Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601
(502) 564-3999

Draft

AIR QUALITY PERMIT

Issued under 401 KAR 52:020

Permittee Name:	**BlueOval SK, LLC**
Mailing Address:	**2022 Battery Park Drive, Glendale, KY 42740**
Source Name:	**BlueOval SK, LLC**
Mailing Address:	**2022 Battery Park Drive** **Glendale, KY 42740**
Source Location:	**Same as above**
Permit:	**V-21-041 R2**
Agency Interest:	**170550**
Activity:	**APE20240004**
Review Type:	**Title V / Title I – PSD, Operating/Construction**
Source ID:	**21-093-00176**
Regional Office:	**Frankfort Regional Office** **300 Sower Boulevard, 1st Floor** **Frankfort, KY 40601** **(502) 564-3358**
County:	**Hardin**
Application Complete Date:	**February 4, 2022**
Issuance Date:	**June 20, 2022**
Revision Date:	
Expiration Date:	**June 20, 2027**

For Michael J. Kennedy, P.E.
Director
Division for Air Quality

TABLE OF CONTENTS

Permit	Permit Type	Activity#	Complete Date	Issuance Date	Summary of Action
V-21-041	Title V/ PSD Initial	APE20210001	2/4/2022	6/20/2022	Initial Construction Permit
V-21-041 R1	Admin. Change	APE20240001	7/24/2024	8/12/2024	Name Change
V-21-041 R2	Signific-ant Revision	APE20240004	1/29/2025		As-built corrections and 401 KAR 51:017 limit changes

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit was issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 01: **Electrode Manufacturing Processes**

Description:

Construction Commenced: May 2022

Building #1

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY1-PR01 - KY1-PR08	Powder Room: Anode Measure (Building 1)	Dust Collector KY1-DC01 - KY1-DC27	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-PR17 - KY1-PR24	Powder Room: Anode Feed (Building 1)	Dust Collector KY1-DC01 - KY1-DC27	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-PR76 - KY1-PR83	Anode Mixer Vacuum Pump (Building 1)	No Dust Collector, Building Enclosure	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-PR84 - KY1-PR91	Anode Powder Vacuum Pump (Building 1)	No Dust Collector, Building Enclosure	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-PR92 - KY1-PR173	Anode Powder (Building 1)	Dust Collector KY1-DC10 - KY1-DC27	401 KAR 59:010 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations a.** and **b.** and **1. Operating Limitations g.v.**
KY1-PR09 - KY1-PR16	Powder Room: Cathode Measure (Building 1)	Dust Collector KY1-DC01 - KY1-DC27	401 KAR 59:010 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations a.** and **b.** and **1. Operating Limitations g.v.**
KY1-PR25 - KY1-PR32	Powder Room: Cathode Feed (Building 1)	Dust Collector KY1-DC01 - KY1-DC27	401 KAR 59:010 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations a.** and **b.** and **1. Operating Limitations g.v.**
KY1-PR33 - KY1-PR40	Cathode Powder Vacuum Pump (Building 1)	No Dust Collector,	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
		Building Enclosure	40 CFR 63, Subpart CCCCCCC	
KY1-PR41 - KY1-PR75	Cathode Powder (Building 1)	Dust Collector KY1-DC01 - KY1-DC09	40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations a.** and **b.** and **1. Operating Limitations g.v.**
KY1-CP01 - KY1-CP16 and KY1-AP01-KY1-AP16	Cathode/Anode Processing (Building 1)	Activated Carbon KY1-AC01	401 KAR 51:017 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations c.**
KY1-CR01 - KY1-CR08	Electrode Cleaning (Building 1)	Activated Carbon KY1-AC02 -KY1-AC03	401 KAR 51:017 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations c.**
KY1-DR01 - KY1-DR08	Cathode Drying (Building 1)	Scrubber KY1-SC01 - KY1-SC08	401 KAR 51:017 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations c.**

Building #2

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY2-PR01 - KY2-PR08	Powder Room: Anode Measure (Building 2)	Dust Collector KY2-DC01 - KY2-DC29	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY2-PR17 - KY2-PR24	Powder Room: Anode Feed (Building 2)	Dust Collector KY2-DC01 - KY2-DC29	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY2-PR82 - KY2-PR89	Anode Mixer Vacuum Pump (Building 2)	No Dust Collector, Building Enclosure	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY2-PR90 - KY2-PR97	Anode Powder Vacuum Pump (Building 2)	No Dust Collector, Building Enclosure	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY2-PR98 - KY2-PR187	Anode Powder (Building 2)	Dust Collector KY2-DC11 - KY2-DC29	401 KAR 59:010 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations a.** and **b.** and **1. Operating Limitations g.v.**
KY2-PR09 - KY2-PR16	Powder Room: Cathode Measure (Building 2)	Dust Collector KY2-DC01 - KY2-DC29	401 KAR 59:010 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations a.** and **b.** and **1. Operating Limitations g.v.**
KY2-PR25 - KY2-PR32	Powder Room: Cathode Feed (Building 2)	Dust Collector KY2-DC01 - KY2-DC29	401 KAR 59:010 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations a.** and **b.** and **1. Operating Limitations g.v.**
KY2-PR33 - KY2-PR40	Cathode Powder Vacuum Pump (Building 2)	No Dust Collector, Building Enclosure	401 KAR 59:010 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations a.** and **b.**
KY2-PR41 - KY2-PR81	Cathode Powder (Building 2)	Dust Collector KY2-DC01 - KY2-DC10	401 KAR 59:010 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations a.** and **b.** and **1. Operating Limitations g.v.**
KY2-CP01 – KY2-CP16; KY2-AP01 – KY2-AP16	Cathode/Anode Processing (Building 2)	Activated Carbon KY2-AC01	401 KAR 51:017 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations c.**
KY2-CR01 - KY2-CR08	Electrode Cleaning (Building 2)	Activated Carbon KY2-AC02-KY2-AC03	401 KAR 51:017 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations c.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY2-DR01 - KY2-DR08	Cathode Drying (Building 2)	Scrubber KY2-SC01 - KY2-SC08	401 KAR 51:017 40 CFR 63, Subpart CCCCCCC	Refer to **2. Emission Limitations c.**

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (applied to VOC emissions)

401 KAR 59:010, *New Process Operations*

401 KAR 63:002, Section 2(4)(aaaaaa) 40 C.F.R. 63.11599 through 63.11607, Table 1 (Subpart CCCCCCC), *National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing*

1. **Operating Limitations**:
   a. The control equipment shall be in place and operating in accordance with the manufacturer's recommendations at all times the affected emission units are operating. [401 KAR 51:017 and 401 KAR 59:010]

   b. The cleanroom areas serviced by the dust collectors shall be designed to meet the ISO 7 Clean Room specification for dust minimization. The dust collector PM emissions performance specifications shall be designed to meet a HEPA classification. [401 KAR 51:017 and 401 KAR 59:010]

      Compliance Demonstration Method:
      Refer to subsection **5. Specific Recordkeeping Requirements k.**

   c. Activated carbon adsorbers shall be replaced when determined inefficient per the weekly adsorber outlet VOC monitoring. [401 KAR 51:017]

   d. If concentrations over the indicator levels documented by the monitoring plan required by **4. Specific Monitoring Requirements c.** are detected in a carbon adsorber during monitoring required by **4. Specific Monitoring Requirements d.**, the permittee shall not operate the emission unit until the carbon has been replaced. [401 KAR 51:017]

   e. The scrubbant fluid NMP concentration documented by the monitoring plan required by **4. Specific Monitoring Requirements** c. for the *Cathode Drying scrubbers* shall not be exceeded. [401 KAR 51:017]

   f. The scrubbers shall be operated such that the scrubbant liquid flowrate is greater than or equal to the average flowrate used during the most recent performance test, the air flowrate is less than or equal to the average rate used during the most recent performance test, and

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

the type (e.g. saddles, Pall rings) and size of the packing material shall not be changed from the most recent performance test without retesting.

g. The permittee must comply with the requirements in paragraphs (a)(1) through (5) of 40 CFR 63.11601. These requirements apply at all times. [40 CFR 63.11601(a)]
   i. The permittee must add the dry pigments and solids that contain compounds of nickel and operate a capture system that minimizes fugitive particulate emissions during the addition of dry pigments and solids that contain compounds of nickel to a process vessel or to the grinding and milling process. [40 CFR 63.11601(a)(1)]
   ii. The permittee must capture particulate emissions and route them to a particulate control device meeting the requirements of 40 CFR 63.11601(a)(6) during the addition of dry pigments and solids that contain compounds of nickel to a process vessel. This requirement does not apply to pigments and other solids that are in paste, slurry, or liquid form. [40 CFR 63.11601(a)(2)]
   iii. The permittee must:
      1. Capture particulate emissions and route them to a particulate control device meeting the requirements of 40 CFR 63.11601(a)(6) during the addition of dry pigments and solids that contain compounds of nickel to the grinding and milling process; or [40 CFR 63.11601(a)(3)(i)]
      2. Add pigments and other solids that contain compounds of cadmium, chromium, lead, or nickel to the grinding and milling process only in paste, slurry, or liquid form. [40 CFR 63.11601(a)(3)(ii)]
   iv. The permittee must:
      1. Capture particulate emissions and route them to a particulate control device meeting the requirements of 40 CFR 63.11601(a)(5) during the grinding and milling of materials containing compounds of nickel; or [40 CFR 63.11601(a)(4)(i)]
      2. Fully enclose the grinding and milling equipment during the grinding and milling of materials containing compounds nickel; or [40 CFR 63.11601(a)(4)(ii)]
      3. Ensure that the pigments and solids are in the solution during the grinding and milling of materials containing compounds of nickel. [40 CFR 63.11601(a)(4)(iii)]
   v. The visible emissions from the particulate control device exhaust must not exceed 10-percent opacity for particulate control devices that vent to the atmosphere. This requirement does not apply to particulate control devices that do not vent to the atmosphere. [40 CFR 63.11601(a)(5)]

2. Emission Limitations:

a. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3 (1)]

Compliance Demonstration Method:
Refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements** for opacity compliance demonstration.

b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]

i. For process weight rates ≤ 0.5 tons/hour: $E=2.34$
ii. For process weight rates ≤ 30 tons/hour: $E=3.59P^{0.62}$
iii. For process weight rates > 30 tons/hour: $E=17.31P^{0.16}$

Where:
E = rate of the emission in lb/hr
P = process weight rate in tons/hr

Compliance Demonstration Method:
Compliance shall be demonstrated according to subsections **1. Operating Limitations** b. and **4. Specific Monitoring Requirements**.

c. Pursuant to 401 KAR 51:017, exhaust concentrations of VOC shall not exceed the following limitations:

SOURCE #	EMISSION LIMITATIONS
KY1-CP01 - KY1-CP16; KY1-AP01 - KY1-AP16; KY1- CR01 - KY1-CR08	4.5 ppmv VOC (as NMP) post-control based on 3 hr block average basis
KY2-CP01 – KY2-CP16; KY2-AP01 – KY2-AP16; KY2- CR01 - KY2-CR08	
KY1-DR01 - KY1-DR08	2.0 ppmv VOC (as NMP) post-control based on 3 hr block average basis
KY2-DR01 - KY2-DR08	

Compliance Demonstration Method:
i Compliance with the ppmv limit is demonstrated through compliance with subsections **1. Operating Limitations**, **3. Testing Requirements**, **4. Specific Monitoring Requirements**, and subsection **5. Specific Recordkeeping Requirements**.

d. Refer to **Section D – Source Emission Limitations and Testing Requirements**.

3. Testing Requirements:

a. An initial test using EPA Method 25A or an equivalent method on a representative adsorber for each controlled process is required on inlet and outlet VOC. One test on a representative adsorber from *Cathode/Anode Processing*, and one test on a representative adsorber from *Electrode Cleaning* shall be conducted. In addition to the inlet and outlet ppmv VOC factors (as NMP), the average acfm airflow rate shall be established during the test. Testing shall occur at the maximum air flow rate. Refer to Section G.4.

b. An initial test using EPA Method 25A or an equivalent method on a representative *Cathode Drying Scrubber* is required. Testing shall be scheduled to capture operations near the end of a scrubber liquid blowdown cycle when the NMP concentration in the recirculating

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

scrubber liquid is expected to be at the highest level. Along with the Method 25A results, the average air flow rate, scrubbant fluid flow rate, and the NMP concentration used during the test shall be recorded. Testing shall occur at the maximum air flow rate. Refer to Section G.4.

