



## INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

**Intermediate Operating Permit Number:** OP2013-041  
**Expiration Date:** JUN 30 2018  
**Installation ID:** 213-0007  
**Project Number:** 2012-05-072

**Installation Name and Address**

Royal Oak Enterprises, LLC - Branson  
150 Royal Oak Drive  
Branson, MO 65616  
Taney County

**Parent Company's Name and Address**

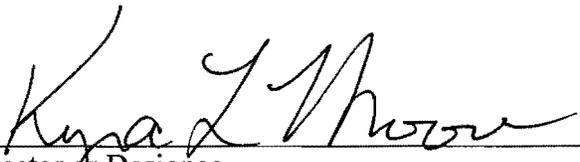
Royal Oak Enterprises, LLC  
P.O. Box 549  
Salem, MO 65560

**Installation Description:**

The plant in Branson, Missouri, takes wood char, pulverizes it and blends it with other raw materials to produce charcoal briquettes. The briquettes are packaged in various size bags; some become instant lite briquettes and others remain as regular briquettes. The packaged briquettes are stored in the warehouse or shipped out to customers. The installation has the potential to exceed the Part 70 State Installation threshold for particulate matter less than or equal to ten microns in aerodynamic diameter (PM<sub>10</sub>), but has accepted a voluntary limit to remain below that threshold.

JUL 01 2013

Effective Date

  
Director or Designee  
Department of Natural Resources

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

The plant in Branson, Missouri, takes wood char, pulverizes it and blends it with other raw materials to produce charcoal briquettes. The briquettes are packaged in various size bags; some become instant lite briquettes others remain as regular briquettes. The packaged briquettes are stored in the warehouse or shipped out to customers.

<b>Reported Air Pollutant Emissions (tons per year, rounded to tenths)</b>					
Pollutants	2012 <sup>1</sup>	2011	2010 <sup>2</sup>	2009	2008
Particulate Matter ≤ Ten Microns (PM <sub>10</sub> )	19.7	19.7	21.9	21.9	17.7
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )	7.0	7.0	2.3	2.3	6.0
Sulfur Oxides (SO <sub>x</sub> )	0.9	0.9	1.1	1.1	1.1
Nitrogen Oxides (NO <sub>x</sub> )	7.5	7.5	9.6	9.6	9.6
Volatile Organic Compounds(VOC)	4.8	4.8	7.7	7.7	7.8
Carbon Monoxide (CO)	20.5	20.5	26.1	26.1	26.1
Lead (Pb)	0.0	0.0	0.0	0.0	0.0
Hazardous Air Pollutants (HAPs) <sup>3</sup>	0.7	0.7	1.1	1.1	1.1
Ammonia (NH <sub>3</sub> )	-- <sup>4</sup>	--	--	--	--

### EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and identified as having unit-specific emission limitations.

<b>ID</b>	<b>Unit Description</b>
EP-01	Sawdust-Fired Burner

<sup>1</sup> The permittee has filed a reduced annual report for this year. The emissions are reported as the same as the previous year.

<sup>2</sup> The permittee has filed a reduced annual report for this year. The emissions are reported as the same as the previous year.

<sup>3</sup> HAPs may be reported as VOC or PM<sub>10</sub> in the annual reports, depending on the specific chemical.

<sup>4</sup> "--" indicates that no value was reported.

<b>ID</b>	<b>Unit Description</b>
EP-02	Charcoal Storage
EP-03	Loading Hopper (Charcoal)
EP-04	Hopper Loadout
EP-05	Conveying Charcoal
EP-06	Pulverizing (Charcoal)
EP-07	Conveying Charcoal
EP-08	Conveying Charcoal
EP-09	Bucket Elevator (Charcoal)
EP-10	Bin Loadout (Charcoal)
EP-11	Conveying (Charcoal)
EP-12	Sawdust Storage
EP-13	Coal Storage
EP-14	Lime Storage
EP-15	Storage (Sawdust/Coal/Lime)
EP-16	Blending (Sawdust/Coal/Lime)
EP-17	Conveying (Sawdust/Coal/Lime)
EP-18	Storage (Sawdust/Coal/Lime)
EP-19	Loading Hopper (Sawdust/Coal/Lime)
EP-20	Hopper Loadout (Sawdust/Coal/Lime)
EP-21	Conveying (Sawdust/Coal/Lime)
EP-22	Pulverizing (Sawdust/Coal/Lime)
EP-23	Conveying (Sawdust/Coal/Lime)
EP-24	Bucket Elevator (Sawdust/Coal/Lime)
EP-25	Bin Loadout (Sawdust/Coal/Lime)
EP-26	Conveying (Sawdust/Coal/Lime)
EP-27	Loading Hopper Starch
EP-28	Loading Hopper Nitrate
EP-29	Hopper Loadout (Starch/Lime)
EP-30	Conveying (Starch/Lime)
EP-31	Mesquite Storage
EP-32	Loading Mesquite
EP-33	Mixer
EP-35	Dryer/Cooler
EP-36	Dryer Loadout
EP-37	Conveying

