

**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 52:030**

Permittee Name: Shamrock Technologies, Inc.
Mailing Address: 301 Community Dr.
Henderson, KY 42420

Source Name: Shamrock Technologies, Inc.
Mailing Address: 301 Community Dr.
Henderson, KY 42420

Source Location: Same as above

Permit ID: F-26-004
Agency Interest #: 46709
Activity ID: APE20210001, APE20250001
Review Type: Conditional Major, Construction/Operating
Source ID: 21-101-00136

Regional Office: Owensboro Regional Office
3032 Alvey Park Dr. W., Suite 700
Owensboro, KY 42303
(270) 687-7304

County: Henderson

Application Complete Date: January 5, 2026
Issuance Date:
Expiration Date:

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

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Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action
F-26-004	Renewal	APE20210001	3/12/21		Permit Renewal
	Minor Revision	APE20250001	1/5/26		Installation of an additional tray oven and increase batch process rates to 225 lb/hr for each oven

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 52:030, Federally-enforceable permits for non-major sources.

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 (CONTINUED)

EMISSION UNIT	Description	MAXIMUM OPERATING RATE
D6	Dynamitron E-Beam N Vault Batch Process (1) VOC emissions due to processing PTFE with residual oils and (2) Emissions due to irradiation. Installation Date: 1/1/1999 Production Rate: 500 lb/hr Stack ID: D6 Control Device: None	120 kwh
D7	Dynamitron E-Beam S Vault Batch Process (1) VOC emissions due to processing PTFE with residual oils and (2) Emissions due to irradiation. Installation Date: 1/1/1999 Production Rate: 500 lb/hr Stack ID: D7 Control Device: None	120 kwh
D9	Tray Oven 1 Tray Oven 1 Exhaust Installation Date: 1/1/2007 Control Device: Scrubber 1 Stack ID: B3 Control Efficiency: 95% (for HF emissions)	225 lb/hr (high dose batch average)
D11	Tray Oven 2 Tray Oven 2 Exhaust Installation Date: 2/1/2016 Control Device: Scrubber 1 Stack ID: B3 Control Efficiency: 95% (for HF emissions)	225 lb/hr (high dose batch average)
D12	Tray Oven 3 Tray Oven 3 Exhaust Installation Date: 3/15/2018 Control Device: Scrubber 1 Stack ID: B3 Control Efficiency: 95% (for HF emissions)	225 lb/hr (high dose batch average)
D13	Tray Oven 4 Tray Oven 4 Exhaust Installation Date: 3/15/2018 Control Device: Scrubber 1 Stack ID: B3 Control Efficiency: 95% (for HF emissions)	225 lb/hr (high dose batch average)
D14	Tray Oven 5 Tray Oven 5 Exhaust Installation Date: 12/15/2025(Proposed) Control Device: Scrubber 1 Stack ID: B3 Control Efficiency: 95% (for HF emissions)	225 lb/hr (high dose batch average)

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

E1	Blender		1,200 lb/hr
	Solids Blender		
	Installation Date:	9/04/2024	
	Control Device:	Fabric Filter	
	Stack ID:	F1	
Control Efficiency:	99.5% (for PM emissions)		

APPLICABLE REGULATIONS:

401 KAR 59:010, *New Process Operations* (applies to EUs B3, B7, D9, D11-D14, & E1)

401 KAR 53:010, *Ambient Air Quality Standards* (applies to HF emissions)

STATE ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances* (does not apply to HF emissions)

1. Operating Limitations:

See 7. **Specific Control Equipment Operating Conditions.**

2. Emission Limitations:

- a. Refer to **Section D.4 – Source Emission Limitations and Testing Requirements** for source-wide HF emission limitations.
- b. The permittee shall not violate, or interfere with the attainment or maintenance of, ambient air quality standards as specified in 401 KAR 53:010. [401 KAR 53:005, Section 1(3)]

Compliance Demonstration Method:

Refer to **Section D.3 – Source Emission Limitations and Testing Requirements.**

- c. No person shall 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 twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

Compliance Demonstration Method:

See 4. **Specific Monitoring Requirements** b. and 5. **Specific Recordkeeping Requirements** b.