4. Specific Monitoring Requirements:

a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each building no less than weekly while the affected facility is operating. If visible emissions from the buildings are observed (not including condensed water in the plume), the permittee shall determine the opacity using Reference Method 9. In lieu of determining the opacity using U.S. EPA Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume).

b. The permittee shall install, calibrate, maintain and operate according to manufacturer's specifications a monitoring device (differential pressure gauges or manometers) to determine the pressure drop across the dust collectors once a day during the operation of the affected processes. A permanent label displaying the operating range established for each collector shall be posted next to the selected instrument, displayed on the operator screen, or documented in an electronic interface/data historian.

c. All control equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would be achieving compliance with the applicable **2. Emission Limitations**, including periodic monitoring of key operating parameters. For each carbon adsorber, the permittee shall develop and implement a site-specific monitoring plan to document the strategy that will be used to ensure that the adsorber is operating as designed and carbon is replaced when appropriate. This plan shall include an action level or device reading at which, during weekly monitoring, the permittee will change out the carbon adsorber's carbon. For each NMP scrubber, the permittee shall develop and implement a site-specific monitoring plan to document the strategy that will be used to ensure that the scrubber is operating as designed and the scrubber liquid blowdown system is operated on a periodic basis to maintain the NMP concentration in the recirculating scrubber liquid below the maximum level specified in the monitoring plan. Upon request of the Division, the permittee shall promptly correct any deficiencies in a site-specific monitoring plan and submit the revised plan. Monitoring plans for specific control equipment shall be submitted within 90 days after the submittal of their respective testing reports.

d. The permittee shall monitor the VOC exhaust concentration weekly from activated carbon adsorber controlled emission sources.

e. The permittee shall calibrate, maintain, and operate instruments and devices (e.g., PID) used to monitor the adsorbers' VOC exhaust concentration, using procedures that take into account the manufacturer's recommendations. Monitoring device calibrations shall occur at least annually.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f. The permittee shall monitor the fractional (fractional meaning a minimum 15 minute basis) hours the individual source #s operate and the equivalent (equivalent includes both saleable and unsaleable product) GWh of batteries produced by Battery Assembly (Emission Unit 02) and Battery Formation (Emission Unit 03) on a monthly basis. For control equipment that controls more than one source #, the permittee shall monitor the fractional hours of operation for both the individual control equipment and the controlled sources.

g. The permittee shall monitor the NMP concentration in the recirculating scrubber liquid for the Cathode Drying scrubbers continuously during scrubber operation.

h. The permittee shall calibrate, maintain, and operate instruments and devices used to monitor the Cathode Drying scrubber effluent's NMP concentration, using procedures that take into account the manufacturer's recommendations. Monitoring device calibrations shall occur at least annually.

i. All scrubbers shall be inspected on an annual basis. Preventive maintenance shall be performed in accordance with manufacturer's specifications. The scrubbers shall be inspected on an annual basis for proper operation of the following:
   i Scrubber liquid pump(s)

   ii Scrubber liquid spray nozzles

   iii Scrubber internals

j. The permittee must demonstrate initial compliance by conducting the inspection and monitoring activities in 40 CFR 63.11602(a)(1) and ongoing compliance by conducting the inspection and testing activities in 40 CFR 63.11602(a)(2). [40 CFR 63.11602(a)]
   i. *Initial particulate control device inspections and tests.* The permittee must conduct an initial inspection of each particulate control device according to the requirements in 40 CFR 63.11602(a)(1)(i) through (iii) and perform a visible emissions test according to the requirements of 40 CFR 63.11602(a)(1)(iv). The permittee must record the results of each inspection and test according to 40 CFR 63.11602(b) and perform corrective action where necessary. The permittee must conduct each inspection no later than 180 days after the applicable compliance date for each control device which has been operated within 60 days following the compliance date. For a control device which has not been installed or operated within 60 days following the compliance date, the permittee must conduct an initial inspection prior to startup of the control device. [40 CFR 63.11602(a)(1)]
      1. For each wet particulate control system, the permittee must verify the presence of water flow to the control equipment. The permittee must also visually inspect the system ductwork and control equipment for leaks and inspect the interior of the control equipment (if applicable) for structural integrity and the condition of the control system. [40 CFR 63.11602(a)(1)(i)]
      2. For each dry particulate control system, the permittee must visually inspect the system ductwork and dry particulate control unit for leaks. The permittee must also

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

inspect the inside of each dry particulate control unit for structural integrity and condition. [40 CFR 63.11602(a)(1)(ii)]

3. An initial inspection of the internal components of a wet or dry particulate control system is not required if there is a record that an inspection meeting the requirements of this subsection has been performed within the past 12 months and any maintenance actions have been resolved. [40 CFR 63.11602(a)(1)(iii)]
4. For each particulate control device, the permittee must conduct a visible emission test consisting of three 1-minute test runs using Method 203C (40 CFR part 51, appendix M). The visible emission test runs must be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling equipment. If the average test results of the visible emissions test runs indicate an opacity greater than the applicable limitation in 40 CFR 63.11601(a), the permittee must take corrective action and retest within 15 days. [40 CFR 63.11602(a)(1)(iv)]

ii. *Ongoing particulate control device inspections and tests.* Following the initial inspections, the permittee must perform periodic inspections of each PM control device according to the requirements in 40 CFR 63.11602(a)(2)(i) or (ii). The permittee must record the results of each inspection according to 40 CFR 63.11602(b) and perform corrective action where necessary. The permittee must also conduct tests according to the requirements in 40 CFR 63.11602(a)(2)(iii) and record the results according to 40 CFR 63.11602(b). [40 CFR 63.11602(a)(2)]

1. The permittee must inspect and maintain each wet particulate control system according to the requirements in 40 CFR 63.11602(a)(2)(i)(A) through (C). [40 CFR 63.11602(a)(2)(i)]
   A. The permittee must conduct a daily inspection to verify the presence of water flow to the wet particulate control system. [40 CFR 63.11602(a)(2)(i)(A)]
   B. The permittee must conduct weekly visual inspections of any flexible ductwork for leaks. [40 CFR 63.11602(a)(2)(i)(B)]
   C. The permittee must conduct inspections of the rigid, stationary ductwork for leaks, and the interior of the wet control system (if applicable) to determine the structural integrity and condition of the control equipment every 12 months. [40 CFR 63.11602(a)(2)(i)(C)]
2. The permittee must inspect and maintain each dry particulate control unit according to the requirements in 40 CFR 63.11602(a)(2)(ii)(A) and (B). [40 CFR 63.11602(a)(2)(ii)]
   A. The permittee must conduct weekly visual inspections of any flexible ductwork for leaks. [40 CFR 63.11602(a)(2)(ii)(A)]
   B. The permittee must conduct inspections of the rigid, stationary ductwork for leaks, and the interior of the dry particulate control unit for structural integrity and to determine the condition of the fabric filter (if applicable) every 12 months. [40 CFR 63.11602(a)(2)(ii)(B)]
3. For each particulate control device, the permittee must conduct a 5-minute visual determination of emissions from the particulate control device every 3 months using Method 22 (40 CFR part 60, appendix A-7). The visible emission test must be performed during the addition of dry pigments and solids containing compounds

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling equipment. If visible emissions are observed for two minutes of the required 5-minute observation period, the permittee must conduct a Method 203C (40 CFR part 51, appendix M) test within 15 days of the time when visible emissions were observed. The Method 203C test will consist of three 1-minute test runs and must be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel HAP to a process vessel or to the grinding and milling equipment. If the Method 203C test runs indicates an opacity greater than the limitation in 40 CFR 63.11601(a)(5), the permittee must comply with the requirements in 40 CFR 63.11602(a)(2)(iii)(A) through (C). [40 CFR 63.11602(a)(2)(iii)]

A. The permittee must take corrective action and retest using Method 203C within 15 days. The Method 203C test will consist of three 1-minute test runs and must be performed during the addition of dry pigments and solids containing compounds of cadmium, chromium, lead, or nickel to a process vessel or to the grinding and milling equipment. The permittee must continue to take corrective action and retest each 15 days until a Method 203C test indicates an opacity equal to or less than the limitation in 40 CFR 63.11601(a)(5). [40 CFR 63.11602(a)(2)(iii)(A)]
B. The permittee must prepare a deviation report in accordance with 40 CFR 63.11603(b)(3) for each instance in which the Method 203C opacity results were greater than the limitation in 40 CFR 63.11601(a)(5). [40 CFR 63.11602(a)(2)(iii)(B)]
C. The permittee must resume the visible determinations of emissions from the particulate control device in accordance with 40 CFR 63.11602(a)(2)(iii) 3 months after the previous visible determination. [40 CFR 63.11602(a)(2)(iii)(C)]

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain a log of the visual observations noting date, time, initials of observers, and records of corrective actions taken as a result of visible emissions and records of any Reference Method 9 readings performed.

b. The permittee shall maintain records of calibration of the monitoring device and a log of the pressure drop readings across the dust collector, including the date, and dates of filter replacements. For any process that is not in operation on a given date, this fact should also be noted.

c. The permittee shall maintain records of the monthly fractional hours of operation for each emission source.

d. The permittee shall keep weekly records of the VOC concentration in the adsorbers' effluent air streams determined by the VOC monitoring device.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. The permittee shall maintain onsite, and in a form suitable and readily available for expeditious review, the manufacturer's specifications and operational procedures for all control devices.

f. The permittee shall keep records of preventive/routine maintenance and any repairs made to all control devices.

g. The permittee shall record the fractional hours the individual source #s operate and the equivalent GWh of batteries produced by Battery Assembly (Emission Unit 02) and Battery Formation (Emission Unit 03) on a monthly basis. For control equipment that controls more than one source #, the permittee shall record the fractional hours of operation for the individual control equipment itself instead of at the controlled sources.

h. The permittee shall maintain a log of continuous NMP concentration readings in the recirculating scrubber liquid for the Cathode Drying scrubbers.

i. The permittee shall maintain records of calibrations of the scrubbers' NMP concentration measuring instruments and devices.

j. The permittee shall maintain records of design documentation demonstrating the cleanroom and dust collectors meet the specifications in **1. Operating Limitations** onsite and in a form suitable and readily available for expeditious review. [401 KAR 51:017 and 401 KAR 59:010]

k. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general recordkeeping requirements.

l. *Records.* The permittee must maintain the records specified I [sic] 40 CFR 63.11603(c)(1) through (4) in accordance with 40 CFR 63.11603(c)(5) through (6), for five years after the date of each recorded action. [40 CFR 63.11603(c)]
   i. As required in 40 CFR 63.10(b)(2)(xiv), the permittee must keep a copy of each notification that the permittee submitted in accordance with 40 CFR 63.11603(a), and all documentation supporting any Notification of Applicability and Notification of Compliance Status that the permittee submitted. [40 CFR 63.11603(c)(1)]
   ii. The permittee must keep a copy of each Annual Compliance Certification Report prepared in accordance with 40 CFR 63.11603(b). [40 CFR 63.11603(c)(2)]
   iii. The permittee must keep records of all inspections and tests as required by 40 CFR 63.11602(b). [40 CFR 63.11603(c)(3)]
   iv. The records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.11603(c)(4)]
   v. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each recorded action. [40 CFR 63.11603(c)(5)]
   vi. The permittee must keep each record onsite for at least 2 years after the date of each recorded action according to 40 CFR 63.10(b)(1). The permittee may keep the records offsite for the remaining 3 years. [40 CFR 63.11603(c)(6)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

m. The permittee must record the information specified in 40 CFR 63.11602(b)(1) through (6) for each inspection and testing activity. [40 CFR 63.11602(b)]
   i. The date, place, and time; [40 CFR 63.11602(b)(1)]
   ii. Person conducting the activity; [40 CFR 63.11602(b)(2)]
   iii. Technique or method used; [40 CFR 63.11602(b)(3)]
   iv. Operating conditions during the activity; [40 CFR 63.11602(b)(4)]
   v. Results; and [40 CFR 63.11602(b)(5)]
   vi. Description of correction actions taken. [40 CFR 63.11602(b)(6)]

6. Specific Reporting Requirements:

a. The permittee shall submit a copy of all control device inspection and repair logs for those times when corrective actions are required due to an opacity exceedance and/or records of any Reference Method 9 opacity observations.

b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements. Records shall be maintained on a per building basis.

c. In delegating implementation and enforcement authority of 40 CFR 63 Subpart CCCCCCC to a state, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in 40 CFR 63.11606(b)(1) through (4) are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency. [40 CFR 63.11606(b)]
   i. Approval of an alternative nonopacity emissions standard under 40 CFR 63.6(g). [40 CFR 63.11606(b)(1)]
   ii. Approval of a major change to test methods under 40 CFR 63.7(e)(2)(ii) and (f). A "major change to test method" is defined in 40 CFR 63.90. [40 CFR 63.11606(b)(2)]
   iii. Approval of a major change to monitoring under 40 CFR 63.8(f). A "major change to monitoring" is defined in 40 CFR 63.90. [40 CFR 63.11606(b)(3)]
   iv. Approval of a major change to recordkeeping/reporting under 40 CFR 63.10(f). A "major change to recordkeeping/reporting" is defined in 40 CFR 63.90. As required in 40 CF 63.11432, the permittee must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in 40 CFR 63 Subpart CCCCCCC table 1. [40 CFR 63.11606(b)(4)]

d. *Notifications.* The permittee must submit the notifications identified in 40 CFR 63.11603(a)(1) and (2). [40 CFR 63.11603(a)]
   i. *Initial Notification of Applicability.* If the permittee owns or operates a new affected source, the permittee must submit an initial notification of applicability required by 40 CFR 63.9(b)(2) no later than 180 days after initial start-up of the operations, or no later than 120 days after the source becomes subject to 40 CFR 63 Subpart CCCCCCC, or June 1, 2010, whichever is later. The notification of applicability must include the information specified in paragraphs 40 CFR 63.11603(a)(1)(i) through (iii). [40 CFR 63.11603(a)(1)]
      1. The name and address of the owner or operator; [40 CFR 63.11603(a)(1)(i)]
      2. The address (i.e., physical location) of the affected source; and [40 CFR 63.11603(a)(1)(ii)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date. [40 CFR 63.11603(a)(1)(iii)]

ii. *Notification of Compliance Status.* If the permittee owns or operates a new affected source, the permittee must submit a Notification of Compliance Status within 180 days after initial start-up, or by June 1, 2010, whichever is later. This Notification of Compliance Status must include the information specified in 40 CFR 63.11603(a)(2)(i) and (ii). [40 CFR 63.11603(a)(2)]

1. The company's name and address; [40 CFR 63.11603(a)(2)(i)]
2. A statement by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification, a description of the method of compliance (i.e., compliance with management practices, installation of a wet or dry scrubber) and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63 Subpart CCCCCCC. [40 CFR 63.11603(a)(2)(ii)]

e. *Annual Compliance Certification Report.* The permittee must prepare an annual compliance certification report according to the requirements in 40 CFR 63.11603(b)(1) through (b)(3). This report does not need to be submitted unless a deviation from the requirements of this subpart has occurred. When a deviation from the requirements of this subpart has occurred, the annual compliance certification report must be submitted along with the deviation report. [40 CFR 63.11603(b)]

i. *Dates.* The permittee must prepare and, if applicable, submit each annual compliance certification report according to the dates specified in 40 CFR 63.11603(b)(1)(i) through (iii). [40 CFR 63.11603(b)(1)]

