRR 212-2.3(b), air contaminants must demonstrate compliance with the applicable guideline concentrations in DEC Program Policy DAR-1. The facility owner or operator demonstrated compliance for nickel sulfate in the air dispersion modeling completed at the time of initial permitting.

Per Table 4 to 6 NYCRR 212-2.3(b), air contaminants assigned an Environmental Rating of A with an Emission Rate Potential greater than or equal to 10 lbs per hour but less than or equal to 25 lbs per hour must meet an air cleaning requirement of 99.5 percent (%).

To satisfy this requirement, the facility owner or



operator must install and operate a dust collector (Control ID CDC08) to control emissions of nickel sulfate from Emission Point EP020. Consistent with the emission rate used in the modeling and the design outlet emission rate, emissions of nickel sulfate from EP020 are limited to a post-control emission rate of 0.010 pounds per hour.

The facility owner or operator must conduct an initial confirmatory stack test on EP020 within 180 days of the process commencing operation to demonstrate compliance with the above limit. The inlet emission rate during the test must be determined and presented in the final test report. The inlet emission rate may be based on sampling, mass balance, flow measurements, engineering calculations, or other methodology, as appropriate. Additionally, the initial stack test conditions along with the historical performance date will be used to establish the acceptable pressure drop range to be incorporated into the permit to ensure the control device is operating properly.

Testing must be conducted using EPA Method 29 or another method acceptable to the Department. Per 6 NYCRR 202-1, a stack test protocol must be submitted to the Department at least 30 days prior to conducting the test. A stack test report must be submitted to the Department in triplicate within 60 days of completing the test.

Subsequent testing must be completed once every five calendar years. The Department may require additional testing if the facility owner or operator intends to modify the process or control device operation in a manner that could result in increased emissions.

Records of completed stack tests and supporting documentation must be kept for a period of at least five years.

Parameter Monitored: NICKEL METAL AND INSOLUBLE COMPOUNDS

Upper Permit Limit: 0.010 pounds per hour Reference Test Method: EPA Method 29 Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 53: Compliance Demonstration
Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 53.1:



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

Emission Unit: U-00001 Emission Point: EP018 Process: P06 Emission Source: CCS01

Regulated Contaminant(s):

CAS No: 007783-06-4 HYDROGEN SULFIDE

Item 53.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Facility process emissions of hydrogen sulfide have been assigned an Environmental Rating of B by the Department. In accordance with the requirements of 6 NYCRR 212-2.3(b), air contaminants must demonstrate compliance with the applicable guideline concentrations in DEC Program Policy DAR-1. The facility owner or operator demonstrated compliance with the applicable DAR-1 guideline concentrations for hydrogen sulfide in the air dispersion modeling completed at the time of initial permitting.

Per Table 4 to 6 NYCRR 212-2.3(b), for air contaminants assigned an Environmental Rating of B with an Emission Rate Potential less than 10 lbs per hour no emission control is required. However, the facility has opted to control emissions of hydrogen sulfide from Emission Point EP018 using a caustic scrubber (Control ID CCS01).

To demonstrate on-going compliance and ensure proper operation of Caustic Scrubber 1 (Control ID CCS01), the pH of the scrubber liquid must be continuously monitored and maintained at or above 10.0 pH units, while the process is in operation. pH readings must be recorded at a minimum of once per hour. The pH probe(s) must be calibrated and maintained according to the manufacturer's recommendations and/or established operating procedures.

Records of hourly scrubber liquid pH readings and pH probe(s) calibration/maintenance must be kept on-site for a period of at least five years and made available to the Department upon request.

Parameter Monitored: PH

Lower Permit Limit: 10 pH (STANDARD) units

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED



VALUE AT ANY TIME

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 54: Compliance Demonstration

Effective between the dates of 03/07/2022 and 03/06/2032

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

Item 54.1:

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

Emission Unit: U-00001 Emission Point: EP018

Process: P06

Regulated Contaminant(s):

CAS No: 007783-06-4 HYDROGEN SULFIDE

Item 54.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

Facility process emissions of hydrogen sulfide have been assigned an Environmental Rating of B by the Department. In accordance with the requirements of 6 NYCRR 212-2.3(b), air contaminants must demonstrate compliance with the applicable guideline concentrations in DEC Program Policy DAR-1. The facility owner or operator demonstrated compliance with the applicable DAR-1 guideline concentrations for hydrogen sulfide in the air dispersion modeling completed at the time of initial permitting.