<b>ID</b>	<b>Unit Description</b>
EP-38	Bucket Elevator
EP-39	Conveying
EP-40	Conveying
EP-41	Conveying
EP-42	Conveying
EP-43	Bin Loadout #1
EP-44	Bin Loadout #2
EP-45	Bin Loadout #3
EP-46	Bin Loadout #4
EP-47	Conveying
EP-48	Conveying
EP-49	Conveying
EP-50	Conveying
EP-51	Dip Tank
EP-52	Dip Tank Loadout
EP-53	Conveying
EP-54	Bagging Briquets
EP-64	Space Heaters
EP-65	Briquet Fines Screen
EP-66	Conveyor-Fines
EP-67	Bucket Elevator
EP-68	Conveyor-Fines
EP-69	Briquet Fines Screen
EP-70	Briquet Fines Screen
EP-71	Briquet Fines Screen
EP-72	Briquet Fines Screen
EP-73	Unload Railcar
EP-74	Starch Storage in Silo
EP-75	Pneumatic Transfer of Starch
EP-76	Auger Transfer of Starch
EP-77	Truck Unloading

**EMISSION UNITS WITHOUT LIMITATIONS**

The following list provides a description of the equipment, which does not have unit specific limitations at the time of permit issuance.

<b>ID</b>	<b>Unit Description</b>
EP-34	Briquetting
EP-55	Stoddard Solvent Tank #1, 20,000 gallon capacity
EP-57	Stoddard Solvent Tank #3, 18,000 gallon capacity
EP-58	Stoddard Solvent Tank #4, 3,000 gallon capacity
EP-59	Stoddard Solvent Tank #5, 3,000 gallon capacity
EP-60	Diesel Tank #1, 500 gallon capacity
EP-61	Diesel Tank #2, 1,500 gallon capacity
EP-62	Diesel Tank #3, 260 gallon capacity
EP-63	Gasoline Tank, 950 gallon capacity

**DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

None.

## II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance.

The following requirements apply to *all conditions* in this permit, unless otherwise noted.

### **Monitoring:**

The permittee shall calibrate, maintain and operate all instruments and control equipment according to the manufacturer's recommendations or according to good engineering practices.

### **Recordkeeping:**

The permittee shall record all required recordkeeping (i.e. inspections and corrective actions) in an appropriate format. Records may be kept electronically using database or workbook systems, as long as all required information is readily available for compliance determinations. The permittee's written inspection procedures will be made available to department personnel upon request.

### **Reporting<sup>5</sup>:**

- 1) The permittee shall report any exceedance of any of the terms imposed by this permit, or any malfunction which could cause an exceedance of any of the terms imposed by this permit, no later than ten (10) days after the exceedance or event causing the exceedance (unless otherwise specified in the specific condition), to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102
- 2) The permittee shall submit an annual certification<sup>6</sup> that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. All deviations must be included in the compliance certifications. These certifications shall be submitted annually by **April 1<sup>st</sup>**, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to Environmental Protection Agency, Region VII, 11201 Renner Boulevard, Lenexa, KS 66219, and the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102

### **Permit Condition PW1**

10 CSR 10-6.065 Operating Permits

10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

### **Emission Limitation:**

The permittee shall emit into the atmosphere less than 100 tons of particulate matter less than or equal to ten microns in aerodynamic diameter (PM<sub>10</sub>) from the entire installation in any consecutive 12-month period.

<sup>5</sup> Refer to 10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Recordkeeping and Reporting Requirements, page 21, for additional details, including semi-annual reporting of monitoring data.

<sup>6</sup> Refer to 10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(6)(C)3.B; and §(6)(C)3.D; and §(5)(C)3 and §(6)(C)3.E.(I) – (III) and (V) – (VI) Compliance Requirements, page 23, for more details.

**Monitoring/Recordkeeping:**

The permittee shall maintain an accurate record of emissions of PM<sub>10</sub> emitted into the atmosphere from this installation. The permittee shall record the monthly and running 12-month totals of the PM<sub>10</sub> emissions from this installation. Example forms are attached as Attachment E (Attachment E, beginning on page 30 ). The permittee may use this form, or forms of its own, so long as the forms used will accurately demonstrate compliance with the PM<sub>10</sub> emission limitation (less than 100 tons in any consecutive 12-month period of PM<sub>10</sub>).

### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance.