1. The first annual compliance certification report must cover the first annual reporting period which begins the day of the compliance date and ends on December 31. [40 CFR 63.11603(b)(1)(i)]
2. Each subsequent annual compliance certification report must cover the annual reporting period from January 1 through December 31. [40 CFR 63.11603(b)(1)(ii))]
3. Each annual compliance certification report must be prepared no later than January 31 and kept in a readily-accessible location for inspector review. If a deviation has occurred during the year, each annual compliance certification report must be submitted along with the deviation report, and postmarked no later than February 15. [40 CFR 63.11603(b)(1)(iii)]

ii. *General Requirements.* The annual compliance certification report must contain the information specified in 40 CFR 63.11603(b)(2)(i) through (iii). [40 CFR 63.11603(b)(2)]

1. Company name and address; [40 CFR 63.11603(b)(2)(i)]
2. A statement in accordance with 40 CFR 63.9(h) of the General Provisions that is signed by a responsible official with that official's name, title, phone number, e-mail address and signature, certifying the truth, accuracy, and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR 63 Subpart CCCCCCC; and [40 CFR 63.11603(b)(2)(ii)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Date of report and beginning and ending dates of the reporting period. The reporting period is the 12-month period beginning on January 1 and ending on December 31. [40 CFR 63.11603(b)(2)(iii)]

iii. *Deviation Report.* If a deviation has occurred during the reporting period, the permittee must include a description of deviations from the applicable requirements, the time periods during which the deviations occurred, and the corrective actions taken. This deviation report must be submitted along with the annual compliance certification report, as required by 40 CFR 63.11603(b)(1)(iii). [40 CFR 63.11603(b)(3)]

f. If the permittee no longer processes, uses, or generates materials containing HAP after December 3, 2009, the permittee must submit a Notification in accordance with 40 CFR 63.11599(d), which must include the information specified in paragraphs (e)(1) and (2) [sic] of 40 CFR 63.11603. [40 CFR 63.11603(d)]

i. The company's name and address; [40 CFR 63.11603(d)(2)]

ii. A statement by a responsible official indicating that the facility no longer processes, uses, or generates materials containing HAP, as defined in 40 CFR 63.11607, and that there are no plans to process, use or generate such materials in the future. This statement should also include the date by which the company ceased using materials containing HAP, as defined in 63.11607, and the responsible official's name, title, phone number, e-mail address and signature. [40 CFR 63.11603(d)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 02: Battery Assembly

Description:

Construction Commenced: May 2022

Building #1

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY1-CN01 - KY1-CN56	Cathode Notching (Building 1)	Dust Collector KY1-DC28-KY1-DC34	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-AN01 - KY1-AN56	Anode Notching (Building 1)	Dust Collector KY1-DC35-KY1-DC41	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-CL01 - KY1-CL10	Cathode Slitting (Building 1)	Dust Collector KY1-DC42 - KY1-DC43	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-AL01 - KY1-AL10	Anode Slitting (Building 1)	Dust Collector KY1-DC44 - KY1-DC45	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-VD01 - KY1-VD16	Vacuum Dryer (Cathode) (Building 1)	Activated Carbon KY1-AC04	401 KAR 51:017	Refer to **2. Emission Limitations c.**
KY1-EL01 - KY1-EL16	Electrolyte Filling, Sealing (Building 1)	Activated Carbon KY1-AC05	401 KAR 51:017 401 KAR 63:020	Refer to **2. Emission Limitations c.**
KY1-CS01 - KY1-CS04	Cathode Press (Building 1)	Dust Collector KY1-DC46 - KY1-DC47 Activated Carbon KY1-AC06	401 KAR 51:017 401 KAR 59:010	Refer to **2. Emission Limitations a.**, **b.** and **c.**
KY1-AS01 - KY1-AS04	Anode Press (Building 1)	Dust Collector KY1-DC48 - KY1-DC49	401 KAR 51:017 401 KAR 59:010	Refer to **2. Emission Limitations a.**, **b.** and **c**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
		Activated Carbon KY1-AC07		
KY1-WB01 - KY1-WB16	Tab Welding (BME) (Building 1)	Dust Collector KY1-DC50-KY1-DC53 Building Enclosure	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-WB17 - KY1-WB32	Tab Welding (SK) (Building 1)	Dust Collector KY1-DC54 - KY1-DC69	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY1-MA01 - KY1-MA32	Tab Welding (SK) Module Assembly (Building 1)	Dust Collector KY1-DC70 - KY1-DC101	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**

Building #2

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY2-CN01 - KY2-CN35	Cathode Notching (Building 2)	Dust Collector KY2-DC30-KY2-DC34 Building Enclosure	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY2-AN01 - KY2-AN35	Anode Notching (Building 2)	Dust Collector KY2-DC35-KY2-DC39	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY2-VD01 - KY2-VD16	Vacuum Dryer (Cathode) (Building 2)	Activated Carbon KY2-AC04	401 KAR 51:017	Refer to **2. Emission Limitations c.**
KY2-EL01 - KY2-EL16	Electrolyte Filling, Sealing (Building 2)	Activated Carbon KY2-AC05	401 KAR 51:017 401 KAR 63:020	Refer to **2. Emission Limitations c.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY2-CS01 - KY2-CS12	Cathode Press (Building 2)	Dust Collector KY2-DC40 - KY2-DC41 Activated Carbon KY2-AC06	401 KAR 51:017 401 KAR 59:010	Refer to **2. Emission Limitations a.**, **b.** and **c.**
KY2-AS01 - KY2-AS12	Anode Press (Building 2)	Dust Collector KY2-DC42 - KY2-DC44 Activated Carbon KY2-AC07	401 KAR 51:017 401 KAR 59:010	Refer to **2. Emission Limitations a.**, **b.** and **c**
KY2-WB01 - KY2-WB16	Tab Welding (BME) (Building 2)	Dust Collector KY2-DC45- KY2-DC48 Building Enclosure	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**
KY2-WB17 - KY2-WB32	Tab Welding (SK) (Building 2)	Dust Collector KY2-DC49- KY2-DC64	401 KAR 59:010	Refer to **2. Emission Limitations a.** and **b.**

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (applied to VOC emissions)

401 KAR 59:010, *New Process Operations*

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. **Operating Limitations:**
   a. The control equipment shall be in place and operating in accordance with the manufacturer's recommendations at all times the affected emission units are operating. [401 KAR 51:017 and 401 KAR 59:010]

   b. The clean room areas serviced by the dust collectors shall be designed to meet the ISO 7 Clean Room specification for dust minimization. The dust collector PM emissions performance specifications shall be designed to meet a HEPA classification. [401 KAR 51:017 and 401 KAR 59:010]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:
Refer to subsection **5. Specific Recordkeeping Requirements i.**

c. Activated carbon adsorbers shall be replaced when determined inefficient per the weekly adsorber outlet VOC monitoring. [401 KAR 51:017]

d. If concentrations over the indicator levels documented by the monitoring plan required by **4. Specific Monitoring Requirements c.** are detected in a carbon adsorber during monitoring required by **4. Specific Monitoring Requirements d.**, the permittee shall not operate the emission unit until the carbon has been replaced. [401 KAR 51:017]

2. Emission Limitations:

a. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3 (1)]

Compliance Demonstration Method:
Refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements** for opacity compliance demonstration.

b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]
   i. For process weight rates ≤ 0.5 tons/hour: $E=2.34$
   ii. For process weight rates ≤ 30 tons/hour: $E=3.59P^{0.62}$
   iii. For process weight rates > 30 tons/hour: $E=17.31P^{0.16}$
   Where:
   E = rate of the emission in lb/hr
   P = process weight rate in tons/hr

Compliance Demonstration Method:
Compliance shall be demonstrated according to subsections **1. Operating Limitations b.** and **4. Specific Monitoring Requirements**.

c. Pursuant to 401 KAR 51:017, exhaust concentrations of VOC shall not exceed the following limitations:

SOURCE #	EMISSION LIMITATIONS
KY1-VD01 - KY1-VD16 KY1-EL01 - KY1-EL16 KY1-CS01 - KY1-CS04 KY1-AS01 - KY1-AS04	6.0 ppmv (as Electrolyte*) VOC post-control based on 3 hr block average basis.
KY2-VD01 - KY2-VD16 KY2-EL01 - KY2-EL16	

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

KY2-CS01 - KY2-CS12 KY2-AS01 - KY2-AS12	

*Electrolyte is not pure NMP. Molecular weight of 107.05 lb/lb-mol

Compliance Demonstration Method:
Compliance with the ppmv limit is demonstrated through compliance with subsections **1. Operating Limitations**, **3. Testing Requirements**, **4. Specific Monitoring Requirements**, and subsection **5. Specific Recordkeeping Requirements**.

d. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:
Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

e. Refer to **Section D – Source Emission Limitations and Testing Requirements**.

3. Testing Requirements:
An initial test using EPA Method 25A or an equivalent method on a representative adsorber for each controlled process is required on inlet and outlet VOC. One test on a representative adsorber *Vacuum Dryer/Electrolyte Filling and Sealing* shall be conducted. In addition to the inlet and outlet ppmv VOC factors (as Electrolyte), the average acfm airflow rate shall be established during the test. Testing shall occur at the maximum air flow rate. Refer to Section G.4.

4. Specific Monitoring Requirements:

a. The permittee shall perform a qualitative visual observation of the opacity of emissions from each building no less than weekly while the affected facility is operating. If visible emissions from the buildings are observed (not including condensed water in the plume), the permittee shall determine the opacity using Reference Method 9. In lieu of determining the opacity using U.S. EPA Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume).

b. The permittee shall install, calibrate, maintain and operate according to manufacturer's specifications a monitoring device (differential pressure gauges or manometers) to determine the pressure drop across the dust collectors once a day during the operation of the affected processes. A permanent label displaying the operating range established for each

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

collector shall be posted next to the selected instrument, displayed on the operator screen, or documented in an electronic interface/data historian.

c. All control equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would be achieving compliance with the applicable **2. Emission Limitations**, including periodic monitoring of key operating parameters. For each carbon adsorber, the permittee shall develop and implement a site-specific monitoring plan to document the strategy that will be used to ensure that the adsorber is operating as designed and carbon is replaced when appropriate. This plan shall include an action level or device reading at which, during weekly monitoring, the permittee will change out the carbon adsorber's carbon. Upon request of the Division, the permittee shall promptly correct any deficiencies in a site-specific monitoring plan and submit the revised plan. Monitoring plans for specific control equipment shall be submitted within 90 days after the submittal of their respective testing reports.

d. The permittee shall monitor the VOC exhaust concentration weekly from activated carbon adsorber controlled emission sources.

e. The permittee shall calibrate, maintain, and operate instruments and devices (e.g., PID) used to monitor the adsorbers' VOC exhaust concentration, using procedures that take into account the manufacturer's recommendations. Monitoring device calibrations shall occur at least annually.

f. The permittee shall monitor the fractional hours the individual source #s operate and the equivalent GWh of batteries produced by Battery Assembly (Emission Unit 02) and Battery Formation (Emission Unit 03) on a monthly basis. For control equipment that controls more than one source #, the permittee shall monitor the fractional hours of operation for the individual control equipment itself and the controlled sources.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain a log of the visual observations noting date, time, initials of observers, and records of corrective actions taken as a result of visible emissions and records of any Reference Method 9 readings performed.

b. The permittee shall maintain records of calibration of the monitoring device and a log of the pressure drop readings across the dust collector, including the date, and dates of filter replacements. For any process that is not in operation on a given date, this fact should also be noted.

c. The permittee shall keep onsite, and in a form suitable and readily available for expeditious review, the manufacturer's dust collector filter specifications.

d. The permittee shall maintain records of the monthly fractional hours of operation for each emission source.

e. The permittee shall keep weekly records of the VOC concentration in the adsorbers' effluent air streams determined by the VOC monitoring device.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

f. The permittee shall maintain onsite, and in a form suitable and readily available for expeditious review, the manufacturer's specifications and operational procedures for the activated carbon adsorbers.

g. The permittee shall keep records of preventive/routine maintenance and any repairs made to the activated carbon equipment.

h. The permittee shall record the fractional hours the individual source #s operate and the equivalent GWh of batteries by Battery Assembly (Emission Unit 02) and Battery Formation (Emission Unit 03) produced on a monthly basis. For control equipment that controls more than one source #, the permittee shall record the fractional hours of operation for the individual control equipment itself instead of at the controlled sources.

i. The permittee shall maintain records of design documentation demonstrating the cleanroom and dust collectors meet the specifications in **1. Operating Limitations** onsite and in a form suitable and readily available for expeditious review. [401 KAR 51:017 and 401 KAR 59:010]

j. The permittee shall keep records of what process parameters are being monitored for the purposes of determining the amount of equivalent GWh batteries produced, and how to calculate GWh of production from those parameters.

k. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general recordkeeping requirements. Records shall be maintained on a per building basis.

