



## PART 70 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.

Operating Permit Number: **OP2011-051**  
Expiration Date: **NOV 09 2016**  
Installation ID: 095-0321  
Project Number: 2010-07-025

**Installation Name and Address**

Lafarge North America - Courtney Ridge Quarry  
2620 N. Hwy 291  
Sugar Creek, MO 64058  
Jackson County

**Parent Company's Name and Address**

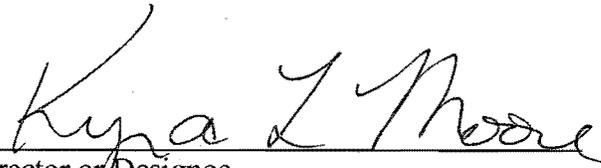
Lafarge North America, Inc.  
1S194 Illinois Highway 47  
Elburn, IL 60119

**Installation Description:**

Lafarge North America's Courtney Ridge Quarry is a limestone quarry located in Sugar Creek, Missouri. Courtney Ridge Quarry consists of rock crushing, sizing, and handling equipment, two diesel engines, rock storage piles, and a haul road. The quarry is co-located with Lafarge North America's Sugar Creek Portland Cement Plant (095-0030). The portland cement plant and the quarry are considered one installation for potential to emit purposes, but are obtaining separate Part 70 operating permits. The installation is a major source of carbon monoxide (CO), greenhouse gases (CO<sub>2</sub>e), nitrogen oxides (NO<sub>x</sub>), particulate matter ≤ 10 microns (PM<sub>10</sub>), particulate matter ≤ 2.5 microns (PM<sub>2.5</sub>), sulfur oxides (SO<sub>x</sub>), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs).

NOV 10 2011

Effective Date

  
Director or Designee  
Department of Natural Resources

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

Lafarge North America’s Courtney Ridge Quarry is a limestone quarry located in Sugar Creek, Missouri. Courtney Ridge Quarry consists of rock crushing, sizing, and handling equipment, two diesel engines, rock storage piles, and a haul road. The quarry is co-located with Lafarge North America’s Sugar Creek Portland Cement Plant (095-0030). The portland cement plant and the quarry are considered one installation for potential to emit purposes, but are obtaining separate Part 70 operating permits. The installation is a major source of carbon monoxide (CO), greenhouse gases (CO<sub>2e</sub>), nitrogen oxides (NO<sub>x</sub>), particulate matter ≤ 10 microns (PM<sub>10</sub>), particulate matter ≤ 2.5 microns (PM<sub>2.5</sub>), sulfur oxides (SO<sub>x</sub>), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs).

<b>Pollutant<sup>1</sup></b>	<b>2010</b>	<b>2009</b>	<b>2008<sup>2</sup></b>
Particulate Matter ≤ Ten Microns (PM <sub>10</sub> )	0.04	0.04	0.04
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )	0.04	0.04	0.02

<sup>1</sup>The installation does emit SO<sub>x</sub>, NO<sub>x</sub>, and CO; however, annual emissions were below the reporting threshold of 1 ton listed within 10 CSR 10-6.110 Table 1.

<sup>2</sup>Prior to reporting year 2008 the Courtney Ridge Quarry emissions were reported under 095-0030 with the Sugar Creek Portland Cement Plant emissions.

<b>Pollutant</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Particulate Matter ≤ Ten Microns (PM <sub>10</sub> )	100.34	89.20	150.61	188.06	189.99
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )	46.48	41.85	63.05	90.26	90.07
Sulfur Oxides (SO <sub>x</sub> )	277.97	191.66	286.07	362.51	357.46
Nitrogen Oxides (NO <sub>x</sub> )	1063.06	1028.02	1455.87	1736.20	1663.00
Volatile Organic Compounds (VOC)	74.73	53.05	77.05	92.11	95.18
Carbon Monoxide (CO)	571.55	369.83	639.59	549.22	580.58
Ammonia (NH <sub>3</sub> )	18.37	12.63	4.05	5.18	5.09
Hazardous Air Pollutants (HAPs)	44.68	4.03	35.44	44.79	44.20
Formaldehyde (50-00-0)	6.61	0.13	11.68	14.87	14.64
Xylene (1330-20-7)	7.21	0.04	7.52	9.29	9.23
Hydrogen Chloride (7647-01-0)	3.14	1.98	7.09	8.89	8.79
Styrene (100-42-5)	2.85	0.001	2.91	3.74	3.67
Benzene (71-43-2)	2.36	1.64	2.42	3.1	3.05
N-Hexane (110-54-3)	11.22	0.08	-	-	-
Ethylbenzene (100-41-4)	1.87	0.01	1.91	2.45	2.41
Toluene (108-88-3)	1.85	0.05	1.89	2.43	2.38
Acetaldehyde (75-07-0)	6.15	-	-	-	-
Methanol (67-56-1)	1.39	0.1	-	-	-
Mercury Compounds (20-13-3)	0.02	0.01	0.01	0.01	0.01
Manganese Compounds (20-12-2)	0.01	0.004	0.01	0.01	0.01

