

Facility DEC ID: 7034600225

**PERMIT**  
**Under the Environmental Conservation Law (ECL)**

**IDENTIFICATION INFORMATION**

Permit Type: Air State Facility  
Permit ID: 7-0346-00225/00001  
Mod 0 Effective Date: 09/30/2021 Expiration Date: 09/29/2031  
Mod 1 Effective Date: 06/30/2022 Expiration Date: 09/29/2031

Permit Issued To: IMPERIUM3 NEW YORK INC  
SUNY BINGHAMTON  
2226 CENTER OF EXCELLENCE  
BINGHAMTON, NY 13902

Contact: WILLIAM SHANNON  
2228 COE  
45 Murray Hill Rd  
Vestal, NY 13850  
(650) 453-8350

Facility: IMPERIUM 3NY  
1301 CLARK ST  
ENDICOTT, NY 13760

Description:  
This is an application for a minor modification to the air state facility permit for a lithium-ion battery production facility.

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: ELIZABETH A TRACY  
615 ERIE BLVD W  
SYRACUSE, NY 13204-2400

Authorized Signature: \_\_\_\_\_ Date: \_\_\_ / \_\_\_ / \_\_\_\_

Facility DEC ID: 7034600225

### 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.

Facility DEC ID: 7034600225

**PAGE LOCATION OF CONDITIONS**

**PAGE**

**DEC GENERAL CONDITIONS**

**General Provisions**

- 4 1 Facility Inspection by the Department
- 4 2 Relationship of this Permit to Other Department Orders and Determinations
- 4 3 Applications for permit renewals, modifications and transfers
- 5 4 Permit modifications, suspensions or revocations by the Department

**Facility Level**

- 5 5 Submission of application for permit modification or renewal-REGION 7 HEADQUARTERS

Facility DEC ID: 7034600225

**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.

**Item 3.2:**

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

**Item 3.3**

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

Facility DEC ID: 7034600225

**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 7 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 7 Headquarters  
Division of Environmental Permits  
615 Erie Blvd West  
Syracuse, NY 13204-2400  
(315) 426-7400

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**Permit Under the Environmental Conservation Law (ECL)**

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: IMPERIUM3 NEW YORK INC  
SUNY BINGHAMTON  
2226 CENTER OF EXCELLENCE  
BINGHAMTON, NY 13902

Facility: IMPERIUM 3NY  
1301 CLARK ST  
ENDICOTT, NY 13760

Authorized Activity By Standard Industrial Classification Code:  
3692 - PRIMARY BATTERIES, DRY AND WET

Mod 0 Permit Effective Date: 09/30/2021

Permit Expiration Date: 09/29/2031

Mod 1 Permit Effective Date: 06/30/2022

Permit Expiration Date: 09/29/2031

**PAGE LOCATION OF CONDITIONS**

**PAGE**

**FEDERALLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 7 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 7 2 6 NYCRR 200.7: Maintenance of Equipment
- 7 3 6 NYCRR 200.6: Compliance Demonstration
- 8 1-1 6 NYCRR 200.7: Compliance Demonstration
- 9 5 6 NYCRR 211.2: Visible Emissions Limited
- 9 1-2 6 NYCRR 212-1.6 (a): Compliance Demonstration
- 10 1-3 6 NYCRR 212-1.7 (b): Compliance Demonstration
- 11 1-4 6 NYCRR 212-1.7 (b): Compliance Demonstration
- 11 1-5 6 NYCRR 212-1.7 (b): Compliance Demonstration
- 12 1-6 6 NYCRR 212-1.7 (b): Compliance Demonstration
- 13 7 6 NYCRR 212-1.7 (b): Compliance Demonstration
- 14 1-7 6 NYCRR 212-2.4 (b): Compliance Demonstration
- 15 1-8 6 NYCRR 228-1.3 (a): Compliance Demonstration
- 16 11 6 NYCRR 228-1.3 (b) (1): Compliance Demonstration
- 17 12 6 NYCRR 228-1.6 (f): Compliance Demonstration