- d. For emissions from a control device or stack (associated with EUs B3, B7, D9, D11-D14, & E1), no person shall 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 ≤ 0.50 ton/hour: $E = 2.34$
 - ii. For process weight rates > 0.50 ton/hr and ≤ 30 tons/hr: $E = 3.59P^{0.62}$
 Where: E = rate of emission in lb/hr, and
 P = process weight rate in tons/hr.

Compliance Demonstration Method:

Compliance with the mass emission standard is assumed.

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. Within sixty (60) days after achieving the maximum production rate at which D14 and Tray Ovens 5 and the associated scrubber 1 will be operated but no later than 180 days after installation of D14 (Tray Ovens 5), the permittee shall conduct a stack test at the inlet and outlet of scrubber 1, while all 5 Tray Ovens are operating (or the maximum achievable production rate) to establish an uncontrolled maximum emission rate of hydrogen fluoride (HF) in (lb HF/lb PTFE), using U.S. EPA Reference Method 26A, or another test method as approved by the Division. This maximum emission rate shall be assumed to be representative of D9 and D11-D14 (Tray Ovens 1-5), and shall be used to calculate an uncontrolled emission factor representative of the batch processing according to **3. Testing Requirements** b. The permittee shall additionally determine the HF control efficiency of the associated scrubber 1. Refer to **Section G - General Provisions(5.)(a.)** and (b.) for test conditions. This HF control efficiency for scrubber 1 shall be used in used in calculating source-wide HF emissions per **Section D.4 – Source Emission Limitations and Testing Requirements**. Subsequent performance testing shall be conducted no later than five years following the most recent performance test approved by the Division. [401 KAR 50:045, Section 1]
 1. During the test, the permittee shall monitor and record the amount of material in each Tray Oven, the stage of processing of each oven during each test run, the total duration of each batch for each Tray Oven, the scrubber liquid flow rate at least once every 15 minutes during each test run, and the pH of each scrubber during the test. The average scrubber liquid flowrate and scrubber pH from the test shall be the minimum operating set point for scrubber 1. [401 KAR 50:045, Section 1]
- b. Within sixty (60) days after achieving the maximum production rate at which D14 Tray Ovens 5 and the associated scrubber 1 will be operated but no later than 180 days after installation of D14 Tray Oven 5, the permittee shall conduct a stack test on any one of the Tray Ovens to quantify an uncontrolled HF emission profile over the entire duration of the batch processing. Hourly emissions, as well as total emissions for the batch shall be calculated. See **Section G - General Provisions(5.)(a.)** and (b.) for test conditions. [401 KAR 50:045, Section 1]
 1. During the test, the permittee shall monitor and record the amount of material in the Tray Oven and the total duration of the batch processing for the Tray Oven. [401

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

KAR 50:045, Section 1]

2. To calculate equivalent hours of HF emissions, assuming the average uncontrolled HF emission rate was emitted over the duration of the batch, the permittee shall divide the total batch HF emissions (lb HF/batch) from **3. Testing Requirements b.** by the derived average uncontrolled HF emission rate (lb HF/hr) from **3. Testing Requirements b.** The permittee shall use the equivalent hours of uncontrolled emissions to calculate an uncontrolled HF emission factor (lb HF/lb PTFE) using the following equation. This uncontrolled HF emission factor shall be used in calculating source-wide HF emissions per **Section D.4 – Source Emission Limitations and Testing Requirements:** [401 KAR 50:045, Section 1]

$$EF = \frac{E \times HR}{P}$$

Where:

- EF = Uncontrolled HF Emission Factor (lb HF/lb PTFE)
- E = Maximum average uncontrolled HF Emission Rate (lb HF/hr) from **3. Testing Requirements a.**
- HR = Equivalent hours of HF emissions, [(lb HF/Batch) / (Average lb HF/hr across the batch)] determined from **3. Testing Requirements b.**
- P = The 3-run average PTFE processing rate (lb total PTFE of the Tray Ovens tested during **3. Testing Requirements a.)**
- c. Within 180 days after the final issuance of permit F-26-004, the permittee shall conduct a performance test on each of emission units B3, B7, D6 and D7 to update unit specific uncontrolled hydrogen fluoride (HF) emission factors (in lb/kwh) at the outlet of each emission unit (B3, B7, D6 & D7), HF control efficiency of each scrubber (2 & 3) and controlled emission rate (lb/hr). Performance testing shall be conducted using U.S. EPA Reference Method 26A or an alternate method approved by the Division. Refer to **Section G - General Provisions(5.)(a.)** and (b.) for test conditions. These uncontrolled emission factors and control efficiencies, for each emission unit (B3, B7, D6 & D7) and scrubbers (2 & 3) shall be used in calculating source-wide HF emissions per **Section D.4 – Source Emission Limitations and Testing Requirements.** Subsequent performance testing shall be conducted no later than five years following the most recent performance test approved by the Division. [401 KAR 50:045, Section 1]
 1. During each test, the permittee shall monitor and record the scrubber liquid flow rate at least once every 15 minutes during each test run for each scrubber and the pH of each scrubber during the test. The average scrubber liquid flowrate and scrubber pH from each test shall be the minimum operating set point for each scrubber. [401 KAR 50:045, Section 1]
 - d. If the permittee begins processing a new material that is expected to result in increased hydrogen fluoride (HF) emissions, no later than 180 days after beginning to process that material, the permittee shall conduct stack testing according to **3. Testing Requirements a. and b.**
 - e. 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)]

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

4. Specific Monitoring Requirements:

- a. The permittee shall conduct semiannual inspections to ensure proper operation of each scrubber (stacks B3, B7 and B8). These inspections shall include observations of the physical appearance of the equipment (*e.g.*, presence of holes in ductwork or hoods, flow constrictions caused by dents or excess accumulations in ductwork, and fan erosion). Any deficiencies that are determined by the operator to materially impact the efficacy of each capture and/or control system shall be noted and proper maintenance performed. [401 KAR 52:030, Section 10]
- b. The permittee shall perform a qualitative visual observation of the opacity of emissions at stacks B3, B7, & B8 (EUs B3, B7, D9, & D11-D14) no less than monthly while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:030, Section 10]
- c. The permittee shall monitor the following, for each emission point (EUs B3, B7, D9, & D11-D14): [401 KAR 52:030, Section 10]
 - i. The monthly total process weight (PTFE processed);
 - ii. The monthly hours of operation.
- d. The permittee shall monitor the scrubber liquid flowrate, at least once every 15 minutes, and pH from each scrubber at least once per shift. [401 KAR 52:030, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain a log of the results of the semiannual inspections performed on stacks B-3, B-7, and B-8. [401 KAR 52:030, Section 10]
- b. The permittee shall maintain records of the qualitative visual observations made as specified in **4. Specific Monitoring Requirements** b., including the date, time, initials of observer, whether any emissions were observed (yes/no), any corrective action taken, and any U.S. EPA Reference Method 9 readings conducted. [401 KAR 52:030, Section 10]
- c. The permittee shall maintain records of the following, for each emission point (EUs B3, B7, D9, D11-D14, & E1): [401 KAR 52:030, Section 10]
 - i. The monthly total process weight (PTFE processed);
 - ii. The monthly hours of operation.
- d. The permittee shall maintain records of average daily average scrubber liquid flowrate and average daily pH from each scrubber and note any times when scrubber liquid flowrate or pH were outside of the range established via **3. Testing Requirements**. The permittee shall use 0% control for calculating source-wide emissions per **Section D.4 – Source Emission Limitations and Testing Requirements** during times when parameters were out of range. [401 KAR 52:030, Section 10]
- e. Refer to **Section F**.