6. Specific Reporting Requirements:

a. The permittee shall submit a copy of all control device inspection and repair logs for those times when corrective actions are required due to an opacity exceedance and/or records of any Reference Method 9 opacity observations.

b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 03: **Battery Formation**

Description:

Construction Commenced: May 2022

Building #1

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY1-DG01 - KY1-DG56	Cell Degassing (Building 1)	Activated Carbon KY1-AC08 - KY1-AC15	401 KAR 51:017	Refer to **2. Emission Limitations**

Building #2

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY2-DG01 - KY2-DG56	Cell Degassing (Building 2)	Activated Carbon KY2-AC08 - KY2-AC15	401 KAR 51:017	Refer to **2. Emission Limitations**

APPLICABLE REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality* (applied to VOC emissions)

1. **Operating Limitations:**
   a. The control equipment shall be in place and operating in accordance with the manufacturer's recommendations at all times the affected emission units are operating. [401 KAR 51:017]

   b. Activated carbon adsorbers shall be replaced when determined inefficient per the weekly adsorber outlet VOC monitoring. [401 KAR 51:017]

   c. If concentrations over the indicator levels documented by the monitoring plan required by **4. Specific Monitoring Requirements c.** are detected in a carbon adsorber during monitoring required by **4. Specific Monitoring Requirements a.**, the permittee shall not operate the emission unit until the carbon has been replaced. [401 KAR 51:017]

2. **Emission Limitations:**
   a. Pursuant to 401 KAR 51:017, exhaust concentrations of VOC shall not exceed the following limitations:

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

SOURCE #	EMISSION LIMITATIONS
KY1-DG01 - KY1-DG56	6.0 ppmv (as Electrolyte*) VOC post-control based on 3 hr block average basis.
KY2-DG01 - KY2-DG56	

*Electrolyte is not pure NMP. Molecular weight of 107.05 lb/lb-mol

Compliance Demonstration Method:
Compliance with the ppmv limit is demonstrated through compliance with subsections **1. Operating Limitations**, **3. Testing Requirements**, **4. Specific Monitoring Requirements**, and subsection **5. Specific Recordkeeping Requirements**.

b. Refer to **Section D – Source Emission Limitations and Testing Requirements**.

3. Testing Requirements:
An initial test using EPA Method 25A or an equivalent method on a representative adsorber for each controlled process is required on inlet and outlet VOC. One test on a representative adsorber from *Cell Degassing* shall be conducted. In addition to the inlet and outlet ppmv VOC factors (as Electrolyte), the average acfm airflow rate shall be established during the test. Testing shall occur at the maximum air flow rate. Refer to Section G.4.

4. Specific Monitoring Requirements:

a. The permittee shall monitor the VOC exhaust concentration weekly from activated carbon adsorber controlled emission sources.

b. The permittee shall calibrate, maintain, and operate instruments and devices (e.g., PID) used to monitor the adsorbers' VOC exhaust concentration, using procedures that take into account the manufacturer's recommendations. Monitoring device calibrations shall occur at least annually.

c. All control equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would be achieving compliance with the applicable **2. Emission Limitations,** including periodic monitoring of key operating parameters. For each carbon adsorber, the permittee shall develop and implement a site-specific monitoring plan to document the strategy that will be used to ensure that the adsorber is operating as designed and carbon is replaced when appropriate. This plan shall include an action level or device reading at which, during weekly monitoring, the permittee will change out the carbon adsorber's carbon. Upon request of the Division, the permittee shall promptly correct any deficiencies in a site-specific monitoring plan and submit the revised plan. Monitoring plans for specific control equipment shall be submitted within 90 days after the submittal of their respective testing reports.

d. The permittee shall monitor the fractional hours the individual source #s operate and the equivalent GWh of batteries produced by Battery Assembly (Emission Unit 02) and Battery Formation (Emission Unit 03) on a monthly basis. For control equipment that

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

controls more than one source #, the permittee shall monitor the fractional hours of operation for the individual control equipment itself and the controlled sources.

5. Specific Recordkeeping Requirements:

a. The permittee shall keep weekly records of the VOC concentration in the adsorbers' effluent air streams determined by the VOC monitoring device.

b. The permittee shall maintain onsite, and in a form suitable and readily available for expeditious review, the manufacturer's specifications and operational procedures for the activated carbon adsorbers.

c. The permittee shall keep records of preventive/routine maintenance and any repairs made to the activated carbon equipment.

d. The permittee shall record the fractional hours the individual source #s operate and the equivalent GWh of batteries produced by Battery Assembly (Emission Unit 02) and Battery Formation (Emission Unit 03) on a monthly basis. For control equipment that controls more than one source #, the permittee shall record the fractional hours of operation for the individual control equipment itself instead of at the controlled sources.

e. The permittee shall keep records of what process parameters are being monitored for the purposes of determining the amount of equivalent GWh batteries produced, and how to calculate GWh of production from those parameters.

f. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general recordkeeping requirements. Records shall be maintained on a per building basis.

6. Specific Reporting Requirements:

Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 04: **Cell Discharge**

Description:

Construction Commenced: May 2022

Building #1

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY1-CD01 - KY1-CD08	Cell Discharge (Building 1)	Activated Carbon KY1-AC16 - KY1-AC17; Scrubber KY1-SC09	401 KAR 51:017 401 KAR 63:020	Refer to **2. Emission Limitations a.** and **b.**

Building #2

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY2-CD01 - KY2-CD08	Cell Discharge (Building 2)	Activated Carbon KY2-AC16 - KY2-AC17 Scrubber KY2-SC09	401 KAR 51:017 401 KAR 63:020	Refer to **2. Emission Limitations a.** and **b.**

APPLICABLE REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality* (applied to VOC emissions)

STATE-ORIGIN REQUIREMENTS:
401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. **Operating Limitations:**
   a. The control equipment shall be in place and operating in accordance with the manufacturer's recommendations at all times the affected emission units are operating. [401 KAR 51:017]

   b. Activated carbon adsorbers shall be replaced when determined inefficient per the weekly adsorber outlet VOC monitoring. [401 KAR 51:017]

   c. If concentrations over the indicator levels documented by the monitoring plan required by **4. Specific Monitoring Requirements c.** are detected in a carbon adsorber during

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

monitoring required by **4. Specific Monitoring Requirements a.**, the permittee shall not operate the emission unit until the carbon has been replaced. [401 KAR 51:017]

2. Emission Limitations:

a. Pursuant to 401 KAR 51:017, exhaust concentrations of VOC shall not exceed the following limitations:

SOURCE #	EMISSION LIMITATIONS
KY1-CD01 - KY1-CD08	6.0 ppmv (as Electrolyte*) VOC post-control based on 3 hr block average basis.
KY2-CD01 - KY2-CD08	

*Electrolyte is not pure NMP. Molecular weight of 107.05 lb/lb-mol

Compliance Demonstration Method:
Compliance with the ppmv limit is demonstrated through compliance with subsections **1. Operating Limitations**, **3. Testing Requirements**, **4. Specific Monitoring Requirements**, and subsection **5. Specific Recordkeeping Requirements**.

b. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:
Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

c. Refer to **Section D – Source Emission Limitations and Testing Requirements**.

3. Testing Requirements:

a. An initial test using EPA Method 25A or an equivalent method on a representative adsorber for each controlled process is required on inlet and outlet VOC. One test on a representative adsorber from *Cell Discharge* shall be conducted. In addition to the inlet and outlet ppmv VOC factors (as Electrolyte), the average acfm airflow rate shall be established during the test . Testing shall occur at the maximum air flow rate. Refer to Section G.4.

b. The permittee shall conduct an initial performance test on a representative scrubber using EPA Method 26, or alternate as approved by the Administrator for the purpose of determining HCl emissions from *Cell Discharge* activities. In the test results, the average

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ppmv HCl outlet concentration and cell throughput shall be reported to the Division. The operating acfm air flowrate, liquid flow rate, and gas pressure drop shall be established during the test. Testing shall occur at the maximum air flow rate. Refer to Section G.4.

4. Specific Monitoring Requirements:

a. The permittee shall monitor the VOC exhaust concentration weekly from activated carbon adsorber controlled emission sources.

b. The permittee shall calibrate, maintain, and operate instruments and devices (e.g., the PID) used to monitor the adsorbers' VOC exhaust concentration, using procedures that take into account the manufacturer's recommendations. Monitoring device calibrations shall occur at least annually.

c. All control equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would be achieving compliance with the applicable **2. Emission Limitations,** including periodic monitoring of key operating parameters. For each carbon adsorber, the permittee shall develop and implement a site-specific monitoring plan to document the strategy that will be used to ensure that the adsorber is operating as designed and carbon is replaced when appropriate. This plan shall include an action level or device reading at which, during weekly monitoring, the permittee will change out the carbon adsorber's carbon. Upon request of the Division, the permittee shall promptly correct any deficiencies in a site-specific monitoring plan and submit the revised plan. Monitoring plans for specific control equipment shall be submitted within 90 days after the submittal of their respective testing reports.

d. For each HCl scrubber, the permittee shall develop and implement a site-specific monitoring plan to document the strategy that will be used to ensure that the scrubber is operating as designed.

e. The permittee shall monitor the fractional hours the individual source #s operate and the equivalent GWh of batteries produced by Battery Assembly (Emission Unit 02) and Battery Formation (Emission Unit 03) on a monthly basis. For control equipment that controls more than one source #, the permittee shall monitor the fractional hours of operation for the individual control equipment itself instead of at the controlled sources.

f. The permittee shall monitor the scrubbers' liquid flow rate, gas differential pressure, and scrubbant pH daily.

g. The permittee shall calibrate, maintain, and operate instruments and devices used to monitor the scrubbers' gas differential pressure, liquid flow rate, and scrubbant pH using procedures that take into account the manufacturer's recommendations. Monitoring device calibrations shall occur at least annually.

h. The permittee shall maintain the liquid flow rate, gas pressure drop, and pH for the scrubber within the range recommended by the manufacturer.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

i. All scrubbers shall be inspected on an annual basis. Preventive maintenance shall be performed in accordance with manufacturer's specifications. The scrubbers shall be inspected on an annual basis for proper operation of the following:
   i Scrubber liquid pump(s)

   ii Scrubber liquid spray nozzles

   iii Scrubber internals

5. Specific Recordkeeping Requirements:

a. The permittee shall keep weekly records of the VOC concentration in the adsorbers' effluent air streams determined by the VOC monitoring device.

b. The permittee shall maintain onsite, and in a form suitable and readily available for expeditious review, the manufacturer's specifications and operational procedures for the activated carbon adsorbers.

c. The permittee shall keep records of preventive/routine maintenance and any repairs made to the activated carbon equipment.

d. Monthly records shall be kept of all materials used containing VOC and HAP, including the product type, amount used and the weight percentages for VOC and all individual HAPs.

e. The permittee shall record the fractional hours the individual source #s operate and cell throughput on a monthly basis.

f. The permittee shall maintain a daily log of the scrubbers' liquid flow rate, differential pressure, and pH readings.

g. The permittee shall maintain records of calibrations of the scrubbers' differential pressure liquid flow rate, and pH measuring instruments and devices.

h. The permittee shall maintain onsite, and in a form suitable and readily available for expeditious review, a record of the manufacturer's specifications and operational procedures for the scrubbers.

i. The permittee shall keep records of preventive/routine maintenance and any repairs made to the scrubber equipment.

j. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general recordkeeping requirements. Records shall be maintained on a per building basis.

6. Specific Reporting Requirements:

Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 05: **Laboratories**

Description:

Construction Commenced: May 2022

Building #1

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY1-QE01 - KY1-QE12	Quality Evaluation 1 (Building 1)	Activated Carbon KY1-AC18 - KY1-AC19	401 KAR 51:017	Refer to **2. Emission Limitations a.**
KY1-QE13 - KY1-QE15	Quality Evaluation 2 (Building 1)	Activated Carbon KY1-AC20 - KY1-AC21	401 KAR 51:017	Refer to **2. Emission Limitations a.**
KY1-LB01 - KY1-LB03	ICP Lab (Building 1)	Scrubber KY1-SC10 - KY1-SC12	401 KAR 63:020	Refer to **2. Emission Limitations b.**
KY1-LB04 - KY1-LB05	Raw Materials Inspection Lab (Building 1)	Scrubber KY1-SC13 - KY1-SC14	401 KAR 63:020	Refer to **2. Emission Limitations b.**

Building #2

Source #	Source Name	Control Device	Applicable Regulation(s)	Emission Limitation(s)
KY2-QE01 - KY2-QE13	Quality Evaluation 1 (Building 2)	Activated Carbon KY2-AC18 - KY2-AC19	401 KAR 51:017	Refer to **2. Emission Limitations a.**
KY2-QE14 – KY2-QE17	Quality Evaluation 2 (Building 2)	Activated Carbon KY2-AC20 - KY2-AC21	401 KAR 51:017	Refer to **2. Emission Limitations a.**
KY2-LB01 - KY2-LB03	ICP Lab (Building 2)	Scrubber KY2-SC10 - KY2-SC12	401 KAR 63:020	Refer to **2. Emission Limitations b.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

KY2-LB04 - KY2-LB05	Raw Materials Inspection Lab (Building 2)	Scrubber KY2-SC13 - KY2-SC14	401 KAR 63:020	Refer to **2. Emission Limitations b.**

APPLICABLE REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality* (applied to VOC emissions)

STATE-ORIGIN REQUIREMENTS:
401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. **Operating Limitations:**
   a. The control equipment shall be in place and operating in accordance with the manufacturer's recommendations at all times the affected emission units are operating. [401 KAR 51:017]

   b. Activated carbon adsorbers shall be replaced when determined inefficient per the weekly adsorber outlet VOC monitoring. [401 KAR 51:017]

   c. If concentrations over the indicator levels documented by the monitoring plan required by **4. Specific Monitoring Requirements c.** are detected in a carbon adsorber during monitoring required by **4. Specific Monitoring Requirements a.**, the permittee shall not operate the emission unit until the carbon has been replaced. [401 KAR 51:017]

2. **Emission Limitations:**
   a. Pursuant to 401 KAR 51:017, exhaust concentrations of VOC shall not exceed the following limitations:

SOURCE NAME	EMISSION LIMITATIONS
KY1-QE01 - KY1-QE15	6.0 ppmv (as Electrolyte*) VOC post-control based on 3 hr block average basis
KY2-QE01 - KY2-QE17	

*Electrolyte is not pure NMP. Molecular weight of 107.05 lb/lb-mol

Compliance Demonstration Method:
Compliance with the ppmv limit is demonstrated through compliance with subsections **1. Operating Limitations**, **4. Specific Monitoring Requirements**, and subsection **5. Specific Recordkeeping Requirements**.

   b. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:
Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

c. Refer to **Section D – Source Emission Limitations and Testing Requirements**.