**EMISSION UNITS WITH LIMITATIONS**

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

<b>Emission Unit</b>	<b>Description</b>	<b>Emission Unit</b>	<b>Description</b>
EP-01	Screen PS2	EP-117	Conveyor C7
EP-02	Feeder PF2	EP-118	Conveyor C8
EP-03	Conveyor PC4	EP-119	Conveyor C9
EP-04	Conveyor PC5	EP-120	Conveyor C10
EP-05	Conveyor PC6	EP-121	Conveyor C11
EP-06	Screen PS1	EP-122	Conveyor C12
EP-07	Feeder PF1	EP-123	Conveyor C13
EP-08	Conveyor PC1	EP-124	Conveyor C14
EP-09	Conveyor PC2	EP-125	Conveyor C15
EP-11	Storage Pile	EP-126	Conveyor C16
EP-12	181 HP Diesel Engine DE2	EP-127	Conveyor C17
EP-13	125 HP Diesel Engine DE1	EP-128	Conveyor C18
EP-110	Screens S1 and S2	EP-138	Feeders F1 and F2
EP-111	Conveyor C1	EP-139	Secondary Crusher CR2
EP-112	Conveyor C2	EP-140	Primary Crusher Conveyor
EP-113	Conveyor C3	EP-142	Primary Crusher CR1
EP-114	Conveyor C4	EP-143	Stockpiles
EP-115	Conveyor C5	EP-144	Haul Road
EP-116	Conveyor C6		

**EMISSION UNITS WITHOUT LIMITATIONS**

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

<b>Emission Unit</b>	<b>Description</b>
EP-141	Primary Crusher Hopper
	10,000 gallon Diesel Storage Tank

## **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 as of the date that this permit is issued.

None.

### 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 as of the date that this permit is issued.

<b>PERMIT CONDITION 001</b>	
10 CSR 10-6.060 Construction Permits Required Construction Permit 112008-011, Issued November 24, 2008	
<b>Emission Unit</b>	<b>Description</b>
EP-110	Screens S1 and S2
EP-139	Secondary Crusher CR2
EP-142	Primary Crusher CR1

**Operational Limitation:**

1. Special Condition 4.A: The permittee shall install and operate wet spray devices to restrict the emission of particulate matter from EP-110 Screen S1 and S2, EP-139 Secondary Crusher CR2, and EP-142 Primary Crusher CR1. These wet spray devices shall be used to control fugitive emissions whenever these emission units are in operation.
2. Special Condition 4.B: Watering may be suspended during periods of freezing conditions, when use of the wet spray devices may damage the equipment. During these conditions, the permittee shall adjust the production rate to control fugitive emissions from these emission units. The permittee shall record a brief description of such events in a daily log.

**Monitoring/Recordkeeping:**

1. The permittee shall inspect the wet spray devices nozzles at least once each month to ensure the devices are not clogged and are operating properly.
2. The permittee shall maintain a maintenance log for each emission unit and wet spray device noting all inspections, malfunctions, and repairs using Attachment B or an equivalent form generated by the permittee. The permittee may use these records to document periods of freezing conditions also as required above.
3. The permittee shall keep each record readily accessible to Department of Natural Resources' employees upon request. Records shall be kept in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

**Reporting:**

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 002</b>	
10 CSR 10-6.060 Construction Permits Required Construction Permit 022009-005A, Issued October 5, 2010	
<b>Emission Unit</b>	<b>Description</b>
EP-12	181 HP Diesel Engine for Screen 2 DE2
EP-13	125 HP Diesel Engine for Screen 1 DE1

**Emission Limitation:**

Special Condition 2.A: The permittee shall emit less than 40.0 tons of NO<sub>x</sub> in any consecutive 12-month period from EP-12 181 HP Diesel Engine for Screen 2 DE2 and EP-13 125 HP Engine for Screen 1 DE1.