Visible Emission Sources		
Emission Unit	Stack ID	Description
EP-01	S-03-07	SAWDUST-FIRED BURNERS
EP-02	Bldg.	CHARCOAL STORAGE IN BUILDING
EP-03	S-02	LOADING HOPPER (CHARCOAL)
EP-04	S-02	HOPPER LOADOUT
EP-05	S-02	CONVEYING CHARCOAL
EP-06	S-02	PULVERIZING (CHARCOAL)
EP-07	S-02	CONVEYING (CHARCOAL)
EP-08	S-02	CONVEYING (CHARCOAL)
EP-09	S-02	BUCKET ELEVATOR (CHARCOAL)
EP-10	S-02	BIN LOADOUT (CHARCOAL)
EP-11	S-02	CONVEYING
EP-12	Bldg.	SAWDUST STORAGE IN BUILDING
EP-13	Bldg.	COAL STORAGE IN BUILDING
EP-14	P-Bldg.	LIME STORAGE IN BUILDING
EP-15	Bldg.	STORAGE (SAWDUST/COAL/LIME)
EP-16	Bldg.	BLENDING (SAWDUST/COAL/LIME)
EP-17	Bldg.	CONVEYING (SAWDUST/COAL/LIME)
EP-18	Bldg.	STORAGE (SAWDUST/COAL/LIME)
EP-19	S-02	LOADING HOPPER (SAWDUST/COAL/LIME)
EP-20	S-02	HOPPER LOADOUT (SAWDUST/COAL/LIME)
EP-21	S-02	CONVEYING (SAWDUST/COAL/LIME)
EP-22	S-02	PULVERIZING (SAWDUST/COAL/LIME)
EP-23	S-02	CONVEYING (SAWDUST/COAL/LIME)
EP-24	S-02	BUCKET ELEVATOR (SAWDUST/COAL/LIME)
EP-25	S-02	BIN LOADOUT (SAWDUST/COAL/LIME)
EP-26	S-02	CONVEYING (SAWDUST/COAL/LIME)
EP-27	Bldg.	LOADING HOPPER STARCH
EP-28	Bldg.	LOADING HOPPER NITRATE
EP-29	Bldg.	HOPPER LOADOUT (STARCH/LIME)
EP-30	Bldg.	CONVEYING (STARCH/LIME)
EP-31	Bldg.	MESQUITE STORAGE
EP-32	Bldg.	LOADING MESQUITE
EP-33	Bldg.	MIXER
EP-35	S-03-07	DRYER
EP-36	Bldg.	DRYER LOADOUT
EP-37	Bldg.	CONVEYING
EP-38	Bldg.	BUCKET ELEVATOR
EP-39	Bldg.	CONVEYING
EP-40	Bldg.	CONVEYING
EP-41	Bldg.	CONVEYING

Visible Emission Sources		
Emission Unit	Stack ID	Description
EP-42	Bldg.	CONVEYING
EP-43	S-08	BIN LOADOUTS #1
EP-44	S-08	BIN LOADOUTS #2
EP-45	S-08	BIN LOADOUTS #3
EP-46	S-08	BIN LOADOUTS #4
EP-47	S-08	CONVEYING
EP-48	S-08	CONVEYING
EP-49	S-08	CONVEYING
EP-53	S-08	CONVEYING
EP-50	Bldg.	CONVEYING
EP-52	Bldg.	DIP TANK LOADOUT
EP-54	S-09	BAGGING BRIQUETTES
EP-65	Bldg.	BRIQUETTE FINES SCREEN
EP-66	Bldg.	CONVEYORS FINES
EP-68	Bldg.	CONVEYORS FINES
EP-67	Bldg.	BUCKET ELEVATOR
EP-69	S-09	CONVEYING (CHARCOAL)
EP-70	S-09	CONVEYING (CHARCOAL)
EP-71	S-09	CONVEYING (CHARCOAL)
EP-72	S-09	CONVEYING (CHARCOAL)
EP-73	S-11	Unload Railcar
EP-74	S-10 S-12	Starch Storage in Silos (2)
EP-75	S-13	Pneumatic Transfer of Starch
EP-76	Bldg.	Auger Transfer of Starch
EP-77	S-11	Unload Truck
<i>All Other Stacks</i>		All stacks of visible emissions, other than those listed above

**Permit Condition 1**

EP-01, EP-02, EP-03, EP-12, EP-13, EP-14, EP-15, EP-16, EP-18, EP-19, EP-27, EP-28, EP-31, EP-32, EP-35, EP-36, EP-73, EP-74, EP-75, EP-76, EP-77 & All Other Stacks

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

**Emission Limitations:**

The permittee shall not discharge into the ambient air from any source, not exempted under 10 CSR 10-6.220, any air contaminant of opacity greater than twenty (20%) percent. A source with a 20% opacity limit may emit air contaminants with opacity over 20%, but not greater than 40% for an aggregate length of time not to exceed six (6) minutes in any 60 minutes. Where the presence of uncombined water is the only reason for failure of an emission to meet the opacity requirements, the opacity requirements shall not apply.