3. Testing Requirements:
Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

a. The permittee shall monitor the VOC exhaust concentration weekly from activated carbon adsorber controlled emission sources.

b. The permittee shall calibrate, maintain, and operate instruments and devices used to monitor the adsorbers' VOC exhaust concentration, using procedures that take into account the manufacturer's recommendations. Monitoring device calibrations shall occur at least annually.

c. All control equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would be achieving compliance with the applicable **2. Emission Limitations,** including periodic monitoring of key operating parameters. For each carbon adsorber, the permittee shall develop and implement a site-specific monitoring plan to document the strategy that will be used to ensure that the adsorber is operating as designed and carbon is replaced when appropriate. This plan shall include an action level or device reading at which, during weekly monitoring, the permittee will change out the carbon adsorber's carbon. Upon request of the Division, the permittee shall promptly correct any deficiencies in a site-specific monitoring plan and submit the revised plan. Monitoring plans for specific control equipment shall be submitted within 90 days after the submittal of their respective testing reports.

d. The permittee shall monitor the fractional hours the individual source #s operate.

e. The permittee shall monitor the scrubbers' liquid flow rate, gas differential pressure, and scrubbant pH daily.

f. The permittee shall calibrate, maintain, and operate instruments and devices used to monitor the scrubbers' gas differential pressure, liquid flow rate, and scrubbant pH using procedures that take into account the manufacturer's recommendations. Monitoring device calibrations shall occur at least annually.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

g. The permittee shall maintain the liquid flow rate and gas pressure drop for the scrubber within the range recommended by the manufacturer.

h. All scrubbers shall be inspected on an annual basis. Preventive maintenance shall be performed in accordance with manufacturer's specifications. The scrubbers shall be inspected on an annual basis for proper operation of the following:
   i Scrubber liquid pump(s)

   ii Scrubber liquid spray nozzles

   iii Scrubber internals

5. Specific Recordkeeping Requirements:

a. The permittee shall keep weekly records of the VOC concentration in the adsorbers' effluent air streams determined by the VOC monitoring device.

b. The permittee shall maintain onsite, and in a form suitable and readily available for expeditious review, the manufacturer's specifications and operational procedures for the activated carbon adsorbers.

c. The permittee shall keep records of preventive/routine maintenance and any repairs made to the activated carbon equipment.

d. Monthly records shall be kept of all materials used containing VOC and HAP, including the product type, amount used and the weight percentages for VOC and all individual HAPs.

e. The permittee shall record the fractional hours the individual source #s operate.

f. The permittee shall maintain a daily log of the scrubbers' liquid flow rate, differential pressure, and pH readings.

g. The permittee shall maintain records of calibrations of the scrubbers' differential pressure liquid flow rate, and pH measuring instruments and devices.

h. The permittee shall maintain onsite, and in a form suitable and readily available for expeditious review, a record of the manufacturer's specifications and operational procedures for the scrubbers.

i. The permittee shall keep records of preventive/routine maintenance and any repairs made to the scrubber equipment.

j. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general recordkeeping requirements. Records shall be maintained on a per building basis.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:
Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 06: **Natural Gas-Fired Boilers**

Building #1

(KY1-B01 - KY1-B11): **Eleven (11) Natural Gas-Fired Boilers**

Description:

Maximum Rated Capacity:	12.0 MMBtu/hr, each
Construction Commenced:	May 2022
Fuel:	Natural Gas

Building #2

(KY2-B01 - KY2-B11): **Eleven (11) Natural Gas-Fired Boilers**

Description:

Maximum Rated Capacity:	12.0 MMBtu/hr, each
Construction Commenced:	May 2022
Fuel:	Natural Gas

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (for CO, NO_x, VOC, and GHG)

401 KAR 59:015, *New indirect heat exchangers*

401 KAR, Section 2(2)(d), 40 C.F.R. 60.40c through 60.48c (Subpart Dc), *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances.*

1. **Operating Limitations:**
   a. During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in this section [401 KAR 59:015, Section 7]
      i. The permittee shall comply with 401 KAR 50:055, Section 2(5); [401 KAR 59:015, Section 7(1)(a)]

      ii. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility; [401 KAR 59:015, Section 7(1)(b)]

      iii. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods; [401 KAR 59:015, Section 7(1)(c)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iv. The actions, including duration of the startup period, of the permittee during startup periods and shutdown periods, shall be documented by signed, contemporaneous logs or other relevant evidence; and [401 KAR 59:015, Section 7(1)(d)]

v. Startups and shutdowns shall be conducted according to either: [401 KAR 59:015, Section 7(1)(e)]
   1. The manufacturer's recommended procedures; or [401 KAR 59:015, Section 7(1)(e)1.]

   2. Recommended procedures for a unit of similar design, for which manufacturer's recommended procedures are available, as approved by the cabinet based on documentation provided by the permittee. [401 KAR 59:015, Section 7(1)(e)2.]

Compliance Demonstration Method:
Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements d.**

b. The following control technology, equipment and method are required to meet Best Available Control Technology (BACT) demonstration for CO, NO_x, VOC, and GHG:
   i. Utilizing clean, gaseous fuel.

   ii. Proper design and operation.

   iii. Conducting good combustion practices.

Compliance Demonstration Method:
(1) Continuous compliance with **1. Operating Limitations** b.(i) shall be demonstrated by combusting pipeline quality natural gas only.

(2) Continuous compliance with **1. Operating Limitations** b.(ii) and b.(iii) shall be demonstrated by keeping records of the following:
   1. Operation and maintenance of each unit and associated analyzers per manufacturer recommendations.

   2. Retain a copy of the manufacturer's recommendations on site and make available for review.

   3. Copy of manufacturer's recommended oxygen range and temperature

2. Emission Limitations:
a. The permittee shall not cause emissions of particulate matter in excess of 0.10 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(b)]

b. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]
   i. A maximum of 27% opacity shall be allowed for one 6-minute period in any 60 minutes. [401 KAR 59:015, Section 4(2)(a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. Emissions caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]

c. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 0.8 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(b)1.]

Compliance Demonstration Method:
Compliance with the 401 KAR 59:015 emission standards is assumed. [401 KAR 50:045, Section 4(3)(c)1.]

d. Emissions shall not exceed the values in the following table. These limits serve as the BACT emission limits for CO, NO_x, VOC, and GHG. [401 KAR 51:017]

Building 1.

Pollutant	**Emission Limitation 12 MMBtu/Hr Boilers**	
	(based on 3-hr block average)	(12-month rolling total)
CO	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu	1.94 tpy for each unit (21.37 tpy for all 11 units)
NO_x	9 ppm at 3% O_2 equivalent to 0.0109 lb/MMBtu	0.57 tpy for each unit (6.32 tpy for all 11 units)
VOC	0.0054 lb/MMBtu	0.28 tpy for each unit (3.12 tpy for all 11 units)
CO_2	117 lb/MMBtu	N/A
CO_{2e}		6,154.68 tpy for each unit (67,701.43 tpy for all 11 units)

Building 2.

Pollutant	**Emission Limitation 12 MMBtu/Hr Boilers**	
	(based on 3-hr block average)	(12-month rolling total)
CO	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu	1.94 tpy for each unit (21.37 tpy for all 11 units)
NO_x	9 ppm at 3% O_2 equivalent to 0.0109 lb/MMBtu	0.57 tpy for each unit (6.32 tpy for all 11 units)
VOC	0.0054 lb/MMBtu	0.28 tpy for each unit (3.12 tpy for all 11 units)
CO_2	117 lb/MMBtu	N/A
CO_{2e}		6,154.68 tpy for each unit (67,701.43 tpy for all 11 units)

Compliance Demonstration Method:
The permittee shall demonstrate compliance according to **1. Operating Limitations b., 3. Testing Requirements** and **5. Specific Recordkeeping Requirements b.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:
Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

3. Testing Requirements:

a. The permittee shall conduct an initial performance test to demonstrate compliance with the CO and NO_x BACT emission limitations by the deadline specified in **Section G – General Provisions**. As an alternative to conducting performance testing on each unit, the results from a single boiler can be assumed to be representative of the other boilers with the same MMBtu/hr rating. Performance testing shall be conducted using the following U.S. EPA Reference Test Methods: [401 KAR 50:045, Section 1]

i. U.S. EPA Reference Method 10 for CO;

ii. U.S. EPA Reference Method 7 for NO_x; or

iii. Other methods, as approved by the Division.

b. Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

a. The permittee shall monitor fuel usage (MMscf) on a monthly basis. [401 KAR 52:020, Section 10 and 40 CFR 60.48c(g)(2)]

b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of fuel usage (MMscf) on a monthly basis. [401 KAR 52:020, Section 10 and 40 CFR 60.48c(g)(2)]

b. The permittee shall calculate and keep records of the emissions of CO, VOC, NOx and CO_2e from each unit on a monthly basis as well as a 12-month rolling total. The monthly emissions for each pollutant shall be calculated based on the emission factor, fuel used and monthly average heat content of fuel used. The emission factor for CO and NOx used in the calculations shall be determined from the most recent performance test approved by the

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Division. The emission factor for VOC are based on AP-42, Chapter 1.4 for gaseous fuel at heat content of 1020 Btu/scf. The emission factor for CO_2e shall be based on the calculations from 40 CFR 98, Subpart C and the CO_2 emission factor from the most recent performance test approved by the Division. [401 KAR 52:020, Section 10]

c. All records required under 40 CFR 60.48c shall be maintained by the permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)]

d. The permittee shall maintain records of the manufacturer's recommended procedures for startup and shutdown, any instance in which the recommended procedures were not followed, and any corrective actions taken. [401 KAR 52:020, Section 10]

e. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements.** Records shall be maintained on a per building basis.

6. Specific Reporting Requirements:

a. The permittee shall submit notification of the date of construction or reconstruction and actual startup, as provided in 40 CFR 60.7. This notification shall include: [40 CFR 60.48c(a)]

i. The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility. [40 CFR 60.48c(a)(1)]

ii. If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c, or 60.43c. [40 CFR 60.48c(a)(2)]

iii. The annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired. [40 CFR 60.48c(a)(3)]

b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 07: **Natural Gas-Fired Oil Heaters**

Building #1

(KY1-H01 - KY1-H10): **Ten (10) Natural Gas-Fired Oil Heaters**

Description:

Maximum Rated Capacity:	27.8 MMBtu/hr, each (KY1-H01 - KY1-H05)
	23.8 MMBtu/hr, each (KY1-H06 - KY1-H10)
Construction Commenced:	May 2022
Fuel:	Natural Gas

Building #2

(KY2-H01 – KY2-H10): **Ten (10) Natural Gas-Fired Oil Heaters**

Description:

Maximum Rated Capacity:	27.8 MMBtu/hr, each (KY2-H01 – KY2-H05)
	23.8 MMBtu/hr, each (KY2-H06 – KY2-H10)
Construction Commenced:	May 2022
Fuel:	Natural Gas

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (for CO, NO_x, VOC, and GHG)

401 KAR 59:015, *New indirect heat exchangers*

401 KAR 60:005, Section 2(2)(d) 40 C.F.R. 60.40c through 60.48c (Subpart Dc), *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances.*

1. **Operating Limitations:**
   a. During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in this section [401 KAR 59:015, Section 7]
      i. The permittee shall comply with 401 KAR 50:055, Section 2(5); [401 KAR 59:015, Section 7(1)(a)]

      ii. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility; [401 KAR 59:015, Section 7(1)(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

iii. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods; [401 KAR 59:015, Section 7(1)(c)]

iv. The actions, including duration of the startup period, of the permittee during startup periods and shutdown periods, shall be documented by signed, contemporaneous logs or other relevant evidence; and [401 KAR 59:015, Section 7(1)(d)]

v. Startups and shutdowns shall be conducted according to either: [401 KAR 59:015, Section 7(1)(e)]
   1. The manufacturer's recommended procedures; or [401 KAR 59:015, Section 7(1)(e)1.]

   2. Recommended procedures for a unit of similar design, for which manufacturer's recommended procedures are available, as approved by the cabinet based on documentation provided by the permittee. [401 KAR 59:015, Section 7(1)(e)2.]

Compliance Demonstration Method:
Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements d.**

b. The following control technology, equipment and method are required to meet Best Available Control Technology (BACT) demonstration for CO, NO_x, VOC, and GHG:
   i. Utilizing clean, gaseous fuel.

   ii. Proper design and operation.

   iii. Conducting good combustion practices.

Compliance Demonstration Method:
(1) Continuous compliance with **1. Operating Limitations** b.(i) shall be demonstrated by combusting pipeline quality natural gas only.

(2) Continuous compliance with **1. Operating Limitations** b.(ii) and b.(iii) shall be demonstrated by keeping records of the following:
   1. Operation and maintenance of each unit and associated analyzers per manufacturer recommendations.

   2. Retain a copy of the manufacturer's recommendations on site and make available for review.

   3. Copy of manufacturer's recommended oxygen range and temperature

2. Emission Limitations:
a. The permittee shall not cause emissions of particulate matter in excess of 0.10 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]
   i. A maximum of 27% opacity shall be allowed for one 6-minute period in any 60 minutes. [401 KAR 59:015, Section 4(2)(a)]

   ii. Emissions caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]

c. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 0.8 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(b)1.]

Compliance Demonstration Method:
Compliance with the 401 KAR 59:015 emission standards is assumed. [401 KAR 50:045, Section 4(3)(c)1.]

d. Emissions shall not exceed the values in the following table. These limits serve as the BACT emission limits for CO, NO_x, VOC, and GHG. [401 KAR 51:017]

Building 1.