**Monitoring/Recordkeeping:**

1. Special Condition 2.B: The permittee shall maintain an accurate record of NO<sub>x</sub> emitted into the atmosphere from the diesel engines. Attachment C or an equivalent form generated by the permittee shall be used for this purpose.
2. The permittee shall maintain a maintenance log for each engine noting all inspections, malfunctions, and repairs using Attachment B or an equivalent form generated by the permittee.
3. Special Condition 4: The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources’ personnel upon request.
4. Records may be kept in hard copy or electronic form.

**Reporting:**

1. Special Condition 5: The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances of the limitations imposed by this permit.
2. The permittee shall report any deviations from the emission limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 003</b>	
10 CSR 10-6.060 Construction Permits Required Construction Permit 022009-005A, Issued October 5, 2010	
<b>Emission Unit</b>	<b>Description</b>
EP-11	Storage Pile
EP-143	Stockpiles
EP-144	Haul Road

**Operational Limitation:**

1. Special Condition 3: The permittee shall control dust from the vehicular areas around the storage piles and by the haul road using documented watering, chemical dust suppressants, or paving:
  - a) If using documented watering, the following conditions apply:
    - i) The water application rate shall be 30 gallons per 1000 square feet at least once every four hours.

- ii) Meteorological precipitation of any kind, (e.g. a quarter inch or more rainfall, sleet, snow, and/or freeze thaw conditions) which is sufficient in the amount or condition to achieve control of fugitive emissions from these areas while the areas are in use, may be substituted for water application.
- iii) Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
- iv) The permittee shall maintain a log that documents daily water applications. This log shall include, but is not limited to, dates and volumes of water application. The log shall also record rationale for not applying water on days the areas are in use (e.g. meteorological situations, precipitation events, freezing, etc.)
- v) The permittee shall keep a record of tank size, total area of vehicular activity area to be watered, and the resultant number of fills necessary to accomplish the required application rate. The permittee shall also keep a record of watering equipment breakdowns and repairs.
- b) If using chemical dust suppressants, the following conditions apply:
  - i) The suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) shall be applied in accordance with the manufacturer's suggest application rate and re-applied as necessary to achieve control of fugitive emissions from these areas.
  - ii) The permittee shall keep records of the time, date, and the amount of material applied for each application of chemical dust suppressant on these areas.
- c) If paving is to be used, the following conditions apply:
  - i) The permittee shall pave the haul road and the specified vehicular activity areas around the storage piles with materials such as asphalt, concrete, and/or other material(s) approved by the Air Pollution Control Program.
  - ii) Maintenance and/or repair of the surface shall be conducted as necessary to ensure that the physical integrity of the pavement is adequate to control fugitive emissions from these areas while the plant is operating.

**Monitoring/Recordkeeping:**

1. The permittee shall retain records as applicable to the type of control used as specified within the operational limitation above.
2. Special Condition 4: The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
3. Records may be kept in hard copy or electronic form.

**Reporting:**

1. Special Condition 5: The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances of the limitations imposed by this permit.
2. The permittee shall report any deviations from the operational limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