**Emission Unit Level**

**EU=1-LTHBT,Proc=CAT,ES=CATCT**

- 18 13 6 NYCRR 228-1.3 (d): Compliance Demonstration
- 19 14 6 NYCRR 228-1.5 (c): Compliance Demonstration

**EU=1-LTHBT,EP=STCK5**

- 20 15 6 NYCRR 212-2.1 (b): Compliance Demonstration
- 21 16 6 NYCRR 212-2.1 (b): Compliance Demonstration

**STATE ONLY ENFORCEABLE CONDITIONS**

**Facility Level**

- 23 18 ECL 19-0301: Contaminant List
- 24 1-9 6 NYCRR 201-1.4: Malfunctions and Start-up/Shutdown Activities
- 25 20 6 NYCRR Subpart 201-5: Emission Unit Definition
- 25 21 6 NYCRR Subpart 201-5: Compliance Demonstration
- 25 22 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 26 1-10 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 27 23 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 28 26 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 28 27 6 NYCRR 211.1: Air pollution prohibited
- 28 28 6 NYCRR 212-2.1: Compliance Demonstration

**Emission Unit Level**

- 29 29 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
- 29 30 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

**EU=1-LTHBT,EP=STCK5**

- 31 31 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 32 32 6 NYCRR 201-5.3 (c): Compliance Demonstration

**Permit ID: 7-0346-00225/00001**

**Facility DEC ID: 7034600225**



Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**FEDERALLY ENFORCEABLE CONDITIONS**

Mod 1/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,

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

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**

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**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)**

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

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 09/30/2021 and 09/29/2031**

**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 09/30/2021 and 09/29/2031**

**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: Compliance Demonstration**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

**Applicable Federal Requirement:6 NYCRR 200.6**

**Item 3.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 3.2:**

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

No later than 180 days after the effective date of this permit and prior to commencing operation, the owner or operator shall submit to the Department a plan to minimize the risk of fire. The plan shall address proper storage, handling and transportation. The owner or operator shall review fire suppression techniques employed at other lithium ion battery facilities and include in the plan as appropriate.

This plan shall be updated annually as needed.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

**Condition 1-1: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 09/29/2031**

**Applicable Federal Requirement: 6 NYCRR 200.7**

**Replaces Condition(s) 4**

**Item 1-1.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 1-1.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

1. The owner or operator shall submit to the DEC, no later than 180 days after commencing operation, a Operation and Maintenance Plan for the emission control equipment and emission capture systems, including exhaust recycle flows; used at the facility.
2. The plan shall include:
  - i) operating ranges for each condenser, fabric filter, activated carbon bed, and dust collector;
  - ii) a preventive maintenance checklist for each control device and capture system; and
  - iii) a plan, including schedule, for calibrating each temperature monitoring device.

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

- 3. Maintenance activities shall be recorded in a log.
- 4. The owner or operator shall state, in the annual certification, whether he or she has complied with this condition.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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 5: Visible Emissions Limited**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

**Applicable Federal Requirement:6 NYCRR 211.2**

**Item 5.1:**

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 1-2: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 09/29/2031**

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

**Replaces Condition(s) 6**

**Item 1-2.1:**

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

- Emission Unit: 1-LTHBT                      Emission Point: STCK5
- Emission Unit: 1-LTHBT                      Emission Point: STK11

**Item 1-2.2:**

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

- 1. No person shall cause or allow emissions to the outdoor atmosphere having an average opacity of 20 percent or greater for any consecutive six-minute period from any emission source subject to this Subpart.

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

2. Compliance shall be determined using EPA Method 9. Testing shall be conducted at the request of the Department.

Parameter Monitored: OPACITY  
 Upper Permit Limit: 20 percent  
 Reference Test Method: 40CFR Part 60 Appendix A Method 9  
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION  
 Averaging Method: 6-MINUTE AVERAGE (METHOD 9)  
 Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 1-3: Compliance Demonstration**  
 Effective between the dates of 06/30/2022 and 09/29/2031

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

**Item 1-3.1:**

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

Emission Unit: 1-LTHBT  
 Process: ELC Emission Source: CARB4

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

**Item 1-3.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The second carbon bed in series (CARB4) associated with the electrolyte filling operation will be equipped with a breakthrough detector. The breakthrough detector is a functional indicator that has an oxidizing granular material suspended within a transparent tube. When an oxidizable substance reaches the indicator, a color change from violet to brown/black will be clearly visible.