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

6. Specific Reporting Requirements:

Refer to **Section F.9.**

7. Specific Control Equipment Operating Conditions:

a. Each scrubber shall be operating and properly maintained according to manufacturer's specifications during all times that their associated emission units are in operation. [401 KAR 52:030, Section 10]

b. Refer to **Section E.**

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:030, 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.

<u>Description</u>	<u>Generally Applicable Regulations</u>
(1) B1 (ICT vault exhaust)	401 KAR 53:010 401 KAR 59:010
(2) B2 (ICT window exhaust – ambient air only)	None
(3) D2 (Three Dynamitron product collectors – rated at 509 lb/hr)	401 KAR 53:010 401 KAR 59:010 401 KAR 63:020
(4) E2 (ACM 1 Grinder product collector – rated at 200 lb/hr)	401 KAR 59:010
(5) E3 (ACM 2 Grinder product collector – rated at 300 lb/hr)	401 KAR 59:010
(6) E4 (Three Tray Oven vacuum product collectors – rated at 50 lb/hr per oven)	401 KAR 59:010
(7) D1 (Mill 1 (White Mill) and product collector – rated at 500 lb/hr)	401 KAR 59:010
(8) D4 (Mill 1 product collector baghouse – rated at 500 lb/hr)	401 KAR 59:010
(9) D8 (Mill 2 product collector baghouse – rated at 500 lb/hr)	401 KAR 59:010
(10) D3 (Mill 3 product collector baghouse – rated at 54 lb/hr)	401 KAR 59:010
(11) C1 (Mill 6 product collector baghouse – rated at 40 lb/hr)	401 KAR 59:010
(12) C5 (Mill 7 product collector baghouse – rated at 40 lb/hr)	401 KAR 59:010
(13) C6 (Mills 6 and 7 Common Dust Collector)	401 KAR 59:010
(14) C3 (Dispersions 1 process separator baghouse – rated at 500 lb/hr)	401 KAR 59:010
(15) C7 (Dispersions 1 oil heater – 99,000 Btu/hr natural gas fired indirect heat exchanger)	401 KAR 59:010 401 KAR 63:020
(16) C2 (Dispersions 2 process separator baghouse – rated at 500 lb/hr)	401 KAR 59:010
(17) C8 (Dispersions 2 oil heater – 99,000 Btu/hr natural gas fired indirect heat exchanger)	None
(18) A1 (Spray chiller product collector baghouse – rated at 110 lb/hr)	401 KAR 59:010

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

<u>Description</u>	<u>Generally Applicable Regulations</u>
(19) Storage vessels having less than 10,567 gallons capacity that contain petroleum or organic liquids with a vapor pressure of 1.5 psia or less at storage temperature	None
(20) Storage vessels having less than 10,567 gallons capacity that contain petroleum or organic liquids with a vapor pressure greater than 1.5 psia at storage temperature, providing those vessels having more than 580 gallons capacity are equipped with a permanent submerged fill pipe	None
(21) Storage vessels containing inorganic aqueous liquids, except inorganic acids with boiling points below the maximum storage temperature at atmospheric pressure	None
(22) Laboratory fume hoods and vents used exclusively for chemical or physical analysis, or for “bench-scale production” research and development facilities	None
(23) Machinery lubricants and waxes, including oils, greases or other lubricants applied as temporary protective coatings	None
(24) C9 (Mill 8 and product collector baghouse – rated at 200 lb/hr)	401 KAR 59:010
(25) C10 (Mill 9 and product collector baghouse – rated at 200 lb/hr)	401 KAR 59:010
(26) D10 (Second Set of Three Dynamitron product collectors – rated at 509 lb/hr)	401 KAR 59:010
(27) B5 (E-Beam 3 vault exhaust)	401 KAR 53:010 401 KAR 59:010
(28) B6 (E-Beam 3 window exhaust – ambient air only)	None
(29) C12 (Mill 10 and product collector baghouse – rated at 250 lb/hr)	401 KAR 59:010
(30) 3 Ceiling Heaters	401 KAR 59:010 401 KAR 63:020