**PERMIT CONDITION 004**

10 CSR 10-6.070 New Source Performance Regulations

40 CFR Part 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants

<b>Emission Unit</b>	<b>Description</b>	<b>Emission Unit</b>	<b>Description</b>
EP-01	Screen PS2	EP-117	Conveyor C7
EP-02	Feeder PF2	EP-118	Conveyor C8
EP-03	Conveyor PC4	EP-119	Conveyor C9
EP-04	Conveyor PC5	EP-120	Conveyor C10
EP-05	Conveyor PC6	EP-121	Conveyor C11
EP-06	Screen PS1	EP-122	Conveyor C12
EP-07	Feeder PF1	EP-123	Conveyor C13
EP-08	Conveyor PC1	EP-124	Conveyor C14
EP-09	Conveyor PC2	EP-125	Conveyor C15
EP-110	Screens S1 and S2	EP-126	Conveyor C16
EP-111	Conveyor C1	EP-127	Conveyor C17
EP-112	Conveyor C2	EP-128	Conveyor C18
EP-113	Conveyor C3	EP-138	Feeders F1 and F2
EP-114	Conveyor C4	EP-139	Secondary Crusher CR2
EP-115	Conveyor C5	EP-140	Primary Crusher Conveyor
EP-116	Conveyor C6	EP-142	Primary Crusher CR1

**Definitions:**

1. All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part. [§60.671]
  - a) *Seasonal shut down* means shut down of an affected facility for a period of at least 45 consecutive days due to weather or seasonal market conditions.

**Standards:**

1. Affected facilities shall meet the fugitive emission limits and compliance requirements in Table 3 of this subpart within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems. [§60.672(b)]
2. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section. [§60.672(d)]

**Table 3 to Subpart 000 — Fugitive Emission Limits**

Affected facilities (as defined in §60.670) that commenced construction, modification, or reconstruction...	Fugitive emissions limit for screening operations, transfer points on belt conveyors, or from any other affected facility (as defined in §60.670)...	Fugitive emissions limit for crushers at which a capture system is not used...	Compliance Requirements...
Before April 22, 2008	10 percent opacity	15 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart.
On or after April 22, 2008	7 percent opacity	12 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and
			A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.

**Monitoring:**

1. For any affected facility which uses wet suppression to control emissions, the permittee shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The permittee shall initiate corrective action within 24 hours and complete corrective action as expediently as practical if the permittee finds that water is not flowing properly during an inspection of the water spray nozzles. The permittee shall record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b). [§60.674(b)]
  - a) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the five-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in Paragraphs (b)(1)(i) and (ii) of this section: [§60.674(b)(1)]
    - i) The permittee conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to Paragraph (b) of this section and §60.676(b), and [§60.674(b)(1)(i)]

- ii) The permittee designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §60.11 of this part and §60.675 of this subpart. [§60.674(b)(1)(ii)]
- b) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §60.676(b) shall specify the control mechanism being used instead of the water sprays. [§60.674(b)(2)]

**Test Methods/Procedures:**

1. In conducting the performance tests required in §60.8, the permittee shall use as reference methods and procedures the test methods in appendices A–1 through A–7 of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in Paragraph (e) of this section. [§60.675(a)]
2. In determining compliance with the particulate matter standards in §60.672(b), the permittee shall use Method 9 of Appendix A–4 of this part and the procedures in §60.11, with the following additions: [§60.675(c)(1)]
  - a) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet). [§60.675(c)(1)(i)]
  - b) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources ( e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A–4 of this part, Section 2.1) shall be followed. [§60.675(c)(1)(ii)]
  - c) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions shall be made at a point in the plume where the mist is no longer visible. [§60.675(c)(1)(iii)]
3. When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) of this subpart, the duration of the Method 9 (40 CFR Part 60, Appendix A–4) observations shall be 30 minutes (five six-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart shall be based on the average of the five six-minute averages. [§60.675(c)(3)]
4. The permittee may use the following as alternatives to the reference methods and procedures specified in this section: [§60.675(e)]
  - a) For the method and procedure of Paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used: [§60.675(e)(1)]
    - i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream. [§60.675(e)(1)(i)]
    - ii) Separate the emissions so that the opacity of emissions from each affected facility can be read. [§60.675(e)(1)(ii)]
  - b) A single visible emission observer may conduct visible emission observations for up to three fugitive emission points within a 15-second interval if the following conditions are met: [§60.675(e)(2)]
    - i) No more than three emission points may be read concurrently. [§60.675(e)(2)(i)]