Pollutant	**Emission Limitation (27.8 MMBtu/hr)**	
	(based on 3-hr block average)	(12-month rolling total)
CO	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu	4.50 tpy for each unit (22.48 tpy for all 5 units)
NO_x	20 ppm at 3% O_2 equivalent to 0.0243 lb/MMBtu	2.95 tpy for each unit (14.77 tpy for all 5 units)
VOC	0.0054 lb/MMBtu	0.66 tpy for each unit (3.28 tpy for all 5 units)
CO_2	117 lb/MMBtu	N/A
CO_{2e}		14,242.95 tpy for each unit (71,214.73 tpy for all 5 units)

Pollutant	**Emission Limitation (23.8 MMBtu/hr)**	
	(based on 3-hr block average)	(12-month rolling total)
CO	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu	3.85 tpy for each unit (19.27 tpy for all 5 units)
NO_x	20 ppm at 3% O_2 equivalent to 0.0243 lb/MMBtu	2.53 tpy for each unit (12.66 tpy for all 5 units)
VOC	0.0054 lb/MMBtu	0.56 tpy for each unit (2.81 tpy for all 5 units)
CO_2	117 lb/MMBtu	N/A
CO_{2e}		12,206.77 tpy for each unit (61,033.87 tpy for all 5 units)

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Building 2.

Pollutant	**Emission Limitation (27.8 MMBtu/hr)**	
	(based on 3-hr block average)	(12-month rolling total)
CO	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu	4.50 tpy for each unit (22.48 tpy for all 5 units)
NO_x	20 ppm at 3% O_2 equivalent to 0.0243 lb/MMBtu	2.95 tpy for each unit (14.77 tpy for all 5 units)
VOC	0.0054 lb/MMBtu	0.66 tpy for each unit (3.28 tpy for all 5 units)
CO_2	117 lb/MMBtu	N/A
CO_{2e}		14,242.95 tpy for each unit (71,214.73 tpy for all 5 units)

Pollutant	**Emission Limitation (23.8 MMBtu/hr)**	
	(based on 3-hr block average)	(12-month rolling total)
CO	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu	3.85 tpy for each unit (19.27 tpy for all 5 units)
NO_x	20 ppm at 3% O_2 equivalent to 0.0243 lb/MMBtu	2.53 tpy for each unit (12.66 tpy for all 5 units)
VOC	0.0054 lb/MMBtu	0.56 tpy for each unit (2.81 tpy for all 5 units)
CO_2	117 lb/MMBtu	N/A
CO_{2e}		12,206.77 tpy for each unit (61,033.87 tpy for all 5 units)

Compliance Demonstration Method:
The permittee shall demonstrate compliance according to **1. Operating Limitations b.**, **3. Testing Requirements**, and **5. Specific Recordkeeping Requirements b.**

e. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:
Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

a. The permittee shall conduct an initial performance test to demonstrate compliance with the CO and NO_x BACT emission limitations by the deadline specified in **Section G – General Provisions**. As an alternative to conducting performance testing on each unit, the results from a single oil heater can be assumed to be representative of the other oil heaters with the same MMBtu/hr rating. Performance testing shall be conducted using the following U.S. EPA Reference Test Methods: [401 KAR 50:045, Section 1]

i. U.S. EPA Reference Method 10 for CO;

ii. U.S. EPA Reference Method 7 for NO_x; or

iii. Other methods, as approved by the Division.

b. Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

a. The permittee shall monitor fuel usage (MMscf) on a monthly basis. [401 KAR 52:020, Section 10 and 40 CFR 60.48c(g)(2)]

b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of fuel usage (MMscf) on a monthly basis. [401 KAR 52:020, Section 10 and 40 CFR 60.48c(g)(2)]

b. The permittee shall calculate and keep records of the emissions of CO, VOC, NOx and CO_2e from each unit on a monthly basis as well as a 12-month rolling total. The monthly emissions for each pollutant shall be calculated based on the emission factor, fuel used and monthly average heat content of fuel used. The emission factor for CO and NOx used in the calculations shall be determined from the most recent performance test approved by the Division. The emission factor for VOC are based on AP-42, Chapter 1.4 for gaseous fuel at heat content of 1020 Btu/scf. The emission factor for CO_2e shall be based on the calculations from 40 CFR 98, Subpart C and the CO_2 emission factor from the most recent performance test approved by the Division. [401 KAR 52:020, Section 10]

c. All records required under 40 CFR 60.48c shall be maintained by the permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)]

d. The permittee shall keep records of the manufacturer's recommended procedures for startup and shutdown, any instance in which the recommended procedures were not followed, and any corrective actions taken. [401 KAR 52:020, Section 10]

e. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements.** Records shall be maintained on a per building basis.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

a. The permittee shall submit notification of the date of construction or reconstruction and actual startup, as provided in 40 CFR 60.7. This notification shall include: [40 CFR 60.48c(a)]

i. The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility. [40 CFR 60.48c(a)(1)]

ii. If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c, or 60.43c. [40 CFR 60.48c(a)(2)]

iii. The annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired. [40 CFR 60.48c(a)(3)]

b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 08A: **Diesel-Fired Emergency Fire Pump Engines**

Building #1

(KY1-FPE01 - KY1-FPE03) **Three (3) Diesel-Fired Emergency Fire Pump Engines**

Description:

Maximum Engine Rating:	399 hp each
Construction Commenced:	May 2022
Primary Fuel:	Diesel

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (for CO, NO_x, VOC, and GHG)

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (Subpart IIII), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*.

1. **Operating Limitations:**
   a. The permittee shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements apply for these engines under 40 CFR Part 63 [40 CFR 63.6590(c)(1)]

   b. The permittee shall use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]

   c. The permittee shall operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If the engine is not operated according to the requirements in 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and shall meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]
      i. There is no time limit on the use of emergency stationary ICE in emergency situations[40 CFR 60.4211(f)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. The permittee may operate the emergency stationary ICE for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4211(f)(2). [40 CFR 60.4211(f)(2) and (f)(2)(i)]

iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 60.4211(f)(3) and (f)(3)(i)]

1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [40 CFR 60.4211(f)(3)(i)(A)]

2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 60.4211(f)(3)(i)(B)]

3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 60.4211(f)(3)(i)(C)]

4. The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 60.4211(f)(3)(i)(D)]

5. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [40 CFR 60.4211(f)(3)(i)(E)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

d. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 over the entire life of the engine. [40 CFR 60.4206]

e. The permittee shall do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
   i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]

   ii. Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]

   iii. Meet the requirements of 40 CFR Part 1068, as they apply. [40 CFR 60.4211(a)(3)]

2. Emission Limitations:

a. The permittee shall comply with the emission standards in 40 CFR 60, Subpart IIII, Table 4, for all pollutants. These limits also constitute the Best Available Control Technology (BACT) emission limitations for VOC, NO_x, CO_2 and CO for each unit. [40 CFR 60.4205(c) and 401 KAR 51:017]

Pollutant	Emission Standard (g/KW-hr)	Emission Standard (g/HP-hr)
NO_x + NMHC (NO_x BACT) (VOC BACT)	4.0	3.0
CO (CO BACT)	3.5	2.6
PM	0.20	0.15

Compliance Demonstration Method:

1. The permittee shall demonstrate compliance with the emission standards by purchasing an engine certified to the emission standards specified in 40 CFR 60.4205(c), for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]

2. If the permittee does not install, configure, operate, and maintain an engine and control device according to the manufacturer's emission-related written instructions, or an emission-related setting is changed in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance by keeping a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the appliable emission standards within 1 year of startup,

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after emission-related settings are changed in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g) and (g)(2)]

b. Carbon dioxide equivalent (CO_2e) emissions shall not exceed 1.18 lb/hp-hr on a 3-hour block average basis. This limit serves as the BACT emission limit for GHG.

Compliance Demonstration Method:
The permittee is assumed to be in compliance with the GHG BACT emission limit based on the emission factors for diesel fuel from 40 CFR 98, Subpart C.

3. Testing Requirements:

a. Performance tests conducted pursuant to 40 CFR 60, Subpart IIII shall conform to the requirements of 40 CFR 60.4212(a) through (e), as appropriate. [40 CFR 60.4212]

b. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

a. If the engines do not meet the standards applicable to non-emergency engines, the permittee shall install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]

b. The permittee shall monitor hours of operation and fuel usage (Mgal) on a monthly basis. [401 KAR 52:020, Section 10]

c. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**.

5. Specific Recordkeeping Requirements:

a. If the emergency engines do not meet the standards applicable to non-emergency engines, the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

b. The permittee shall maintain records necessary to demonstrate compliance with the applicable emission limits, according to the method specified, and fuel supplier certification according to the applicable fuel requirement. Records of performance tests shall report emission limits and actual emissions in the units of the applicable standard. [401 KAR 52:020, Section 10]

c. The permittee shall maintain records of hours of operation and fuel usage (Mgal) on a monthly basis. [401 KAR 52:020, Section 10]

d. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**. Records shall be maintained on a per building basis.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

a. Beginning on February 26, 2025, within 60 days after the date of completing each performance test required by 40 CFR 60 Subpart IIII, the permittee must submit the results of the performance test required under 40 CFR 60 Subpart IIII following the procedures specified in 40 CFR 60.4214(f)(1) and (2). [40 CFR 60.4214(f)]

i. Reports shall be submitted pursuant to 40 CFR 60.4214(g) and records may be maintained in an electronic format pursuant to 40 CFR 60.4214(j).

b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 08B: **Diesel-Fired Emergency Engines**

Building #1

(KY1-GE01 - KY1-GE05) **Five (5) Diesel-Fired Emergency Engines**

Description:

Maximum Engine Rating:	1,609 hp Emergency Engines (KY1-GE01 - KY1-GE02)
	1,341 hp Emergency Engine (KY1-GE03)
	805 hp Emergency Engine (KY1-GE04)
	1,140 hp Emergency Engine (KY1-GE05)
Construction Commenced:	May 2022
Primary Fuel:	Diesel

Building #2

(KY2-GE01 - KY2-GE04) **Four (4) Diesel-Fired Emergency Engines**

Description:

Maximum Engine Rating:	1,073 hp Emergency Engines (KY2-GE01 - KY2-GE02)
	1676 hp Emergency Engine (KY2-GE03)
	2146 hp Emergency Engine (KY2-GE04)
Construction Commenced:	May 2022
Primary Fuel:	Diesel

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (for CO, NO_x, VOC, and GHG)

401 KAR 60:005, Section 2(2)(dddd), 40 C.F.R. 60.4200 through 60.4219, Tables 1 through 8 (Subpart IIII), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

401 KAR 63:002, Section 2(4)(eeee), 40 C.F.R. 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (Subpart ZZZZ), *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*.

1. **Operating Limitations:**
   a. The permittee shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements apply for these engines under 40 CFR Part 63 [40 CFR 63.6590(c)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee shall use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]

c. The permittee shall operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If the engine is not operated according to the requirements in 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and shall meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]

   i. There is no time limit on the use of emergency stationary ICE in emergency situations [40 CFR 60.4211(f)(1)]

   ii. The permittee may operate the emergency stationary ICE for maintenance checks and readiness testing for a maximum of 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4211(f)(2). [40 CFR 60.4211(f)(2) and (f)(2)(i)]

   iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 60.4211(f)(3) and (f)(3)(i)]

      1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [40 CFR 60.4211(f)(3)(i)(A)]

      2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 60.4211(f)(3)(i)(B)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 60.4211(f)(3)(i)(C)]

4. The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 60.4211(f)(3)(i)(D)]

5. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [40 CFR 60.4211(f)(3)(i)(E)]

d. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 over the entire life of the engine. [40 CFR 60.4206]

e. The permittee shall do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
   i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]

   ii. Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]

   iii. Meet the requirements of 40 CFR Part 1068, as they apply. [40 CFR 60.4211(a)(3)]

2. Emission Limitations:

a. The permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power. These limits also constitute the BACT emission limitations for VOC, NOx, and CO for each unit. [40 CFR 60.4205(b), 60.4202(a)(2), 40 CFR Part 1039, Appendix I(b), and 401 KAR 51:017]
   Building 1.

Pollutant	**Emission Standard** (g/KW-hr)
NO_x + NMHC (NO_x BACT) (VOC BACT)	6.4
CO (CO BACT)	3.5
PM	0.20

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Building 2.

Pollutant	**Emission Standard** (g/KW-hr)
NO_x + NMHC (NO_x BACT) (VOC BACT)	6.4
CO (CO BACT)	3.5
PM	0.20

Compliance Demonstration Method:

1. The permittee shall demonstrate compliance with the emission standards by purchasing an engine certified to the emission standards specified in 40 CFR 60.4205(b), for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]

2. If the permittee does not install, configure, operate, and maintain an engine and control device according to the manufacturer's emission-related written instructions, or an emission-related setting is changed in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance by keeping a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year or startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instruction, or within 1 year after emission-related settings are changed in a way that is not permitted by the manufacturer. The permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR 60.4211(g) and (g)(3)]

b. Smoke from the engines may not exceed the following standards: [40 CFR 60.4205(b), 60.4202(a)(2), and 40 CFR 1039.105(b)]
   i. 20 percent during the acceleration mode. [40 CFR 1039.105(b)(1)]

   ii. 15 percent during the lugging mode. [40 CFR 1039.105(b)(2)]

   iii. 50 percent during the peaks in either the acceleration or lugging modes. [40 CFR 1039.105(b)(3)]

Compliance Demonstration Method:
Refer to **Compliance Demonstration Method** for **2. Emission Limitations a.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

c. CO_2e emissions shall not exceed 0.99 lb/hp-hr on a 3-hour block average basis. This limit serves as the BACT emission limit for GHG. [401 KAR 51:017]

Compliance Demonstration Method:
The permittee is assumed to be in compliance with the GHG BACT emission limit based on the emission factors for diesel fuel from 40 CFR 98, Subpart C.

3. Testing Requirements:

a. Performance tests conducted pursuant to 40 CFR 60, Subpart IIII shall conform to the requirements of 40 CFR 60.4212(a) through (e), as appropriate. [40 CFR 60.4212]

b. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

a. If the engines do not meet the standards applicable to non-emergency engines, the permittee shall install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]

b. The permittee shall monitor hours of operation and fuel usage (Mgal) on a monthly basis. [401 KAR 52:020, Section 10]

c. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**.