Imperium will conduct daily visual inspections of the breakthrough detector. If any color change is noted during a daily visual inspection, Imperium will initiate changeout of the carbon within 3 hours of detection of color change. The facility will maintain records of the daily visual inspections and carbon replacement. If both carbon beds in series should indicate color change at the same time, the process shall be shutdown as soon as possible and the Department must be notified of the deviation.

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

Monitoring Frequency: DAILY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 1-4: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 09/29/2031**

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

**Item 1-4.1:**

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

Emission Unit: 1-LTHBT

Process: CAT

Emission Source: CARB2

Regulated Contaminant(s):

CAS No: 000872-50-4      1-METHYL-2-PYRROLIDONE

**Item 1-4.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The second carbon bed in series (CARB2) associated with the cathode coating operations will be equipped with a breakthrough detector. The breakthrough detector is a functional indicator that has an oxidizing granular material suspended within a transparent tube. When an oxidizable substance reaches the indicator, a color change from violet to brown/black will be clearly visible.

Imperium will conduct daily visual inspections of the breakthrough detector. If any color change is noted during a daily visual inspection, Imperium will initiate changeout of the carbon within 3 hours of detection of color change. The facility will maintain records of the daily visual inspections and carbon replacement. If both carbon beds in series should indicate color change at the same time, the process shall be shutdown as soon as possible and the Department must be notified of the deviation.

Monitoring Frequency: DAILY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 1-5: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 09/29/2031**



Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**Applicable Federal Requirement:6 NYCRR 212-1.7 (b)****Item 1-5.1:**

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

Emission Unit: 1-LTHBT

Process: CAT

Emission Source: CARB1

Regulated Contaminant(s):

CAS No: 000872-50-4

1-METHYL-2-PYRROLIDONE

**Item 1-5.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The first carbon bed in series (CARB1) associated with the cathode coating operations will be equipped with a breakthrough detector. The breakthrough detector is a functional indicator that has an oxidizing granular material suspended within a transparent tube. When an oxidizable substance reaches the indicator, a color change from violet to brown/black will be clearly visible.

Imperium will conduct daily visual inspections of the breakthrough detector. If any color change is noted during a daily visual inspection, the exhaust from the condenser will be rerouted to the second carbon bed (CARB2) and Imperium will initiate changeout of the carbon within 3 hours of detection of color change. After the carbon has been replaced the condenser exhaust will be rerouted back to the first carbon bed. The facility will maintain records of the daily visual inspections and carbon replacement. If both carbon beds in series should indicate color change at the same time, the process shall be shutdown as soon as possible and the Department must be notified of the deviation.

Monitoring Frequency: DAILY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 1-6: Compliance Demonstration****Effective between the dates of 06/30/2022 and 09/29/2031****Applicable Federal Requirement:6 NYCRR 212-1.7 (b)****Item 1-6.1:**

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

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

Emission Unit: 1-LTHBT

Process: ELC

Emission Source: CARB3

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

**Item 1-6.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The first carbon bed in series (CARB3) associated with the electrolyte filling operation will be equipped with a breakthrough detector. The breakthrough detector is a functional indicator that has an oxidizing granular material suspended within a transparent tube. When an oxidizable substance reaches the indicator, a color change from violet to brown/black will be clearly visible.

Imperium will conduct daily visual inspections of the breakthrough detector. If any color change is noted during a daily visual inspection, the exhaust from the electrolyte filling will be rerouted to the second carbon bed (CARB4) and Imperium will initiate changeout of the carbon within 3 hours of detection of color change.