- ii) All three emission points shall be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points. [§60.675(e)(2)(ii)]
  - iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer shall stop taking readings for the other two points and continue reading just that single point. [§60.675(e)(2)(iii)]
5. For performance tests involving only Method 9 (40 CFR Part 60 Appendix A–4) testing, the permittee may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a seven-day advance notification. [§60.675(g)]
  6. If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in §60.671 of this subpart) of the affected facility, then with approval from the permitting authority, the permittee may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility. [§60.675(i)]

**Recordkeeping/Reporting:**

1. The permittee shall record each periodic inspection required under §60.674(b), including dates and any corrective actions taken, in a logbook (in written or electronic format). The permittee shall keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request. [§60.676(b)(1)]
2. The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR Part 60, Appendix A–4) to demonstrate compliance with §60.672(b). [§60.676(f)] Method 9 Observations may be retained using Attachment E or an equivalent form generated by the permittee.
3. The subpart A requirement under §60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart. [§60.676(h)]
4. A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator. [§60.676(i)]
  - a) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the permittee to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available. [§60.676(i)(1)]
  - b) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant. [§60.676(i)(2)]
5. Notifications and reports required under this subpart and under subpart A of this part to demonstrate compliance with this subpart need only to be sent to the EPA Region or the State which has been delegated authority according to §60.4(b). [§60.676(k)]
6. The permittee shall maintain a maintenance log for each emission unit and wet spray device noting all inspections, malfunctions, and repairs using Attachment B or an equivalent form generated by the permittee.
7. The permittee shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. Records may be kept in hard copy or electronic form.

8. The permittee shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
9. The permittee shall report any deviations from the definitions, standards, monitoring, test methods/procedures, and recordkeeping/reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

**Table 1 to Subpart 000 — Exceptions to Applicability of Subpart A to Subpart 000**

Subpart A reference	Applies to Subpart 000	Explanation
60.4, Address	Yes	Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).
60.7, Notification and recordkeeping	Yes	Except in (a)(1) notification of the date construction or reconstruction commenced (§60.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR Part 60, Appendix A–4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR Part 60, Appendix A–4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§60.675(c)), Method 9 (40 CFR Part 60, Appendix A–4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

<b>PERMIT CONDITION 005</b>	
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
Emission Unit	Description
EP-11	Storage Pile
EP-143	Stockpiles
EP-144	Haul Road

**Emission Limitation:**

1. No owner or other person shall cause or permit to be discharged into the atmosphere from these emission units any visible emissions with an opacity greater than 20 percent.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six minutes in any sixty minutes air contaminants with an opacity up to 60 percent.

**Monitoring:**

1. The permittee shall conduct opacity readings on these emission units using the procedures contained in U.S. EPA Test Method 22. Readings are only required when the emission unit is operating and

when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required.

2. The following monitoring schedule must be maintained:
  - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then
  - b) Observations must be made once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then
  - c) Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.
  - d) If, at the issuance of this permit, the permittee has progressed in the schedule listed in a) through c) the permittee may continue to advance accordingly or maintain observations as prescribed in c).
3. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
4. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then implement one of the fugitive emissions controls required by Construction Permit 022009-005A Special Condition 3 and contained within Permit Condition 003 of this operating permit.

**Recordkeeping:**

1. The permittee shall maintain records of all observation results (see Attachments D or an equivalent form generated by the permittee), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions exceeded the opacity limit.
2. The permittee shall maintain records of any equipment malfunctions, using Attachment B or an equivalent form generated by the permittee.
3. The permittee shall maintain records documenting the application of fugitive emissions controls as required by Permit Condition 003 of this operating permit.
4. These records shall be made available immediately for inspection to the Department of Natural Resources personnel upon request.
5. All records must be maintained for five years.

**Reporting:**

1. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
2. The permittee shall report any deviations from the emission limitations, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 006</b>	
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds	
Emission Unit	Description
EP-12	181 HP Diesel Engine DE2
EP-13	125 HP Diesel Engine DE1