5. Specific Recordkeeping Requirements:

a. If the emergency engines do not meet the standards applicable to non-emergency engines, the permittee shall keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

b. The permittee shall maintain records necessary to demonstrate compliance with the applicable emission limits, according to the method specified, and fuel supplier certification according to the applicable fuel requirement. Records of performance tests shall report emission limits and actual emissions in the units of the applicable standard. [401 KAR 52:020, Section 10]

c. The permittee shall maintain records of hours of operation and fuel usage (Mgal) on a monthly basis. [401 KAR 52:020, Section 10]

d. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**. Records shall be maintained on a per building basis.

6. Specific Reporting Requirements:

a. Beginning on February 26, 2025, within 60 days after the date of completing each performance test required by 40 CFR 60 Subpart IIII, the permittee must submit the results

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

of the performance test required under 40 CFR 60 Subpart IIII following the procedures specified in 40 CFR 60.4214(f)(1) and (2). [40 CFR 60.4214(f)]

i. Reports shall be submitted pursuant to 40 CFR 60.4214(g) and records may be maintained in an electronic format pursuant to 40 CFR 60.4214(j).

b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 09: **Cooling Towers**

Building #1

(KY1-CT01 - KY1-CT07): **Cooling Towers**

Description:
Operating Rate: 7,507 gpm (KY1-CT01 - KY1-CT04)
3,804 gpm (KY1-CT05 - KY1-CT07)
Construction Commenced: May 2022

Building #2

(KY2-CT01 - KY2-CT07): **Cooling Towers**

Description:
Operating Rate: 7,507 gpm (KY2-CT01 - KY2-CT04)
3,804 gpm (KY2-CT05 - KY2-CT07)
Construction Commenced: May 2022

APPLICABLE REGULATIONS:
401 KAR 59:010, *New Process Operations*

PRECLUDED REGULATIONS:
401 KAR 63:002, Section 2(4)(j), 40 C.F.R. 63.400 to 63.407, Table 1 (Subpart Q), *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*

1. **Operating Limitations:**
   a. The cooling towers shall be operated and maintained according to the manufacturer's specifications and recommendations at all times.

   b. The cooling tower shall be certified by the manufacturer to have a 0.0005% drift rate.

   c. The use of chromium based water treatment chemicals in the cooling towers (EU09) is prohibited. [To preclude 40 CFR 63, Subpart Q]

      Compliance Demonstration Method:
      Refer to subsections **5. Specific Recordkeeping Requirements**

2. **Emission Limitations:**
   a. No person shall cause, suffer, allow, or permit any continuous emission into the open air from a control or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3 (1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:
Refer to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements** for opacity compliance demonstration.

b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A. [401 KAR 59:010, Section 3(2)]
   i. For process weight rates ≤ 0.5 tons/hour: $E=2.34$
   ii. For process weight rates ≤ 30 tons/hour: $E=3.59P^{0.62}$
   Where:
   E = rate of the emission in lb/hr
   P = process weight rate in tons/hr

Compliance Demonstration Method:
The permittee is assumed to be in compliance when the cooling towers are operated and maintained in accordance with the manufacturer's specifications and recommendations.

3. Testing Requirements:
Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:
The permittee shall perform a qualitative visual observation of the opacity of emissions at each stack no less than weekly while the affected facility is operating. If visible emissions from the stacks are observed (not including condensed water in the plume), the permittee shall determine the opacity using Reference Method 9. In lieu of determining the opacity using U.S. EPA Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume).

5. Specific Recordkeeping Requirements:
a. The permittee shall maintain a log of the visual observations noting date, time, initials of observers, and records of corrective actions taken as a result of visible emissions from a stack and records of any Reference Method 9 readings performed.

b. The permittee shall keep onsite, and in a form suitable and readily available for expeditious review, the manufacturer's specifications for the cooling towers.

c. The permittee shall keep the manufacturer's certification of the cooling towers' 0.0005% drift rate onsite.

d. The permittee shall maintain records of water treatment chemical purchases, including invoices and other documentation that includes invoices and other documentation that includes date(s) of purchase or shipment, trade name or other information to identify composition of the product, and quantity of the product. [To preclude 40 CFR 63, Subpart Q]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**. Records shall be maintained on a per building basis.

6. Specific Reporting Requirements:

a. The permittee shall submit a copy of the control device inspection and repair log for those times when corrective actions are required due to an opacity exceedance and/or records of any Reference Method 9 opacity observations as noted in Section B (4) a. Copies of these records shall be submitted as a part of the semiannual reporting as required in Section F (5) & (6).

b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 10: **Storage Tanks**

Building #1

Description:

All tanks are Vertical Above-Ground White Fixed Roof tanks.
Construction Commenced: May 2022

Source #	Source Name	Tank Size
EU10: Storage Tanks		
KY1-RT01 - KY1-RT04	Raw Material Tanks (Raw NMP)	13,800 gallons
KY1-WT01 - KY1-WT08	Waste Tanks (Recovered Waste NMP)	13,800 gallons
KY1-ET01 - KY1-ET08	Electrolyte Storage Tanks	13,800 gallons
KY1-EST101	Electrolyte Separator Tanks 1 (with Activated Carbon Adsorber Control KY1-AC22)	790 gallons
KY1-EST201	Electrolyte Separator Tanks 2 (with Activated Carbon Adsorber Control KY1-AC22)	790 gallons
KY1-EWT01	Electrolyte Waste Tanks	1,320 gallons

Building #2

Description:

All tanks are Vertical Above-Ground White Fixed Roof tanks.
Construction Commenced: May 2022

Source #	Source Name	Tank Size
EU10: Storage Tanks		
KY2-RT01 - KY2-RT04	Raw Material Tanks (Raw NMP)	13,800 gallons
KY2-WT01 - KY2-WT08	Waste Tanks (Recovered Waste NMP)	13,800 gallons
KY2-ET01 - KY2-ET08	Electrolyte Storage Tanks (Electrolyte is not pure NMP)	13,800 gallons
KY2-EST101	Electrolyte Separator Tanks 1(with Activated Carbon Adsorber Control KY2-AC22)	790 gallons

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Source #	Source Name	Tank Size
EU10: Storage Tanks		
KY2-EST201	Electrolyte Separator Tanks 2(with Activated Carbon Adsorber Control KY2-AC22)	790 gallons
KY2-EWT01	Electrolyte Waste Tanks	1,320 gallons

APPLICABLE REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality* (applied to VOC emissions)

STATE-ORIGIN REQUIREMENTS:
401 KAR 63:020, *Potentially hazardous matter or toxic substances.*

1. **Operating Limitations:**
   a. The control equipment shall be in place and operating in accordance with the manufacturer's recommendations at all times the affected emission units are operating. [401 KAR 52:020, Section 10]

   b. Activated carbon adsorbers shall be replaced when determined inefficient per the weekly adsorber outlet VOC monitoring. [401 KAR 52:020, Section 10]

   c. If concentrations over the indicator levels documented by the monitoring plan required by **4. Specific Monitoring Requirements c.** are detected in a carbon adsorber during monitoring required by **4. Specific Monitoring Requirements a.**, the permittee shall not operate the emission unit until the carbon has been replaced. [401 KAR 52:020, Section 10]

   d. BACT Tank Work Practice Standards:
      i. All storage tanks shall be equipped with permanent submerged fill pipes and [401 KAR 51:017]

      ii. All storage tanks shall be equipped with spill and overfill protection. [401 KAR 51:017]

2. **Emission Limitations:**
   Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

   Compliance Demonstration Method:
   Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

a. The permittee shall monitor the VOC exhaust concentration weekly from activated carbon adsorber controlled emission sources. [401 KAR 52:020, Section 10]

b. The permittee shall calibrate, maintain, and operate instruments and devices used to monitor the adsorbers' VOC exhaust concentration, using procedures that take into account the manufacturer's recommendations. Monitoring device calibrations shall occur at least annually. [401 KAR 52:020, Section 10]

c. For each carbon adsorber, the permittee shall develop and implement a site-specific monitoring plan to document the strategy that will be used to ensure that the adsorber is operating as designed and carbon is replaced when appropriate. This plan shall include an action level or device reading at which, during weekly monitoring, the permittee will change out the carbon adsorber's carbon. Upon request of the Division, the permittee shall promptly correct any deficiencies in a site-specific monitoring plan and submit the revised plan. [401 KAR 52:020, Section 10]

d. The permittee shall monitor the following:
   i. The quantity raw material to be stored delivered to the facility during each month.

   ii. The amount of waste material, to be stored in the waste tanks, that is generated and the amount of waste shipped off-site during each month.

5. Specific Recordkeeping Requirements:

a. The permittee shall keep weekly records of the VOC concentration in the adsorbers' effluent air streams determined by the VOC monitoring device. [401 KAR 52:020, Section 10]

b. The permittee shall maintain onsite, and in a form suitable and readily available for expeditious review, the manufacturer's specifications and operational procedures for the activated carbon adsorbers. [401 KAR 52:020, Section 10]

c. The permittee shall keep records of preventive/routine maintenance and any repairs made to the activated carbon equipment. [401 KAR 52:020, Section 10]

d. The owner or operator shall maintain the following documents:
   i. A log of the quantity raw material to be stored delivered to the facility during each month.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ii. A log of the amount of waste material, to be stored in the waste tanks, that is generated and waste shipped off-site during each month.

e. Records confirming that each tank installed is equipped with the pollution prevention equipment listed under subsection **1. Operating limitations** shall be kept on site**.**

f. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**. Records shall be maintained on a per building basis.

6. Specific Reporting Requirements:
Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 11: **Date Code Printers**

Building #1

(KY1-PI01): **Date Code Printers**

Description:
Control Equipment: None

Construction Commenced: May 2022

Building #2

(KY2-PI01): **Date Code Printers**

Description:
Control Equipment: None

Construction Commenced: May 2022

APPLICABLE REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality* (applied to VOC emissions)

1. **Operating Limitations:**
   BACT Work Practice Standards:
   a. All inks, solvents, and makeup fluid used shall be stored in closed, vapor tight, containers.

2. **Emission Limitations:**
   Refer to subsection **1. Operating Limitations**.

3. **Testing Requirements:**
   Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. **Specific Monitoring Requirements:**
   The amount of ink used shall be monitored monthly in units of pounds.

5. **Specific Recordkeeping Requirements:**
   a. Monthly records shall be kept of all materials used containing VOC, including the product type, amount used and the weight percentages VOC.

   b. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**. Records shall be maintained on a per building basis.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:
Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 12: **Paved Haul Roads**

Building #1

(KY1-HR01): **Paved Haul Roads**
Description:
Control Equipment: None

Construction Commenced: May 2022

STATE-ORIGIN REQUIREMENTS:
401 KAR 63:010, *Fugitive Emissions*

1. **Operating Limitations:**
   a. A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
      i. Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

      ii. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts;

      iii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations.

      iv. Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne;

      v. The maintenance of paved roadways in a clean condition; or

      vi. The prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or earth moving equipment or erosion by water.

   b. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas borne material leaving the building or equipment are treated by removal or

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]

c. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]

d. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

2. Emission Limitations:

A person shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by Reference Method 22 of Appendix A in 40 C.F.R. Part 60, for: [401 KAR 63:010, Section 3(2)]

a. More than five (5) minutes of emission time during any sixty (60) minute observation period; or

b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

a. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis.

b. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 C.F.R. Part 60. In lieu of conducting U.S. EPA Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property.

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne, on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the log.

b. The permittee shall maintain a log of the following:

i. Any Reference Method 22 performed and field records identified in Reference Method 22.

ii. Any corrective action taken and the results.

c. Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**. Records shall be maintained on a per building basis.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:
Refer to **Section F – Monitoring, Recordkeeping, and Reporting Requirements**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 13: **Direct-Fired Natural Gas-Fired Dehumidification Units**
Emission Unit 16: **Direct-Fired Natural Gas-Fired Coater Oven Air Handling Units**

Building #1

Description:

Source #	Source Name	Maximum Rated Capacity (MMBtu/hr)	Construction Commenced
Emission Unit 13 (Direct-Fired)			
KY1-DH01 – KY1-DH46	Natural Gas-Fired Dehumidification Units (Building 1)	2	May 2022
Emission Unit 16 (Direct-Fired)			
KY1-COD01 – KY1-COD12	Natural Gas-Fired Coater Oven Air Handling Units (Building 1)	5	May 2022
KY1-COD13 – KY1-COD16	Natural Gas-Fired Coater Oven Air Handling Units (Building 1)	5.6	May 2022

Building #2

Description:

Source #	Source Name	Maximum Rated Capacity (MMBtu/hr)	Construction Commenced
Emission Unit 13 (Direct-Fired)			
KY2-DH01 – KY2-DH46	Natural Gas-Fired Dehumidification Units (Building 2)	2	May 2022
Emission Unit 16 (Direct-Fired)			
KY2-COD01 – KY2-COD12	Natural Gas-Fired Coater Oven Air Handling Units (Building 2)	5	May 2022

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

KY2-COD13 – KY2-COD16	Natural Gas-Fired Coater Oven Air Handling Units (Building 2)	5.6	May 2022

APPLICABLE REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality* (for CO, NO_x, VOC, and GHG)

401 KAR 59:010, *New process operations.*

STATE-ORIGIN REQUIREMENTS:
401 KAR 63:020, *Potentially hazardous matter or toxic substances.*

1. **Operating Limitations:**
   The permittee shall only combust pipeline quality natural gas and shall maintain and operate the units (including start up and shut down) in accordance with manufacturer's recommendations. [401 KAR 51:017]

2. **Emission Limitations:**
   a. For emissions from a control device or stack the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of 2.34 lb/hr. [401 KAR 59:010, Section 3(2)]

   b. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than 20% opacity. [401 KAR 59:010, Section 3(1)(a)]

   Compliance Demonstration Method:
   The permittee is assumed to be in compliance with the applicable 401 KAR 59:010 PM and opacity standards.

   c. Emissions shall not exceed the values in the following table. These limits serve as the BACT emission limits for CO, NO_x, VOC, and GHG. [401 KAR 51:017]

Building 1.