After the carbon has been replaced, the electrolyte filling exhaust will be rerouted back to the first carbon bed. The facility will maintain records of the daily visual inspections and carbon replacement. If both carbon beds in series should indicate color change at the same time, the process shall be shutdown as soon as possible and the Department must be notified of the deviation.

Monitoring Frequency: DAILY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 7: Compliance Demonstration**

**Effective between the dates of 09/30/2021 and 09/29/2031**

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

**Item 7.1:**

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 1-LTHBT

Emission Point: STCK5

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**Item 7.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

1. The owner or operator shall install, calibrate, operate and maintain a device for measuring and recording the exhaust gas temperature of the refrigerated condenser.
2. The condenser shall be operated at or below the temperature recorded during the most recent compliant emission test, looking forward, at all times when electrolyte is used in the secondary filling station. The averaging period shall be each three hour block period.
3. The owner or operator shall notify the DEC of each period when the condenser outlet temperature does not satisfy the criteria in Item 1 above, including discharges when the condenser is not operating. Such notifications shall be made no later than 48 hours after becoming aware of such occurrence, and shall be reported in writing no later than 30 days after such occurrence. The notification shall state the date and time of such period of noncompliance, the duration of such excess emission, the cause and the corrective action taken, if any.
4. The owner or operator shall measure and record the amount of solvent recovered from each condenser on a weekly or monthly basis. The percentage of solvent recovered, compared the the solvent used during coating, shall be computed and recorded.
5. The owner or operator shall, in the annual certification, state whether he or she has complied with this requirement.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

**Condition 1-7: Compliance Demonstration****Effective between the dates of 06/30/2022 and 09/29/2031****Applicable Federal Requirement:6 NYCRR 212-2.4 (b)****Replaces Condition(s) 9****Item 1-7.1:**

The Compliance Demonstration activity will be performed for the facility:

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

The Compliance Demonstration applies to:

Emission Unit: 1-LTHBT                      Emission Point: STCK5

Emission Unit: 1-LTHBT                      Emission Point: STK11

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

**Item 1-7.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility consists of multiple general process sources that are subject to the particulate limit of Part 212. No particulate emissions are expected; this condition is being included for completeness.

1. The facility owner or operator shall not 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.
2. Compliance shall be determined through emissions testing conducted in accordance with a protocol approved by the DEC and 6 NYCRR 202-1.
3. Testing shall be conducted at the request of the DEC.

Parameter Monitored: PARTICULATES  
 Upper Permit Limit: 0.05 grains per cubic foot  
 Reference Test Method: 40 CFR Part 60 App A, Method 5  
 Monitoring Frequency: UPON REQUEST OF REGULATORY AGENCY  
 Averaging Method: Arithmetic average of stack test runs  
 Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 1-8: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 09/29/2031**

**Applicable Federal Requirement: 6 NYCRR 228-1.3 (a)**

**Replaces Condition(s) 10**

**Item 1-8.1:**

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

Emission Unit: 1-LTHBT                      Emission Point: STCK4

**Item 1-8.2:**

Compliance Demonstration shall include the following monitoring:

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

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

Monitoring Description:

1. No person shall cause or allow emissions to the outdoor atmosphere having an average opacity of 20 percent or greater for any consecutive six-minute period from any emission source subject to this Subpart.
2. Compliance shall be determined using EPA Method 9. Testing shall be conducted at the request of the Department.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: 40CFR Part 60 Appendix A Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 11: Compliance Demonstration**  
Effective between the dates of 09/30/2021 and 09/29/2031

**Applicable Federal Requirement: 6 NYCRR 228-1.3 (b) (1)**

**Item 11.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 11.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator must maintain and, upon request, provide the department with a certification which lists the parameters used to determine the actual VOC content of each as applied coating used at the facility. In addition, purchase, usage and/or production records of the coating material, including solvents, must be maintained in a format acceptable to the department and, upon request, these records must be submitted to the department within 90 days of receiving the request. Any additional information required to determine compliance with this Part must be provided to the department in a format acceptable to the department. All records required by this paragraph must be maintained at the facility for a period of five years.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING  
DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**Condition 12: Compliance Demonstration**