**Emission Limitations:**

- No person shall cause or permit the emission into the atmosphere gases containing more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide or more than thirty-five milligrams per cubic meter (35 mg/cubic meter) of sulfuric acid or sulfur trioxide or any combination of these gases averaged on any consecutive three-hour time period.
- This requirement is not federally enforceable. This requirement is only enforceable by the Missouri Department of Natural Resources:** No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO <sub>2</sub> )	0.5 ppm (1300 µg/m <sup>3</sup> )	3-hour average not to be exceeded more than once per year
	75 ppb	1-hour average; 3-year average of the 99 <sup>th</sup> percentile of the daily maximum 1-hour average at each site monitor within an area
Hydrogen Sulfide (H <sub>2</sub> S)	0.05 ppm (70 µg/m <sup>3</sup> )	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m <sup>3</sup> )	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	10 µg/m <sup>3</sup>	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m <sup>3</sup>	1-hour average not to be exceeded more than once in any 2 consecutive days

**Monitoring/Record Keeping:**

- The permittee shall maintain an accurate record of the sulfur content of fuel as fired.
- The permittee shall monitor the sulfur content of each delivery of fuel (fuel oil no. 2/diesel) documenting that the sulfur content never exceeds 0.05 percent. (Fuel sulfur content at or below 0.05 percent, i.e. 500 ppm, demonstrates compliance.)
- The permittee shall keep each record readily accessible to Department of Natural Resources' employees upon request. Records shall be kept in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

**Reporting:**

- The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

2. The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

<b>PERMIT CONDITION 007</b>			
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations			
40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines			
<b>Emission Unit</b>	<b>Description</b>	<b>Model Year</b>	<b>Displacement (L/cylinder)</b>
EP-12	181 HP Diesel Engine DE2	2003	1.125
EP-13	125 HP Diesel Engine DE1	2001	1.3833

**Applicability:**

1. This subpart applies to each affected source. [§63.6590]
  - a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. [§63.6590(a)]
    - i) *New stationary RICE.* [§63.6590(a)(2)]
      - (1) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if the permittee commenced construction of the stationary RICE on or after June 12, 2006. [§63.6590(a)(2)(ii)]
  - b) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets the criteria in Paragraph (c)(7) of this section shall meet the requirements of this part by meeting the requirements of 40 CFR Part 60, Subpart III, for compression ignition engines. No further requirements apply for such engines under this part. [§63.6590(c)]
    - i) A new compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions. [§63.6590(c)(7)]

**Emission Limitations:**

1. For pre-2007 model year non-emergency stationary CI ICE with a displacement of less than ten liters per cylinder, the permittee shall comply with the emission standards in Table 1 to this subpart. [§60.4204(a)]
2. The permittee shall meet the emission standards over the entire life of the engine. [§60.4206]

**Table 1 to Subpart III of Part 60 — Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder**

As stated in §60.4204(a), the permittee shall comply with the following emission standards:

<b>Maximum engine power</b>	<b>Emission standards for stationary pre-2007 model year engines with a displacement of &lt;10 liters per cylinder in g/HP-hr</b>			
	<b>Hydrocarbons (HC)</b>	<b>Nitrogen Oxides (NO<sub>x</sub>)</b>	<b>Carbon Monoxide (CO)</b>	<b>Particulate Matter (PM)</b>
100≤HP<175	-	6.9	-	-
175≤HP<300	1.0	6.9	8.5	0.40

**Operational Limitations:**

1. The permittee shall only use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [§60.4207(b)]
2. The permittee shall operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer. The permittee shall also meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as applicable. [§60.4211(a)]

**Compliance Methods:**

1. The permittee shall demonstrate compliance according to one of the following methods:  
[§60.4211(b)]
  - a) Purchasing an engine certified according to 40 CFR Part 89 or 40 CFR Part 94, as applicable, for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's specifications. [§60.4211(b)(1)]
  - b) Retaining records of performance test results for each pollutant for a test conducted on a similar engine. The test shall have been conducted using the same methods specified in this subpart and these methods shall have been followed correctly. [§60.4211(b)(2)]
  - c) Retaining records of engine manufacturer data indicating compliance with the standards. [§60.4211(b)(3)]
  - d) Retaining records of control device vendor data indicating compliance with the standards. [§60.4211(b)(4)]
  - e) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in §60.4212, as applicable. [§60.4211(b)(5)]

**Monitoring:**

Each stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4204, shall install the diesel particulate filter with a backpressure monitor that notifies the permittee when the high backpressure limit of the engine is approached. [§60.4209(b)]