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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. Hydrogen Fluoride (HF) and Particulate Matter (PM) 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. No person shall violate, or interfere with the attainment or maintenance of, ambient air quality standards as specified in 401 KAR 53:010. [401 KAR 53:005, Section 1(3)]

Compliance Demonstration Method:

- a. Based upon the process rates, emission factors, control efficiencies, and other pertinent information provided in the application submitted and supplemental information submitted by the source, and compliance with all control requirements in **SECTION B**, the Cabinet determines the affected facility is in compliance with the primary and secondary standards for gaseous fluorides (expressed as HF) in Appendix A of 401 KAR 53:010.
- b. If the results from a performance test show that the HF emission rate from any of the emission units (stacks), listed in Table 1, exceeds the emission rate shown, the permittee shall submit updated modeling for HF, or other analysis to demonstrate compliance with the primary and secondary standards for gaseous fluorides (expressed as HF) in Appendix A of 401 KAR 53:010.

Table 1	
Emission Unit (Stack ID)	HF Emission Rate (lb/hr)
D9, D11-D14 (B3)	0.14800 ^[1]
D2 (D2) ^[2]	0.00209
D6 (D6)	0.06555
D7 (D7)	0.08040
B7 (B7)	0.31310 ^[1]
B3 (B8)	0.22440 ^[1]
B5 (B5) ^[2]	0.00382
B1 (B1) ^[2]	0.00423

^[1] Controlled Emission Rate

^[2] Insignificant Activity

4. To preclude the applicability of 401 KAR 52:020, Title V permits, the total source-wide actual Hydrogen Fluoride (HF) emissions shall not exceed 9.0 tons per year on a twelve (12) consecutive month basis. Total source-wide actual combined hazardous air pollutant (HAP) emissions shall not exceed 22.5 tons per year on a twelve (12) consecutive month basis.

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

Compliance Demonstration Method:

- a. Compliance shall be determined by calculating and recording monthly emission rates and rolling 12-month total emissions of HF.
- b. Actual emission rate for HF shall be calculated using the following equation:

$$Emissions \left(\frac{\text{tons}}{\text{month}} \right) = \sum \left(\frac{EF \times P}{2000 \frac{\text{lb}}{\text{ton}}} \times (1 - \text{Control Efficiency}) \right)$$

Where EF is the emission factor in Table 2 or established during the most recent performance test, P is the monthly process rate (tons) or operating rate (kwh), and control efficiency is the control listed in the Table 2 or established during the most recent performance test. The permittee shall use 0% control for any period where scrubber parameters (liquid flowrate or pH) were outside the range established by the most recent performance test.

Table 2			
Emission (Stack ID)	Unit	HF Control Efficiency	HF Emission Factor
B3 (B8)		89.10%	2.57E-2 lb/kwh
D6 (D6)		0%	5.46E-4 lb/kwh
D7 (D7)		0%	6.70E-4 lb/kwh
D9 (B3)		95%	1.97E-3 lb/ton
B7 (B7)		92.5%	3.26E-1 lb/kwh
D11 (B3)		95%	1.97E-3 lb/ton
D12 (B3)		95%	1.97E-3 lb/ton
D13 (B3)		95%	1.97E-3 lb/ton
D14 (B3)		95%	1.97E-3 lb/ton
B1 (B1) ^[2]		0%	5.29E-5 lb/kwh
B5 (B5) ^[2]		0%	2.98E-5 lb/kwh
D2 (D2) ^[2]		0%	1.42E-4 lb/kwh
[1]	The HF emission factor and control efficiency shall be updated each time performance testing required in Section B has been conducted and approved by the Division.		
[2]	Insignificant activity		