**Monitoring / Recordkeeping:**

The permittee will follow the monitoring and recordkeeping requirements listed in the *Core Permit Requirements* for 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants, starting on page 18.

**Permit Condition 2<sup>7</sup>**

EP-04, EP-05, EP-06, EP-07, EP-08, EP-09, EP-10, EP-11, EP-17, EP-20, EP-21, EP-22, EP-23, EP-24, EP-25, EP-26, EP-29, EP-30, EP-33, EP-37, EP-38, EP-39, EP-40, EP-41, EP-42, EP-43, EP-44, EP-45, EP-46, EP-47, EP-48, EP-49, EP-50, EP-52, EP-53, EP-54, EP-65, EP-66, EP-67, EP-68, EP-69, EP-70, EP-71, EP-72

10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants

**Emission Limitations:**

The permittee shall not discharge into the ambient air from any source, not exempted under 10 CSR 10-6.220, any air contaminant of opacity greater than forty (40%) percent. A source with a 40% opacity limit may emit air contaminants with opacity over 40%, but not greater than 60% for an aggregate length of time not to exceed six (6) minutes in any 60 minutes. Where the presence of uncombined water is the only reason for failure of an emission to meet the opacity requirements, the opacity requirements shall not apply.

**Monitoring / Recordkeeping:**

The permittee will follow the monitoring and recordkeeping requirements listed in *Core Permit Requirements* for 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants, starting on page 18.

<b>Sawdust Fired Burner</b>			
Equipment Number	Description	Location	Permit Conditions
EP-01	Sawdust fired 27 MMBtu per hour burner; design rate: 2.89 tons of wood per hour; controlled with multiple cyclones with fly ash reinjection and cyclone (overall control efficiency: 85%); installed in 1985		

**Permit Condition 1**

Sawdust Fired Burner

10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitation:**

1. The emission unit shall be limited to burning sawdust.
2. Emissions from any existing or new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
3. Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.

**Monitoring/Recordkeeping:**

The permittee shall retain the potential to emit calculations in Attachment F (refer to page 32) which demonstrate that the above emission limitations will not be exceeded.

<sup>7</sup> EP-34 (Briquetting) and EP-64 (Space Heaters) both vent inside a building and are not included in this list.

<b>Space Heaters</b>			
Equipment Number	Description	Location	Permit Conditions
EP-64	Space Heaters, 27 MMBtu per hour total heat input; Fuel: LPG; installed 1966		1

**Permit Condition 1**

Space Heaters  
10 CSR 10-6.405 Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used for Indirect Heating

**Emission Limitation:**

This emission unit shall be limited to Liquid Propane Gas (LPG).

**Monitoring / Recordkeeping:**

No monitoring or recordkeeping is required for this condition based on 10 CSR 10-6.405(1)(C): *An emission unit that is subject to 10 CSR 10-6.070 and in compliance with applicable provisions; or an emission unit fueled by landfill gas, propane, natural gas, fuel oils #2 through #6 (with less than one and two-tenths percent (1.2%) sulfur), and/or other gases (with hydrogen sulfide levels less than or equal to four (4) parts per million volume as measured using ASTM D4084, or equivalent and mercury concentrations less than forty (40) micrograms per cubic meter as measured using ASTM D5954, or ASTM D6350, or equivalent) would be deemed in compliance with 10 CSR 10-6.405.*

## IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect on the date of permit issuance. The following is only an excerpt from the regulation or code, and is provided for summary purposes only

### **10 CSR 10-6.045 Open Burning Requirements**

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
  - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
    - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
    - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
    - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
  - b) Yard waste, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
    - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
    - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
      - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
      - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
      - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
      - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the director of Public Health and Welfare of the City of St. Joseph for the region in which the

City of St. Joseph is located provided, however, the burning period first shall receive the approval of the department director; and

- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) Royal Oak Enterprises, LLC - Branson may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Royal Oak Enterprises, LLC - Branson fails to comply with the provisions or any condition of the open burning permit.
  - a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

#### **10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions**

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;

- h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

#### **10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

#### **10 CSR 10-6.065 Operating Permits**

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)3.B]

#### **10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information**

- 1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements

outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.