**Performance Testing:**

1. All performance tests to demonstrate compliance with this subpart shall be conducting as follows:  
[§60.4212]
  - a) The performance test shall be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F. [§60.4212(a)]
  - b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR Part 1039 shall not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR Part 1039. [§60.4212(b)]
  - c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, shall not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = 1.25 \times \text{STD} \quad \text{Equation 1}$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable. Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate. [§60.4212(c)]

- d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a) shall not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), from the equation in Paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a) may follow the testing procedures specified in §60.4213, as appropriate. [§60.4212(d)]

**Alternative Performance Testing:**

1. Each performance test shall be conducted according to the requirements in §60.8 and under the specific conditions that this subpart specifies in Table 7. The test shall be conducted within ten percent of 100 percent peak (or the highest achievable) load. [§60.4213(a)]
2. The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). [§60.4213(b)]
3. The permittee shall conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run shall last at least one hour. [§60.4213(c)]
4. The permittee shall normalize the NO<sub>x</sub> or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O<sub>2</sub>) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO<sub>2</sub>) using the procedures described in Paragraph (d)(3) of this section.

$$C_{\text{adj}} = \frac{5.9 \times C_d}{20.9 - \%O_2} \quad \text{Equation 3}$$

Where:

C<sub>adj</sub> = Calculated NO<sub>x</sub> or PM concentration adjusted to 15 percent O<sub>2</sub>.

C<sub>d</sub> = Measured concentration of NO<sub>x</sub> or PM, uncorrected.

5.9 = 20.9 percent O<sub>2</sub> – 15 percent O<sub>2</sub>, the defined O<sub>2</sub> correction value, percent.

%O<sub>2</sub> = Measured O<sub>2</sub> concentration, dry basis, percent. [§60.4213(d)(2)]

5. If pollutant concentrations are to be corrected to 15 percent O<sub>2</sub> and CO<sub>2</sub> concentration is measured in lieu of O<sub>2</sub> concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in Paragraphs (d)(3)(i) through (iii) of this section. [§60.4213(d)(3)]

- a) Calculate the fuel-specific F<sub>o</sub> value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 \times F_d}{F_c} \quad \text{Equation 4}$$

Where:

F<sub>o</sub> = Fuel factor based on the ratio of O<sub>2</sub> volume to the ultimate CO<sub>2</sub> volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O<sub>2</sub>, percent/100.

$F_d$  = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19,  $\text{dsm}^3/\text{J}$  ( $\text{dscf}/106 \text{ Btu}$ ).

$F_c$  = Ratio of the volume of  $\text{CO}_2$  produced to the gross calorific value of the fuel from Method 19,  $\text{dsm}^3/\text{J}$  ( $\text{dscf}/106 \text{ Btu}$ ). [§60.4213(d)(3)(i)]

- b) Calculate the  $\text{CO}_2$  correction factor for correcting measurement data to 15 percent  $\text{O}_2$ , as follows:

$$X_{\text{CO}_2} = \frac{5.9}{F_o} \text{ Equation 5}$$

Where:

$X_{\text{CO}_2}$  =  $\text{CO}_2$  correction factor, percent.

5.9 = 20.9 percent  $\text{O}_2$  – 15 percent  $\text{O}_2$ , the defined  $\text{O}_2$  correction value, percent.

[§60.4213(d)(3)(ii)]

- c) Calculate the  $\text{NO}_x$  and PM gas concentrations adjusted to 15 percent  $\text{O}_2$  using  $\text{CO}_2$  as follows:

$$C_{\text{adj}} = \frac{C_d \times X_{\text{CO}_2}}{\% \text{CO}_2} \text{ Equation 6}$$

Where:

$C_{\text{adj}}$  = Calculated  $\text{NO}_x$  or PM concentration adjusted to 15 percent  $\text{O}_2$ .

$C_d$  = Measured concentration of  $\text{NO}_x$  or PM, uncorrected.

$\% \text{CO}_2$  = Measured  $\text{CO}_2$  concentration, dry basis, percent. [§60.4213(d)(3)(iii)]

6. To determine compliance with the  $\text{NO}_x$  mass per unit output emission limitation, convert the concentration of  $\text{NO}_x$  in the engine exhaust using Equation 7 of this section:

$$\text{ER} = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{\text{KW-hour}} \text{ Equation 7}$$

Where:

ER = Emission rate in grams per KW-hour.