Per Table 4 to 6 NYCRR 212-2.3(b), for air contaminants assigned an Environmental Rating of B with an Emission Rate Potential less than 10 lbs per hour, no emission control is required. However, the facility has opted to control emissions of hydrogen sulfide from Emission Point EP018 using a caustic scrubber (Control ID CCS01).

Consistent with the emission rate used in the modeling, emissions of hydrogen sulfide from Emission Point EP018 are limited to a post-control emission rate of 0.054 pounds per hour based on a design control efficiency of 95 percent (%). This emission rate will met be through the installation and operation of Caustic Scrubber 1 (Control ID CCS01).

The facility owner or operator must conduct an initial confirmatory stack test on EP018 within 180 days of the



process commencing operation to demonstrate compliance with the above limit. The inlet emission rate during the test must be determined and presented in the final test report. The inlet emission rate may be based on sampling, mass balance, flow measurements, engineering calculations, or other methodology, as appropriate. Additionally, the initial stack test conditions along with historical performance data will be used to establish the acceptable scrubber liquid flow rate and pH ranges to be incorporated into the permit to ensure the control device is operating properly.

Testing must be conducted using EPA Method 15 or another method acceptable to the Department. Per 6 NYCRR 202-1, a stack test protocol must be submitted to the Department at least 30 days prior to conducting the test. A stack test report must be submitted to the Department in triplicate within 60 days of completing the test.

Subsequent testing must be completed once every 10 calendar years. The Department may require additional testing if the facility owner or operator intends to modify the process or control device operation in a manner that could result in increased emissions.

Records of completed stack tests and supporting documentation must be kept for a period of at least ten years. Records must be made available to the Department upon request.

By demonstrating compliance with the DAR-1 Short-term guideline concentration the facility has demonstrated compliance with the 6 NYCRR 257-5 ambient standard for hydrogen sulfide.

Upper Permit Limit: 0.054 pounds per hour Reference Test Method: EPA Method 15

Monitoring Frequency: ONCE EVERY TEN YEARS Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 55: Compliance Demonstration Effective between the dates of 03/07/2022 and 03/06/2032

Applicable State Requirement: 6 NYCRR 257-5.3

Item 55.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 007783-06-4 HYDROGEN SULFIDE



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Item 55.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

In accordance with 6 NYCRR 257-5.3, the average hourly off-site concentration of hydrogen sulfide shall not exceed 0.010 ppm (14 micrograms/cubic meter). The facility owner or operator demonstrated compliance for hydrogen sulfide in the air dispersion modeling at the time of initial permitting.

To demonstrate on-going compliance with this standard, the facility owner or operator must comply with the testing and monitoring requirements for hydrogen sulfide under 6 NYCRR 212-2.3(b) that are specified elsewhere in this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**** Emission Unit Level ****

Condition 56: Emission Point Definition By Emission Unit Effective between the dates of 03/07/2022 and 03/06/2032

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 56.1:

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

Emission Unit: U-00001

Emission Point: EP001

Height (ft.): 65 Diameter (in.): 22 NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP002

Height (ft.): 99 Diameter (in.): 17 NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP003

Height (ft.): 85 Diameter (in.): 10 NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP004

Height (ft.): 80 Diameter (in.): 12 NYTMN (km.): 4785.156 NYTME (km.): 283.093



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Emission Point: EP005

Height (ft.): 65 Diameter (in.): 8

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP006

Height (ft.): 65 Diameter (in.): 29 NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP007