- c. A report of the consecutive twelve (12) month totals of HAP emissions for each HAP and combined HAPs from all emission points in **Sections B** and **C** of the permit, including all calculations, shall be maintained onsite and be submitted as part of the semi-annual report required by **Section F.6**. Refer to **Sections F.5, F.7** and **F.8**.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

1. 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 Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030 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 [401 KAR 52:030, Section 3(1)(f)1a, and Section 1a-7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
3. In accordance with the requirements of 401 KAR 52:030, Section 3(1)f, 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 Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
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 52:030, Section 22. If continuous emission and opacity monitors are required by regulation or this permit, data shall be

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

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 Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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 52:030, 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 in accordance with the following requirements:
 - a. Identification of each 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.
 - 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.

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

- f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the Division for Air Quality Owensboro Regional Office 3032 Alvey Park Drive W. Suite 700, Owensboro, KY 42303-2191.
10. In accordance with 401 KAR 52:030, Section 3(1)(d), 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. If a KYEIS emissions survey is not mailed to the permittee, then the permittee shall comply with all other emissions reporting requirements in this permit.
 11. The Cabinet may authorize the temporary use of an emission unit to replace a similar unit that is taken off-line for maintenance, if the following conditions are met:
 - a. The owner or operator shall submit to the Cabinet, at least ten (10) days in advance of replacing a unit, the appropriate Forms DEP7007AI to DD that show:
 - (1) The size and location of both the original and replacement units; and
 - (2) Any resulting change in emissions;
 - b. The potential to emit (PTE) of the replacement unit shall not exceed that of the original unit by more than twenty-five (25) percent of a major source threshold, and the emissions from the unit shall not cause the source to exceed the emissions allowable under the permit;
 - c. The PTE of the replacement unit or the resulting PTE of the source shall not subject the source to a new applicable requirement;
 - d. The replacement unit shall comply with all applicable requirements; and
 - e. The source shall notify Regional office of all shutdowns and start-ups.
 - f. Within six (6) months after installing the replacement unit, the owner or operator shall:
 - (1) Re-install the original unit and remove or dismantle the replacement unit; or
 - (2) Submit an application to permit the replacement unit as a permanent change.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. A noncompliance shall be a violation of 401 KAR 52:030, 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 the termination, revocation and reissuance, revision, or denial of a permit [Section 1a-2 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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-5 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:030, Section 18. 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 52:030, 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.

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- 6 and 7 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:030, Section 3(1)(c)].
- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect

SECTION G - GENERAL PROVISIONS (CONTINUED)

information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:030, 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-11 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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-3 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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-12 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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-9 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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 52:030, Section 11(3)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-8 of the *Cabinet Provisions and Procedures for Issuing Federally-Enforceable Permits for Non-Major Sources* incorporated by reference in 401 KAR 52:030, 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.
- 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.
- 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

SECTION G - GENERAL PROVISIONS (CONTINUED)

incorporates all requirements of those existing permits into one single permit for this source.

- q. Pursuant to 401 KAR 52:030, 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 52:030, Section 12].
- b. The authority to operate granted through this permit 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 52:030, Section 8(2)].

3. Permit Revisions

- a. Minor permit revision procedures specified in 401 KAR 52:030, Section 14(3), 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 52:030, 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.

SECTION G - GENERAL PROVISIONS (CONTINUED)**4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorized the modification/construction of the equipment described herein, emission units D9, D11-14 (Tray Ovens 1-5) and E1 (blender) upon submittal of a complete application.

- 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 52:030, 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. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct upon submittal of a complete application. 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 52:030, 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.

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.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:030, Section 23(1), an emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other 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;
 - (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) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two (2) working days of the time when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- (5) Notification of the Division does not relieve the source of any other local, state or federal notification requirements.
 - b. Emergency conditions listed in General Provision G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:030, Section 23(3)].
 - c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:030, Section 23(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 82.166.
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (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 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