Effective between the dates of 09/30/2021 and 09/29/2031

**Applicable Federal Requirement: 6 NYCRR 228-1.6 (f)**

**Item 12.1:**

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

Emission Unit: 1-LTHBT

Emission Point: STCK4

**Item 12.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

1. The owner or operator shall install, calibrate, operate and maintain a device for measuring and recording the exhaust gas temperature of the refrigerated condenser.
2. The condenser shall be operated at or below the temperature recorded during the most recent compliant emission test, looking forward, at all times when NMP is used in the coating formulation. The averaging period shall be each three hour block period.
3. The owner or operator shall notify the DEC of each period when the condenser outlet temperature does not satisfy the criteria in Item 1 above, including discharges when the condenser is not operating. Such notifications shall be made no later than 48 hours after becoming aware of such occurrence, and shall be reported in writing no later than 30 days after such occurrence. The notification shall state the date and time of such period of noncompliance, the duration of such excess emission, the cause and the corrective action taken, if any.
3. The owner or operator shall, in the annual certification, state whether he or she has complied with this requirement.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

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

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**Condition 13: Compliance Demonstration**

Effective between the dates of 09/30/2021 and 09/29/2031

**Applicable Federal Requirement: 6 NYCRR 228-1.3 (d)****Item 13.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-LTHBT

Process: CAT

Emission Source: CATCT

**Item 13.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within the work area(s) associated with a coating line, the owner or operator of a facility subject to this

Subpart must:

- (a) use closed, non-leaking containers to store or dispose of cloth or other absorbent applicators impregnated with VOC solvents that are used for surface preparation, cleanup or coating removal;
- (b) store in closed, non-leaking containers spent or fresh VOC solvents to be used for surface preparation, cleanup or coating removal;
- (c) not use VOC solvents to cleanup spray equipment unless equipment is used to collect the cleaning compounds and to minimize VOC evaporation;
- (d) not use open containers to store or dispense surface coatings and/or inks unless production, sampling, maintenance or inspection procedures require operational access. This provision does not apply to the actual device or equipment designed for the purpose of applying a coating material to a substrate. These devices may include, but are not limited to: spray guns, flow coaters, dip tanks, rollers, knife coaters, and extrusion coaters;
- (e) not use open containers to store or dispose of spent surface coatings, or spent VOC solvents;
- (f) minimize spills during the handling and transfer of coatings and VOC solvents; and
- (g) clean hand held spray guns by one of the following:
  - (1) an enclosed spray gun cleaning system that is kept closed when not in use;
  - (2) non-atomized discharge of VOC solvent into a paint waste container that is kept closed when not in use;
  - (3) disassembling and cleaning of the spray gun in a vat that is kept closed when not in use; or
  - (4) atomized spray into a paint waste container that is fitted with a device designed to capture atomized VOC

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

solvent emissions.

Open containers, if found, shall be covered and such deviations shall be noted in a log maintained in the operating area. The log shall include the following information:

- date and time of observation
- description of observed deviation from this permit condition
- corrective measures taken, if necessary

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

**Condition 14: Compliance Demonstration**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

**Applicable Federal Requirement:6 NYCRR 228-1.5 (c)**

**Item 14.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-LTHBT

Process: CAT

Emission Source: CATCT

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

**Item 14.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The overall removal efficiency of an air cleaning device used as a control strategy must be determined, for every surface coating formulation, on a solids as applied basis using Equation 2 unless a 90 percent or greater overall removal efficiency is achieved by the air cleaning device as determined by Equation 2 presented under an Optional Condition.

As per 6 NYCRR 228-1.3(b)(1), a facility owner or operator must maintain a record that identifies each air cleaning device that has an overall removal efficiency of at least 90 percent. Any additional information required to determine compliance with this Part must be provided to the department in a format acceptable to the department.



Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

All records required by this condition must be maintained at the facility for a period of five years.