Pollutant	**Emission Limitation KY1-13** (based on 3-hr block average)	**Emission Limitation KY1-16** (based on 3-hr block average)
CO	25 ppm at 3% O_2 equivalent to 0.0185 lb/MMBtu	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu
NO_x	89 ppm at 3% O_2 equivalent to 0.108 lb/MMBtu	25 ppm at 3% O_2 equivalent to 0.0304 lb/MMBtu
VOC	0.0054 lb/MMBtu	0.0054 lb/MMBtu
CO_2	117 lb/MMBtu	117 lb/MMBtu

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Building 2.

Pollutant	**Emission Limitation KY2-13** (based on 3-hr block average)	**Emission Limitation KY2-16** (based on 3-hr block average)
CO	25 ppm at 3% O_2 equivalent to 0.0185 lb/MMBtu	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu
NO_x	89 ppm at 3% O_2 equivalent to 0.108 lb/MMBtu	25 ppm at 3% O_2 equivalent to 0.0304 lb/MMBtu
VOC	0.0054 lb/MMBtu	0.0054 lb/MMBtu
CO_2	117 lb/MMBtu	117 lb/MMBtu

Compliance Demonstration Method:

1. The permittee shall demonstrate compliance according to **1. Operating Limitations a.**
2. Compliance with the ppm limit on CO and NOx is based on manufacturer specifications kept on file and available for review.

d. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

a. The permittee shall monitor fuel usage (MMscf) on a monthly basis. [401 KAR 52:020, Section 10]

b. Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of fuel usage (MMscf) on a monthly basis. [401 KAR 52:020, Section 10]

b. Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**. Records shall be maintained on a per building basis.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:
Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements** for further requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 14 **Indirect-Fired Natural Gas-Fired Building Air Handling Units**

Emission Unit 15 **Indirect-Fired Natural Gas-Fired Office Air Handling Units**

Building #1

Description:

Source #	Source Name	Maximum Rated Capacity (MMBtu/hr)	Construction Commenced
Emission Unit 14 (Indirect-Fired)			
KY1-BA01 – KY1-BA10	Natural Gas-Fired Building Air Handling Units (Building 1)	3	May 2022
Emission Unit 15 (Indirect-Fired)			
KY1-OA01 – KY1-OA10	Natural Gas-Fired Office Air Handling Units (Building 1)	3	May 2022

Building #2

Description:

Source #	Source Name	Maximum Rated Capacity (MMBtu/hr)	Construction Commenced
Emission Unit 14 (Indirect-Fired)			
KY2-BA01 – KY2-BA10	Natural Gas-Fired Building Air Handling Units (Building 2)	3	May 2022
Emission Unit 15 (Indirect-Fired)			
KY2-OA01 – KY2-OA10	Natural Gas-Fired Office Air Handling Units (Building 2)	3	May 2022

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

APPLICABLE REGULATIONS:
401 KAR 51:017, *Prevention of significant deterioration of air quality* (for CO, NO_x, VOC, and GHG)

401 KAR 59:015, *New indirect heat exchangers.*

STATE-ORIGIN REQUIREMENTS:
401 KAR 63:020, *Potentially hazardous matter or toxic substances.*

1. **Operating Limitations:**
   a. During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in this section [401 KAR 59:015, Section 7]
      i. The permittee shall comply with 401 KAR 50:055, Section 2(5); [401 KAR 59:015, Section 7(1)(a)]

      ii. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility; [401 KAR 59:015, Section 7(1)(b)]

      iii. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods; [401 KAR 59:015, Section 7(1)(c)]

      iv. The actions, including duration of the startup period, of the permittee during startup periods and shutdown periods, shall be documented by signed, contemporaneous logs or other relevant evidence; and [401 KAR 59:015, Section 7(1)(d)]

      v. Startups and shutdowns shall be conducted according to either: [401 KAR 59:015, Section 7(1)(e)]
         1. The manufacturer's recommended procedures; or [401 KAR 59:015, Section 7(1)(e)1.]

         2. Recommended procedures for a unit of similar design, for which manufacturer's recommended procedures are available, as approved by the cabinet based on documentation provided by the permittee. [401 KAR 59:015, Section 7(1)(e)2.]

   Compliance Demonstration Method:
   Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements b.**

   b. The permittee shall only combust pipeline quality natural gas and shall maintain and operate the units in accordance with manufacturer's recommendations. [401 KAR 52:020, Section 10]

2. **Emission Limitations:**
   a. The permittee shall not cause emissions of particulate matter in excess of 0.10 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

b. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]
   i. A maximum of 27% opacity shall be allowed for one 6-minute period in any 60 minutes. [401 KAR 59:015, Section 4(2)(a)]

   ii. Emissions caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]

c. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 0.8 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(b)1.]

Compliance Demonstration Method:
Compliance with the 401 KAR 59:015 emission standards is assumed. [401 KAR 50:045, Section 4(3)(c)1.]

d. Emissions shall not exceed the values in the following table. These limits serve as the BACT emission limits for CO, NO_x, VOC, and GHG. [401 KAR 51:017]

Building 1.

Pollutant	**Emission Limitation KY1-14** (based on 3-hr block average)	**Emission Limitation KY1-15** (based on 3-hr block average)
CO	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu
NO_x	55 ppm at 3% O_2 equivalent to 0.0668 lb/MMBtu	55 ppm at 3% O_2 equivalent to 0.0668 lb/MMBtu
VOC	0.0054 lb/MMBtu	0.0054 lb/MMBtu
CO_2	117 lb/MMBtu	117 lb/MMBtu

Building 2.

Pollutant	**Emission Limitation KY2-14** (based on 3-hr block average)	**Emission Limitation KY2-15** (based on 3-hr block average)
CO	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu	50 ppm at 3% O_2 equivalent to 0.037 lb/MMBtu
NO_x	55 ppm at 3% O_2 equivalent to 0.0668 lb/MMBtu	55 ppm at 3% O_2 equivalent to 0.0668 lb/MMBtu
VOC	0.0054 lb/MMBtu	0.0054 lb/MMBtu
CO_2	117 lb/MMBtu	117 lb/MMBtu

Compliance Demonstration Method:
1. The permittee shall demonstrate compliance according to **1. Operating Limitations a. & b.**
2. Compliance with the ppm limit on CO and NO_x is based on manufacturer specifications on file and available for review.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

e. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:
Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

3. Testing Requirements:
Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

a. The permittee shall monitor fuel usage (MMscf) on a monthly basis [401 KAR 52:020, Section 10]

b. Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**

5. Specific Recordkeeping Requirements:

a. The permittee shall maintain records of fuel usage (MMscf) on a monthly basis. [401 KAR 52:020, Section 10]

b. The permittee shall keep records of the manufacturer's recommended procedures for startup and shutdown, any instance in which the recommended procedures were not followed, and any corrective actions taken. [401 KAR 52:020, Section 10]

c. Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**. Records shall be maintained on a per building basis.

6. Specific Reporting Requirements:
Refer to **Section F - Monitoring, Recordkeeping, and Reporting Requirements**

SECTION C - INSIGHIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

	Description	Generally Applicable Regulation
1.	N/A	

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.

2. PM, Opacity, CO, NO_x, VOC, SO_2, and GHG emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.

3. Pursuant to 401 KAR 51:017, emissions of VOC from each building shall not exceed the following limitations, where for each building, the initial emission limitation applies upon startup and is replaced by the ongoing emission limitation 12 months after the building achieves 90% of its rated production capacity or 24 months after startup, whichever occurs first.

AREA	SOURCE #	INITIAL EMISSION LIMITATIONS	ONGOING EMISSION LIMITATIONS
Building 1	KY1-CP01 - KY1-CP16 KY1-AP01 - KY1-AP16 KY1- CR01 - KY1-CR08 KY1-DR01 - KY1-DR08 KY1-VD01 - KY1-VD16 KY1-EL01 - KY1-EL16 KY1-CS01 - KY1-CS04 KY1-AS01 - KY1-AS04 KY1-DG01 - KY1-DG56 KY1-CD01 - KY1-CD08 KY1-QE01 - KY1-QE15	214.4 tons VOC total for all listed Building 1 sources per rolling 12-month basis	9,969 lbs VOC total for all listed sources per equivalent GWh batteries produced on a rolling 12-month basis
Building 2	KY2-CP01 – KY2-CP16 KY2-AP01 – KY2-AP16 KY2- CR01 - KY2-CR08 KY2-DR01 - KY2-DR08 KY2-VD01 - KY2-VD16 KY2-EL01 - KY2-EL16 KY2-CS01 - KY2-CS12 KY2-AS01 - KY2-AS12 KY2-DG01 - KY2-DG56 KY2-CD01 - KY2-CD08 KY2-QE01 - KY2-QE17	238.0 tons VOC total for all listed Building 2 sources per rolling 12-month basis	11,068 lbs VOC total for all listed sources per equivalent GWh batteries produced on a rolling 12-month basis

Initial Limitation is the PTE for VOC for Emission Units 01 through 05 on a per building basis in permit V-12-041 R2).

Ongoing limitation is the PTE for VOC for Emission Units 01 through 05 divided by 43 Gigawatt-hours batteries produced per building.

All numbers were rounded up after being calculated.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

Compliance Demonstration Method:

i Compliance with the limit on 12-month lbs VOC per equivalent GWh batteries produced is demonstrated by monitoring and recording fractional hours of operation and equivalent GWh of batteries produced by Battery Assembly (Emission Unit 02) and Battery Formation (Emission Unit 03).

1. The following equation is provided for demonstrating compliance using fractional hours of operation for Building #1:

$$9{,}969\ \frac{lbs\ VOC}{GWh\ batteries\ produced}$$

$$> \sum\left(ppmv\ control\ device\ emissions\ as\ demontrated\ by\ testing\ or\ monitoring\ converted\ to \frac{lbs\ VOC}{hr} emissions * \left(\frac{annual\ hours\ of\ operation\ for\ the\ affected\ equipment}{total\ annual\ GWh\ batteries\ produced}\right)\right)$$

ii Compliance with annual lbs per equivalent GWh limits is based on a rolling twelve months average. Lbs per equivalent GWh emissions shall be calculated on a monthly basis with the monthly lbs VOC emitted and equivalent GWh batteries produced by Battery Assembly (Emission Unit 02) and Battery Formation (Emission Unit 03) added to the previous eleven months to get a total for each consecutive twelve (12) month period. Rolling averages shall be reported in units of lbs/GWh.

$$12\ Month\ Average\ VOC/GWh = \frac{\sum Monthly\ VOC}{\sum Monthly\ GWh\ Batteries}$$

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a. Date, place as defined in this permit, and time of sampling or measurements;
   b. Analyses performance dates;
   c. Company or entity that performed analyses;
   d. Analytical techniques or methods used;
   e. Analyses results; and
   f. Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
   a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
   b. To access and copy any records required by the permit:
   c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.

   Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.

7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
   a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
   b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.

8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
   a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
   b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
   c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.

9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
   a. Identification of the term or condition;
   b. Compliance status of each term or condition of the permit;
   c. Whether compliance was continuous or intermittent;
   d. The method used for determining the compliance status for the source, currently and over the reporting period.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality	U.S. EPA Region 4
Frankfort Regional Office	Air Enforcement Branch
300 Sower Boulevard, 1st Floor	Atlanta Federal Center
Frankfort, KY 40601	61 Forsyth St. SW
	Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

   a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
      (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
      (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
      (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
      (4) New requirements become applicable to a source subject to the Acid Rain Program.

      Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

   d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

   e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].

g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) b].

l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) d.].

o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) a.].

SECTION G - GENERAL PROVISIONS (CONTINUED)

p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.

q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
(1) Applicable requirements that are included and specifically identified in this permit; and
(2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].

b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

3. Permit Revisions

a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).

b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements
Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the changes to of the equipment described herein, emission units EU01 Electrode Manufacturing, EU02 Battery Assembly, EU03 Battery Formation, EU04 Cell Discharge,

SECTION G - GENERAL PROVISIONS (CONTINUED)

EU05 Laboratories, EU06 Natural Gas Fired Boilers, EU07 Natural Gas Fired Hot Oil Heaters, EU08 Emergency Engines, EU09 Cooling Towers, EU10 Storage Tanks, EU11 Date Code Printers, EU12 Paved Haul Roads, EU13 Dehumidification Units, EU14 Building Air Handling Units, EU 15 Office Air Handling Units and EU16 Coater Oven Air Handling Units in accordance with the terms and conditions of permit V-21-041 R2.

a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.

b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, notification of the following:
   (1) The date when construction commenced.
   (2) The date of start-up of the affected facilities listed in this permit.
   (3) The date when the maximum production rate specified in the permit application was achieved.

c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.

d. Pursuant to 401 KAR 50:055, Section 2(1)(a), an owner or operator of any affected facility subject to any standard within the administrative regulations of the Division for Air Quality shall demonstrate compliance with the applicable standard(s) within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility. Pursuant to 401 KAR 52:020, Section 3(3)(c), sources that have not demonstrated compliance within the timeframes prescribed in 401 KAR 50:055, Section 2(1)(a), shall operate the affected facility only for purposes of demonstrating compliance unless authorized under an approved compliance plan or an order of the cabinet.

e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.

f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

SECTION G - GENERAL PROVISIONS (CONTINUED)

5. Testing Requirements

   a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

   b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.

   c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

   a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

   b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

   a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
      (1) An emergency occurred and the permittee can identify the cause of the emergency;
      (2) The permitted facility was at the time being properly operated;

SECTION G - GENERAL PROVISIONS (CONTINUED)

(3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
(4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.1-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
(5) This requirement does not relieve the source of other local, state or federal notification requirements.

b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].

c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
(1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
(2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
(3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
(4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.155.
(5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 40 CFR 82.157.
(6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk

SECTION G - GENERAL PROVISIONS (CONTINUED)

Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP* eSubmit software.

b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

SECTION I - COMPLIANCE SCHEDULE

N/A