Height (ft.): 62 Diameter (in.): 8

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP008

Height (ft.): 62 Diameter (in.): 8

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP009

Height (ft.): 10 Diameter (in.): 27

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP010

Height (ft.): 10 Diameter (in.): 12

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP011

Height (ft.): 49 Diameter (in.): 13

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP012

Height (ft.): 80 Diameter (in.): 12

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP013

Height (ft.): 32 Diameter (in.): 4

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP014

Height (ft.): 52 Diameter (in.): 8

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP015

Height (ft.): 12 Diameter (in.): 8

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP016

Height (ft.): 40 Diameter (in.): 3

NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP017

Height (ft.): 40 Diameter (in.): 3

NYTMN (km.): 4785.156 NYTME (km.): 283.093



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Emission Point: EP018

Height (ft.): 49 Diameter (in.): 26 NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP019

Height (ft.): 95 Diameter (in.): 26 NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP020

Height (ft.): 99 Diameter (in.): 10 NYTMN (km.): 4785.156 NYTME (km.): 283.093

Emission Point: EP021

Height (ft.): 65 Diameter (in.): 10 NYTMN (km.): 4785.156 NYTME (km.): 283.093

Condition 57: Process Definition By Emission Unit Effective between the dates of 03/07/2022 and 03/06/2032

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 57.1:

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

Emission Unit: U-00001

Process: P02 Source Classification Code: 3-01-070-02

Process Description:

Process emission sources subject to 6 NYCRR Part 212 with particulate emissions only. Emissions are controlled using

wet scrubbers.

Emission Source/Control: CWS01 - Control

Control Type: WET SCRUBBER

Emission Source/Control: S0502 - Process

Emission Source/Control: S0503 - Process

Emission Source/Control: S0504 - Process

Emission Source/Control: S0602 - Process

Emission Source/Control: S0603 - Process

Emission Source/Control: S0604 - Process

Item 57.2:

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

Emission Unit: U-00001

Process: P03 Source Classification Code: 3-01-070-02

Process Description:



Permit ID: 8-2628-01165/00001 Facility DEC ID: 8262801165

Process emissions sources subject to 6 NYCRR Part 212 with particulate emissions only. Emissions are controlled using dust collectors.

Emission Source/Control: CDC01 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CDC02 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CDC03 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CDC04 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CDC05 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CDC06 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CDC07 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CDC08 - Control

Control Type: FABRIC FILTER

Emission Source/Control: CDC09 - Control

Control Type: FABRIC FILTER

Emission Source/Control: S0109 - Process

Emission Source/Control: S0211 - Process

Emission Source/Control: S0701 - Process

Emission Source/Control: S0702 - Process

Emission Source/Control: S0703 - Process

Emission Source/Control: S0801 - Process

Emission Source/Control: S0802 - Process

Emission Source/Control: S0803 - Process

Emission Source/Control: S0804 - Process

Emission Source/Control: S0805 - Process

Emission Source/Control: S0806 - Process



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Emission Source/Control: S0807 - Process

Emission Source/Control: S0808 - Process

Emission Source/Control: S0901 - Process

Emission Source/Control: S0902 - Process

Item 57.3:

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

Emission Unit: U-00001

Process: P04 Source Classification Code: 3-01-070-02

Process Description:

Process emissions sources subject to 6 NYCRR Part 212 with emissions of acid gases. Emissions are controlled

using a wet scrubber.

Emission Source/Control: CWS04 - Control

Control Type: WET SCRUBBER

Emission Source/Control: S0104 - Process

Emission Source/Control: S0105 - Process

Emission Source/Control: S0106 - Process

Emission Source/Control: S0107 - Process

Item 57.4:

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

Emission Unit: U-00001

Process: P05 Source Classification Code: 3-01-070-02

Process Description:

Process emissions sources subject to 6 NYCRR Part 212 with emissions of acid gases. Emissions are uncontrolled.

Emission Source/Control: S0108 - Process

Emission Source/Control: S0201 - Process

Emission Source/Control: S0704 - Process

Emission Source/Control: S0809 - Process

Emission Source/Control: S0903 - Process

Emission Source/Control: S0904 - Process

Item 57.5:



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

Emission Unit: U-00001

Process: P06 Source Classification Code: 3-01-070-02

Process Description:

Process emissions sources subject to 6 NYCRR Part 212 with emissions of hydrogen sulfide. Emissions are

controlled using a caustic scrubber.