- 2) The permittee may be required by the director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall submit a full EIQ for the 2011, 2014, 2017, and 2020 reporting years. In the interim years the installation may submit a Reduced Reporting Form; however, if the installation's emissions increase or decrease by more than five tons when compared to their last submitted full EIQ, the installation shall submit a full EIQ rather than a Reduced Reporting Form.
- 5) In addition to the EIQ submittal schedule outlined above, any permit issued under 10 CSR 10-6.060 Section (5) or (6) triggers a requirement that a full EIQ be submitted in the first full calendar year after the permitted equipment initially operates.
- 6) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 7) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 8) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 9) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

#### **10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

#### **10 CSR 10-6.150 Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

#### **10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

##### **Emission Limitation:**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.

- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

**Monitoring:**

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule<sup>8</sup>:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
  - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
  - b) If a violation is noted, monitoring reverts to weekly.
  - c) Should no violation of this regulation be observed during this period then-
    - i) The permittee may observe once per month.
    - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

**Recordkeeping:**

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether the visible emissions were normal for the installation.
- 3) Whether equipment malfunctions contributed to an exceedance.
- 4) Any violations and any corrective actions undertaken to correct the violation.

<b>10 CSR 10-6.180 Measurement of Emissions of Air Contaminants</b>
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- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks

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<sup>8</sup> The reissuance of this operating permit will not affect the frequency of monitoring. The permittee may continue their current monitoring schedule-for all affected emission units.

or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

#### **10 CSR 10-6.165 Restriction of Emission of Odors**

**This requirement is not federally enforceable.**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

#### **10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants**

##### **Emission Limitation:**

No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions in excess of the limits specified by this rule. This permit will contain the opacity limits identified (10, 20 or 40 percent) for the specific emission units.

##### **Monitoring:**

- 1) The permittee shall conduct opacity readings on each emission unit using the procedures contained in U.S. EPA Test Method 22. The permittee is only required to take readings when the emission unit is operating and when the weather conditions allow. If the permittee observes no visible or other significant emissions using these procedures, then no further observations are required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The permittee must maintain the following monitoring schedule<sup>9</sup>:
  - a) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
  - b) Should the permittee observe no violations of this regulation during this period then-
    - i) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
    - ii) If a violation is noted, monitoring reverts to weekly.
    - iii) Should no violation of this regulation be observed during this period then-
      - (1) The permittee may observe once per month.
      - (2) If a violation is noted, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

##### **Recordkeeping:**

The permittee shall maintain records of all observation results using Attachment B (or its equivalent), noting:

- 1) Whether any air emissions (except for water vapor) were visible from the emission units;
- 2) All emission units from which visible emissions occurred;
- 3) Whether the visible emissions were normal for the process;
- 4) The permittee shall maintain records of any equipment malfunctions, which may contribute to visible emissions; and,

<sup>9</sup> The reissuance of this operating permit will not affect the frequency of monitoring. The permittee may continue their current monitoring schedule-for all affected emission units.

- 5) The permittee shall maintain records of all USEPA Method 9 opacity tests performed.

<b>Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone</b>
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- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

<b>10 CSR 10-6.280 Compliance Monitoring Usage</b>
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- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a) Applicable monitoring or testing methods, cited in:
    - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - ii) 10 CSR 10-6.040, "Reference Methods";
    - iii) 10 CSR 10-6.070, "New Source Performance Standards";
    - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

## V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

### **10 CSR 10-6.065, §(5)(E)2 and §(6)(C)1.B Permit Duration**

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

### **10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Recordkeeping and Reporting Requirements**

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) April 1st for monitoring which covers the January through December time period.
    - ii) Exception. Monitoring requirements which require reporting more frequently than annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
    - ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

**10 CSR 10-6.065 §(5)(C)1 and §(6)(C)1.D Risk Management Plan Under Section 112(r)**

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

**10 CSR 10-6.065(5)(C)1.A General Requirements**

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

**10 CSR 10-6.065(5)(C)1.C Reasonably Anticipated Operating Scenarios**

None

**10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(6)(C)3.B; and §(6)(C)3.D; and §(5)(C)3 and §(6)(C)3.E.(I) – (III) and (V) – (VI) Compliance Requirements**

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
  - c) Whether compliance was continuous or intermittent;
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
  - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

**10 CSR 10-6.065, §(5)(C)1 and §(6)(C)7 Emergency Provisions**

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:

- a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

#### **10 CSR 10-6.065(5)(C)5 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
- a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

#### **10 CSR 10-6.020(2)(R)12 Responsible Official**

The application utilized in the preparation of this permit was signed by Jim Hayes, Area Vice President. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

#### **10 CSR 10-6.065 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire;  
or
  - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 3) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

<b>10 CSR 10-6.065 §(5)(E)1.A and §(6)(E)1.C Statement of Basis</b>
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This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

## **VI. Attachments**

Attachments follow.





**Attachment C**

Method 9 Opacity Emissions Observations								
Company					Observer			
Location					Observer Certification Date			
Date					Emission Unit			
Time					Control Device			
Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							
SUMMARY OF AVERAGE OPACITY								
Set Number	Time				Opacity			
	Start	End		Sum	Average			

Readings ranged from \_\_\_\_\_ to \_\_\_\_\_ % opacity.