Parameter Monitored: VOC

Lower Permit Limit: 90 percent degree of air cleaning or greater

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 15: Compliance Demonstration**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

**Applicable Federal Requirement: 6 NYCRR 212-2.1 (b)**

**Item 15.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-LTHBT                      Emission Point: STCK5

Regulated Contaminant(s):  
 CAS No: 000096-49-1                      1,3-DIOXOLAN-2-ONE

**Item 15.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

1. The facility owner or operator shall achieve overall 90% control of the total carbonate emissions used in the electrolyte filling process. This applies to the various carbonate compounds used in the electrolyte filling.
2. The facility owner or operator must demonstrate compliance with this emission limit by conducting a stack test in accordance with a protocol approved by the department and 6NYCRR 202-1 once every 5 years or at any other time required by the DEC.
3. The facility owner or operator must report the emissions in the annual compliance report.

Parameter Monitored: 1,3-DIOXOLAN-2-ONE

Lower Permit Limit: 90 percent by weight

Reference Test Method: EPA Method 18 or 320 or DEC approved

Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**Condition 16: Compliance Demonstration**

Effective between the dates of 09/30/2021 and 09/29/2031

**Applicable Federal Requirement: 6 NYCRR 212-2.1 (b)****Item 16.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-LTHBT

Emission Point: STCK5

Regulated Contaminant(s):

CAS No: 000096-49-1

1,3-DIOXOLAN-2-ONE

**Item 16.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

1. The facility owner or operator shall not exceed 18.6 pounds per hour of the total carbonate emissions used in the electrolyte filling process. This applies to the various carbonate compounds used in the electrolyte filling.
2. The facility owner or operator must demonstrate compliance with this emission limit by conducting a stack test in accordance with a protocol approved by the department and 6NYCRR 202-1 once every 5 years or at any other time required by the DEC.
3. The facility owner or operator must report the emissions in the annual compliance report.

Parameter Monitored: 1,3-DIOXOLAN-2-ONE

Upper Permit Limit: 18.6 pounds per hour

Reference Test Method: EPA Method 18 or 320 or DEC approved

Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**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

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

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 18: Contaminant List**

**Effective between the dates of 09/30/2021 and 09/29/2031**

**Applicable State Requirement:ECL 19-0301**

**Item 18.1:**

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

CAS No: 000092-52-4

Name: 1, 1 BIPHENYL

CAS No: 000096-49-1

Name: 1,3-DIOXOLAN-2-ONE

CAS No: 000872-50-4

Name: 1-METHYL-2-PYRROLIDONE

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

CAS No: 0NY075-00-0  
Name: PARTICULATESCAS No: 0NY998-00-0  
Name: VOC**Condition 1-9: Malfunctions and Start-up/Shutdown Activities**  
**Effective between the dates of 06/30/2022 and 09/29/2031****Applicable State Requirement: 6 NYCRR 201-1.4****Replaces Condition(s) 19****Item 1-9.1:**

- (a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.
- (b) The facility owner or operator shall compile and maintain records of all equipment maintenance and start-up/shutdown activities when they are expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when required by a permit condition or upon request by the department. Such reports shall state whether an exceedance occurred and if it was unavoidable, include the time, frequency and duration of the exceedance, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous monitoring and quarterly reporting requirements need not submit additional reports of exceedances to the department.
- (c) In the event that air contaminant emissions exceed any applicable emission standard due to a malfunction, the facility owner or operator shall notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. In addition, the facility owner or operator shall compile and maintain a record of all malfunctions. Such records shall be maintained at the facility for a period of at least five years and must be made available to the department upon request. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, the air contaminants emitted, and the resulting emission rates and/or opacity.
- (d) The department may also require the facility owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.
- (e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**Condition 20: Emission Unit Definition**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

**Applicable State Requirement:6 NYCRR Subpart 201-5**

**Item 20.1(From Mod 1):**

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

Emission Unit: 1-LTHBT

Emission Unit Description:

The emission unit consists of lithium-ion battery production operations including the following emission sources: cathode and anode coating mixing; cathode coating application lines; electrolyte filling operations; blanking operations; stacking, mixing, and adhesive application operations; and automated welding operations.