Emission Source/Control: CCS01 - Control

Control Type: WET SCRUBBER

Emission Source/Control: S0202 - Process

Emission Source/Control: S0203 - Process

Emission Source/Control: S0204 - Process

Emission Source/Control: S0205 - Process

Emission Source/Control: S0206 - Process

Emission Source/Control: S0207 - Process

Emission Source/Control: S0208 - Process

Emission Source/Control: S0209 - Process

Emission Source/Control: S0210 - Process

Item 57.6:

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

Emission Unit: U-00001

Process: P07 Source Classification Code: 3-01-070-02

Process Description:

Process emission sources subject to 6 NYCRR Part 212 with emissions of VOCs. Emissions are controlled using an activated carbon system consisting of two (2) carbon beds

in series.

Emission Source/Control: CAC01 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: S0401 - Process

Emission Source/Control: S0402 - Process

Emission Source/Control: S0403 - Process

Emission Source/Control: S0404 - Process



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Emission Source/Control: S0405 - Process

Emission Source/Control: S0406 - Process

Emission Source/Control: S0407 - Process

Emission Source/Control: S0408 - Process

Emission Source/Control: S0409 - Process

Emission Source/Control: S0410 - Process

Emission Source/Control: S0411 - Process

Emission Source/Control: S0412 - Process

Emission Source/Control: S0505 - Process

Emission Source/Control: S0506 - Process

Emission Source/Control: S0507 - Process

Emission Source/Control: S0508 - Process

Emission Source/Control: S0509 - Process

Emission Source/Control: S0510 - Process

Emission Source/Control: S0511 - Process

Emission Source/Control: S0512 - Process

Emission Source/Control: S0513 - Process

Emission Source/Control: S0514 - Process

Emission Source/Control: S0515 - Process

Emission Source/Control: S0516 - Process

Emission Source/Control: S0605 - Process

Emission Source/Control: S0606 - Process

Emission Source/Control: S0607 - Process

Emission Source/Control: S0608 - Process

Emission Source/Control: S0609 - Process

Emission Source/Control: S0610 - Process



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Emission Source/Control: S0611 - Process

Emission Source/Control: S0612 - Process

Emission Source/Control: S0613 - Process

Emission Source/Control: S0614 - Process

Emission Source/Control: S0615 - Process

Emission Source/Control: S0616 - Process

Emission Source/Control: S0617 - Process

Item 57.7:

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

Emission Unit: U-00001

Process: P1A Source Classification Code: 3-01-070-02

Process Description:

Process emission sources that are part of a Chemical Manufacturing Process Unit and are subject to control requirements under 40 CFR 63, Subpart VVVVVV for solid metal HAP. Emissions are controlled by wet scrubbers.

scrubbers.

Emission sources are also subject to 6 NYCRR Part 212.

Emission Source/Control: CWS02 - Control

Control Type: WET SCRUBBER

Emission Source/Control: CWS03 - Control

Control Type: WET SCRUBBER

Emission Source/Control: S0501 - Process

Emission Source/Control: S0601 - Process

Item 57.8:

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

Emission Unit: U-00001

Process: P1B Source Classification Code: 3-01-070-02

Process Description:

Process equipment that is part of a Chemical Manufacturing Process Unit and subject to limited work practice requirements under 40 CFR 63, Subpart VVVVVV however, does not qualify as an "emission source". This equipment handles solid materials that contain metal HAP, however does not result in emissions to the outdoor atmosphere. Dust emissions from this process is controlled by dust collectors that exhaust back into the building.



Permit ID: 8-2628-01165/00001 Facility DEC ID: 8262801165

Emission Source/Control: S0101 - Process

Emission Source/Control: S0102 - Process

Emission Source/Control: S0103 - Process



Permit ID: 8-2628-01165/00001 Facility DEC ID: 8262801165