Was the emission unit in compliance at the time of evaluation? \_\_\_\_\_  
 YES NO Signature of Observer





**Attachment E (continued)**

Rolling 12-month PM<sub>10</sub> Emissions

*In order to demonstrate compliance with Permit Condition PW1 the 12-month Rolling Average Emissions of PM<sub>10</sub> must be less than 100 tons.*

<b>Month</b>	<b>PM<sub>10</sub> Emissions (tons)</b>	<b>12-month Rolling<sup>10</sup> Total Emissions of PM<sub>10</sub></b>
January		
February		
March		
April		
May		
June		
July		
August		
September		
October		
November		
December		

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<sup>10</sup> The 12-month Rolling Total column value is the sum of the previous 12 monthly PM<sub>10</sub> Emission column values.

## Attachment F

### 10 CSR 10-6.260 Compliance Demonstration

This attachment may be used to demonstrate that the Sawdust Fired Burner (EP-01) is always in compliance with 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds* as summarized below:

General Equation:  $\text{ppmv SO}_2 = \text{SO}_2 \text{ Emission Factor (lb/MMBtu)} \div \text{F factor (wscf/MMBtu)} \div \text{Conversion Factor (lb/scf)} \times \text{Conversion Factor (ppmv/ppmw)}$

1. The SO<sub>2</sub> emission factor for wood residue combustion = 0.025 lb/MMBtu  
(Source: US EPA document AP-42 Table 1.6-2)
2. This emission factor assumes that all of the sulfur in the fuel is converted to SO<sub>2</sub> emissions.
3. The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For wood the F factor is 9240 dscf/MMBtu.  
(Source: 40 CFR Part 60 Appendix A Method 19 Table 19-2).
4. Conversion factor for lb/scf to ppm is 1.660E-7 lb/scf per ppm  
(Source: 40 CFR Part 60 Appendix A Method 19 Table 19-1).
5. Conversion factor for ppm weight to ppmv = 28.8/MW = 28.8/64 = 0.45  
(Source: US EPA document AP-42 Appendix A)

### Compliance Demonstration

$$\text{ppmv SO}_2 = \left(0.025 \text{ lb/MMBtu}\right) \left(\text{MMBtu}/9240 \text{ ft}^3\right) \left(\text{scf}/1.667 \text{ E}^{-7} \text{ lb}\right) \left(0.45 \text{ ppmv/ppmw}\right) = 7.304 \text{ ppmv}$$

**< 500 ppmv**

Since the uncontrolled potential to emit rate of 7.304 ppmv is below the allowable emission rate of 500 ppmv, the units are in compliance.

# STATEMENT OF BASIS

## Voluntary Limitations

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

## Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Intermediate Operating Permit Application, received May 15, 2012;
- 2) The most recent five (5) of Emissions Inventory Questionnaire (MoEIS) beginning with 2007; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

## Project History

Reference No.	Permit No.	Start Date	Complete Date	Description
AP200704015	OP2007-059	04/02/07	11/16/07	Briquette Charcoal
EX47200007010		07/15/96	05/31/02	Charcoal Briquettes
EX4720N001005	1184-003	09/05/84	11/26/84	
AP200205126		05/13/02	09/19/07	Charcoal Briquetting
AP200206041	No Construction Permit Required	06/10/02	07/03/02	Starch loading & unloading

## Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

## Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, *Alternate Emission Limits*

This rule is not applicable because the installation is in an ozone attainment area.

10 CSR 10-6.400, *Restriction of Emission of Particulate Matter from Industrial Processes.*

The following emission units are exempt from this regulation based on paragraphs (1)(B)12., 15. or 16 (represented in the table in columns 5, 6 and 7).