Building(s): 48\_53

**Condition 21: Compliance Demonstration**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

**Applicable State Requirement:6 NYCRR Subpart 201-5**

**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:

The facility must submit to the Department the following information before commencing operations of the facility.

1. Vender Guarantees for each control device specifying the control efficiency.
2. An operations and maintenance plan for the negative pressure mixing room.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

**Condition 22: Renewal deadlines for state facility permits**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

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

**Item 22.1:**

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 1-10: Compliance Demonstration**  
**Effective between the dates of 06/30/2022 and 09/29/2031**

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

**Replaces Condition(s) 24**

**Item 1-10.1:**

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

Emission Unit: 1-LTHBT	Emission Point: STCK4
Regulated Contaminant(s):	
CAS No: 000872-50-4	1-METHYL-2-PYRROLIDONE

**Item 1-10.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

1. The owner/operator shall achieve an overall capture and reduction efficiency of 99.9% (by weight) of NMP.
2. The owner/operator shall achieve 100% capture and condenser reduction of NMP emissions from the cathode line.
3. Ninety percent of the condenser exhaust shall be recirculated to the cathode drying oven when NMP is used.
4. Compliance will be demonstrated through emissions testing in accordance with a protocol approved by the DEC and 6NYCRR 202-1. Testing shall be conducted once every 5 years and at any other time determined by the Department.
5. The owner/operator shall report whether they have met this condition in the annual certification.

Parameter Monitored: 1-METHYL-2-PYRROLIDONE  
 Upper Permit Limit: 99.9 percent by weight  
 Reference Test Method: EPA method 18 or 320 or equivalent





Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

Effective between the dates of 09/30/2021 and 09/29/2031

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

**Item 26.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 26.2:**

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 7  
615 Erie Blvd West  
Syracuse, NY 13204

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

**Condition 27: Air pollution prohibited**

Effective between the dates of 09/30/2021 and 09/29/2031

**Applicable State Requirement:6 NYCRR 211.1**

**Item 27.1:**

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 28: Compliance Demonstration**

Effective between the dates of 09/30/2021 and 09/29/2031

**Applicable State Requirement:6 NYCRR 212-2.1**

**Item 28.1:**

The Compliance Demonstration activity will be performed for the Facility.

**Item 28.2:**

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

1. Facility-wide annual emissions of High Toxicity Air Contaminants (HTACs) can demonstrate compliance by not exceeding the mass emission limits (MEL) listed in 6NYCRR 212-2.2 Table 2. HTACs greater than the MEL must show compliance with 212-2 Table 4.
2. The owner/operator shall state, in the annual certification, whether the facility is in compliance with this provision.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

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

**Condition 29: Emission Point Definition By Emission Unit**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

**Applicable State Requirement:6 NYCRR Subpart 201-5**

**Item 29.1(From Mod 1):**

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

Emission Unit: 1-LTHBT

Emission Point: STCK4

Height (ft.): 32	Diameter (in.): 20	
NYTMN (km.): 4662.46	NYTME (km.): 413.371	Building: 48_53

Emission Point: STCK5

Height (ft.): 32	Diameter (in.): 20	
NYTMN (km.): 4662.46	NYTME (km.): 413.375	Building: 48_53

Emission Point: STK11

Height (ft.): 50	Diameter (in.): 12	
NYTMN (km.): 4662.255	NYTME (km.): 413.365	Building: 48_53

**Condition 30: Process Definition By Emission Unit**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

**Applicable State Requirement:6 NYCRR Subpart 201-5**

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**Item 30.1(From Mod 1):**

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

Emission Unit: 1-LTHBT  
 Process: CAT Source Classification Code: 3-09-011-99  
 Process Description:  
 Process CAT includes a coating application line.  
 Emissions generated by the coating application are directed to a condenser and two carbon beds operated in series.

Emission Source/Control: CARB1 - Control  
 Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CARB2 - Control  
 Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: COND1 - Control  
 Control Type: REFRIGERATED CONDENSER

Emission Source/Control: CATCT - Process

**Item 30.2(From Mod 1):**

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

Emission Unit: 1-LTHBT  
 Process: DST Source Classification Code: 4-90-002-07  
 Process Description:  
 Process DST consists of a n-methylpyrrolidone distillation operation.

Emission Source/Control: DISTL - Process

**Item 30.3(From Mod 1):**

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

Emission Unit: 1-LTHBT  
 Process: ELC Source Classification Code: 3-09-011-99  
 Process Description:  
 Process ELC consists of electrolyte filling operations.  
 Emissions are directed to two carbon beds operated in series.

Emission Source/Control: CARB3 - Control  
 Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CARB4 - Control  
 Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: ELCFL - Process

**Item 30.4(From Mod 1):**

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

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

Emission Unit: 1-LTHBT  
Process: FUG Source Classification Code: 3-09-011-99  
Process Description:  
Raw material handling, welding and blanking operations  
that vent to fume and dust collectors and vent inside.

Emission Source/Control: DUST1 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: DUST2 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: DUST3 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: DUST4 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: HEPA1 - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: HEPA2 - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: HEPA3 - Control  
Control Type: HIGH EFFICIENCY PARTICULATE AIR FILTER

Emission Source/Control: HEPA4 - Control  
Control Type: FABRIC FILTER

Emission Source/Control: ANOMH - Process

Emission Source/Control: BLNK1 - Process

Emission Source/Control: BLNK2 - Process

Emission Source/Control: CATMH - Process

Emission Source/Control: STKMH - Process

Emission Source/Control: WELD1 - Process

Emission Source/Control: WELD2 - Process

Emission Source/Control: WELD3 - Process

**Condition 31: Compliance Demonstration**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

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

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

**Item 31.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-LTHBT                      Emission Point: STCK5

Regulated Contaminant(s):  
 CAS No: 000092-52-4                      1, 1 BIPHENYL

**Item 31.2:**

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

1. The facility owner or operator shall not exceed 0.141 pounds per hour of biphenyl emissions used in the electrolyte filling process.
2. The facility owner or operator must demonstrate compliance with this emission limit by conducting a stack test in accordance with a protocol approved by the department and 6NYCRR 202-1 once every 5 years or at any other time required by the DEC.
3. The facility owner or operator must report the emissions in the annual compliance report.

Parameter Monitored: 1, 1 BIPHENYL  
 Upper Permit Limit: 0.141 pounds per hour  
 Reference Test Method: EPA Method 18 or 320 or DEC approved  
 Monitoring Frequency: Once every five years  
 Averaging Method: Arithmetic average of stack test runs  
 Reporting Requirements: ANNUALLY (CALENDAR)  
 Reports due 30 days after the reporting period.  
 The initial report is due 1/30/2022.  
 Subsequent reports are due every 12 calendar month(s).

**Condition 32: Compliance Demonstration**  
**Effective between the dates of 09/30/2021 and 09/29/2031**

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

**Item 32.1:**

The Compliance Demonstration activity will be performed for:

Emission Unit: 1-LTHBT                      Emission Point: STCK5

Regulated Contaminant(s):  
 CAS No: 000092-52-4                      1, 1 BIPHENYL

**Item 32.2:**

Compliance Demonstration shall include the following monitoring:

Permit ID: 7-0346-00225/00001

Facility DEC ID: 7034600225

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

1. The facility owner or operator shall achieve overall 90% control of the total biphenyl emissions used in the electrolyte filling process.
2. The facility owner or operator must demonstrate compliance with this emission limit by conducting a stack test in accordance with a protocol approved by the department and 6NYCRR 202-1 once every 5 years or at any other time required by the DEC.
3. The facility owner or operator must report the emissions in the annual compliance report.

Parameter Monitored: 1, 1 BIPHENYL

Lower Permit Limit: 90 percent by weight

Reference Test Method: EPA Method 18 or 320 or DEC approved

Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2022.

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

**Permit ID: 7-0346-00225/00001**

**Facility DEC ID: 7034600225**