EU	Description	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)	PTE is less than 0.5 lbs per hour? (with control / without control)	Is unit in compliance without controls?	Is the Control Efficiency Greater Than 90%?	Is unit in compliance with controls?
EP-02	Charcoal Storage	5.200	12.37	YES/wo	YES	NO	YES
EP-03	Loading Hopper (Charcoal)	5.200	12.37	YES/w	YES	NO	YES
EP-04	Hopper Loadout	5.200	12.37	YES/w	YES	NO	YES
EP-05	Conveying Charcoal	5.200	12.37	YES/w	YES	NO	YES
EP-06	Pulverizing (Charcoal)	5.200	12.37	NO	YES	NO	YES
EP-07	Conveying (Charcoal)	5.200	12.37	YES/w	YES	NO	YES
EP-08	Conveying (Charcoal)	5.200	12.37	YES/w	YES	NO	YES
EP-09	Bucket Elevator (Charcoal)	5.200	12.37	YES/w	YES	NO	YES
EP-10	Bin Loadout (Charcoal)	8.500	17.20	YES/w	YES	NO	YES
EP-11	Conveying (Charcoal)	5.200	12.37	YES/w	YES	NO	YES
EP-12	Sawdust Storage	2.900	8.37	YES/wo	YES	NO	YES
EP-13	Coal Storage	1.200	4.63	YES/wo	YES	NO	YES
EP-14	Lime Storage	1.020	4.15	YES/wo	YES	NO	YES
EP-15	Storage (Sawdust/Coal/Lime)	2.500	7.58	YES/wo	YES	NO	YES
EP-16	Blending (Sawdust/Coal/Lime)	2.500	7.58	NO	YES	NO	YES
EP-17	Conveying (Sawdust/Coal/Lime)	2.500	7.58	YES/w	YES	NO	YES
EP-18	Storage (Sawdust/Coal/Lime)	2.500	7.58	YES/wo	YES	NO	YES
EP-19	Loading Hopper (Sawdust/Coal/Lime)	2.500	7.58	YES/w	YES	NO	YES
EP-20	Hopper Loadout (Sawdust/Coal/Lime)	2.500	7.58	YES/w	YES	NO	YES
EP-21	Conveying (Sawdust/Coal/Lime)	2.500	7.58	YES/w	YES	NO	YES
EP-22	Pulverizing (Sawdust/Coal/Lime)	2.500	7.58	YES/w	YES	NO	YES
EP-23	Conveying (Sawdust/Coal/Lime)	2.500	7.58	YES/w	YES	NO	YES

EU	Description	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)	PTE is less than 0.5 lbs per hour? (with control / without control)	Is unit in compliance without controls?	Is the Control Efficiency Greater Than 90%?	Is unit in compliance with controls?
EP-24	Bucket Elevator (Sawdust/Coal/Lime)	2.500	7.58	YES/w	YES	NO	YES
EP-25	Bin Loadout (Sawdust/Coal/Lime)	2.500	7.58	YES/w	YES	NO	YES
EP-26	Conveying (Sawdust/Coal/Lime)	2.500	7.58	YES/w	YES	NO	YES
EP-27	Loading Hopper Starch	0.640	3.04	YES/wo	YES	NO	YES
EP-28	Loading Hopper Nitrate	0.210	1.44	YES/wo	YES	NO	YES
EP-29	Hopper Loadout (Starch/Lime)	0.810	3.56	YES/wo	YES	NO	YES
EP-30	Conveying (Starch/Lime)	0.810	3.56	YES/wo	YES	NO	YES
EP-31	Mesquite Storage	0.030	0.39	YES/wo	YES	NO	YES
EP-32	Loading Mesquite	0.030	0.39	YES/wo	YES	NO	YES
EP-33	Mixer	8.500	17.20	YES/w	YES	NO	YES
EP-34	Briquetting	8.500	17.20	NO	YES	NO	YES
EP-36	Dryer Loadout	8.500	17.20	NO	YES	NO	YES
EP-37	Conveying	8.500	17.20	NO	YES	NO	YES
EP-38	Bucket Elevator	8.500	17.20	NO	YES	NO	YES
EP-39	Conveying	2.100	6.74	YES/wo	YES	NO	YES
EP-40	Conveying	2.100	6.74	YES/wo	YES	NO	YES
EP-41	Conveying	2.100	6.74	YES/wo	YES	NO	YES
EP-42	Conveying	2.100	6.74	YES/wo	YES	NO	YES
EP-43	Bin Loadout #1	2.100	6.74	YES/wo	YES	YES	YES
EP-44	Bin Loadout #2	2.100	6.74	YES/wo	YES	YES	YES
EP-45	Bin Loadout #3	2.100	6.74	YES/wo	YES	YES	YES
EP-46	Bin Loadout #4	2.100	6.74	YES/wo	YES	YES	YES
EP-47	Conveying	2.100	6.74	YES/wo	YES	YES	YES
EP-48	Conveying	2.100	6.74	YES/wo	YES	YES	YES
EP-49	Conveying	2.100	6.74	YES/wo	YES	YES	YES
EP-50	Conveying	2.100	6.74	YES/wo	YES	NO	YES
EP-52	Dip Tank Loadout	2.100	6.74	YES/wo	YES	NO	YES
EP-53	Conveying	2.100	6.74	YES/wo	YES	YES	YES
EP-54	Bagging Briquettes	8.500	17.20	NO	YES	NO	YES
EP-65	Briquette Fines Screen	8.500	17.20	NO	YES	NO	YES
EP-66	Conveyor - Fines	2.000	6.52	YES/wo	YES	NO	YES
EP-67	Bucket Elevator	2.000	6.52	YES/wo	YES	NO	YES

EU	Description	Process Weight Rate (ton/hr)	Allowable Emission Rate (lb/hr)	PTE is less than 0.5 lbs per hour? (with control / without control)	Is unit in compliance without controls?	Is the Control Efficiency Greater Than 90%?	Is unit in compliance with controls?
EP-68	Conveyor - Fines	2.000	6.52	YES/wo	YES	NO	YES
EP-69	Briquette Fines Screen	1.500	5.38	YES/wo	YES	YES	YES
EP-70	Briquette Fines Screen	1.500	5.38	YES/wo	YES	YES	YES
EP-71	Briquette Fines Screen	1.500	5.38	YES/wo	YES	YES	YES
EP-72	Briquette Fines Screen	1.500	5.38	YES/wo	YES	YES	YES
EP-73	Unload Railcar	18.000	28.43	YES/w	YES	YES	YES
EP-74	Starch Storage in Silo	18.000	28.43	YES/w	YES	YES	YES
EP-74A	Starch Storage in Silo	18.000	28.43	YES/w	YES	YES	YES
EP-75	Pneumatic Transfer of Starch	2.000	6.52	YES/w	YES	YES	YES
EP-76	Auger Transfer of Starch	2.000	6.52	YES/w	YES	NO	YES
EP-77	Unload Truck	10.000	19.18	YES/w	YES	YES	YES

In addition, the briquette dryer (EP01 and EP35) is also exempt, based on:

The briquette dryer (EP35) capacity is 8.5 tons of briquettes per hour plus 2.6 tons of sawdust fuel per hour. The sawdust fuel combustion was given a separate emission point number (EP01). The process weight for the dryer is then 11.1 tons per hour. The exhaust from the sawdust burners passes through a multi-cyclone prior to entering the dryer. This cyclone system has control efficiency of 80%. The exhaust of the dryer passes through a cyclone which has been assigned a control efficiency of 25%.

The allowable particulate matter emission rate for the dryer is:

$$4.1 (11.1)^{0.67} = 20.57 \text{ pounds of PM per hour.}$$

The uncontrolled actual emission rate of the dryer:

$$(EP35) [8.5 \text{ tons per hour} \times 0.11 \text{ pounds per ton}] = 0.94 \text{ pounds per hour}$$

$$(EP01) [27 \text{ MMBtu per hour} \times 0.307 \text{ pounds per MMBtu}] = 8.29 \text{ pounds per hour}$$

$$\text{Total (EP35 + EP01)} = 9.23 \text{ pounds of PM per hour.}$$

This uncontrolled rate is less than the allowable.

#### 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

The Space Heaters ( ) are exempt from this rule based on:

(1) Applicability.

(A) This rule applies to any installation that is an emission source of sulfur compounds, except—  
 2. Combustion equipment that uses exclusively pipeline grade natural gas as defined in 40 CFR 72.2. or liquefied petroleum gas as defined by American Society for Testing and Materials (ASTM), or any combination of these fuels.

### **Construction Permit Revisions**

The following revisions were made to construction permits for this installation:

This facility's only Construction Permit, 1184-003, contains no *Special Conditions*, therefore no *Construction Permit Conditions* were included in this permit.

### **New Source Performance Standards (NSPS) Applicability Issues**

40 CFR Part 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.*

The 20,000 gallon stoddard solvent storage tank is not subject to this subpart because the maximum true vapor pressure of the solvent is less than 15.0 kPa [§60.110b(b)]. This subpart does not apply to the other storage tanks because they have a capacity less than 75 m<sup>3</sup> and/or they also store stoddard solvent.

### **Maximum Achievable Control Technology (MACT) Applicability Issues**

None

### **National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability Issues**

In the permit application and according to Air Pollution Control Program records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

### **Other Regulatory Determinations**

None

### **Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

- 1) The specific pollutant regulated by that rule is not emitted by the installation.
- 2) The installation is not in the source category regulated by that rule.
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule.
- 4) The installation does not contain the type of emission unit which is regulated by that rule.
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

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Randy E. Raymond  
Environmental Engineer

Mr. Jim Hayes  
Royal Oak Enterprises, LLC - Branson  
P.O. Box 1517  
Branson, MO 65616

Re: Royal Oak Enterprises, LLC - Branson, 213-0007  
Permit Number: **OP2013-041**

Dear Mr. Hayes:

Enclosed with this letter is your intermediate operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within thirty (30) days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If you send your appeal by registered or certified mail, we will deem it filed on the date you mailed it. If you send your appeal by a method other than registered or certified mail, we will deem it filed on the date the AHC receives it.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Randy Raymond at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permit Unit Chief

MJS/rrk

Enclosures

c: Southwest Regional Office  
PAMS File: 2012-05-072