$C_d$  = Measured  $\text{NO}_x$  concentration in ppm.

$1.912 \times 10^{-3}$  = Conversion constant for ppm  $\text{NO}_x$  to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour. [§60.4213(e)]

7. To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$\text{ER} = \frac{C_{\text{adj}} \times Q \times T}{\text{KW-hour}} \text{ Equation 8}$$

Where:

ER = Emission rate in grams per KW-hour.

$C_{\text{adj}}$  = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW. [§60.4213(f)]

**Notifications, Recordkeeping, and Reporting:**

1. Each pre-2007 model year non-emergency stationary CI ICE greater than 175 HP and not certified, shall meet the following requirements: [§60.4214(a)]
  - a) Submit an initial notification as required in §60.7(a)(1). The notification shall include the following information: [§60.4214(a)(1)]
    - i) Name and address of the owner or operator; [§60.4214(a)(1)(i)]
    - ii) The address of the affected source; [§60.4214(a)(1)(ii)]
    - iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; [§60.4214(a)(1)(iii)]
    - iv) Emission control equipment; and [§60.4214(a)(1)(iv)]
    - v) Fuel used. [§60.4214(a)(1)(v)]
  - b) The permittee shall retain the following records: [§60.4214(a)(2)]
    - i) All notifications submitted to comply with this subpart and all documentation supporting any notification. [§60.4214(a)(2)(i)]
    - ii) Maintenance conducted on each engine. [§60.4214(a)(2)(ii)] The permittee may use Attachment B or an equivalent form generated by the permittee.
    - iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards. [§60.4214(a)(2)(iii)]
    - iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards. [§60.4214(a)(2)(iv)]
2. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the permittee shall retain records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached. [§60.4214(c)]
3. The permittee shall keep each record readily accessible to Department of Natural Resources' employees upon request. Records shall be kept in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.
4. The permittee shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
5. The permittee shall report any deviations from the emission limitations, operational limitations, compliance methods, monitoring, performance testing, alternative performance testing, and notification, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

## IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the 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 as of the date that this permit is issued. 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.
  - 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.
- 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) Lafarge North America - Courtney Ridge Quarry 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 Lafarge North America - Courtney Ridge Quarry 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 Record Keeping. 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(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(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(6)(C)3.B]

### **10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos**

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

### **10 CSR 10-6.100 Alternate Emission Limits**

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the Department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

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

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 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 paper EIQ to the Air Pollution Control Program by no later than April 1<sup>st</sup> after the end of each reporting year. The permittee may instead submit a full electronic EIQ via MoEIS by no later than May 1<sup>st</sup> after the end of each reporting year.
- 5) Emission fees are due by no later than June 1<sup>st</sup> after the end of each reporting year. The fees shall be payable to the Missouri Department of Natural Resources.
- 6) 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.
- 7) 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:**

1. 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.
2. The permittee shall maintain the following monitoring schedule:
  - a) The permittee shall conduct weekly observations for a minimum of eight consecutive weeks after permit issuance.
  - b) Should no violation of this regulation be observed during this period then-
    - i) The permittee may observe once every two weeks for a period of eight 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.

- c) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

**Recordkeeping:**

1. The permittee shall document all readings on Attachment A, or its equivalent, noting the following:
  - a) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
  - b) Whether the visible emissions were normal for the installation.
  - c) Whether equipment malfunctions contributed to an exceedance.
  - d) Any violations and any corrective actions undertaken to correct the violation.

**10 CSR 10-6.180 Measurement of Emissions of Air Contaminants**

- 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 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 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements**

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the Department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the Department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the Department. Certain business entities that meet the requirements for state-approved exemption status must allow the Department to monitor training classes provided to employees who perform asbestos abatement.

**Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone**

- 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 record keeping 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*

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<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(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(6)(C)1.C General Record Keeping and Reporting Requirements**

- 1) Record Keeping
  - 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) October 1st for monitoring which covers the January through June time period, and
    - ii) April 1st for monitoring which covers the July through December time period.
    - iii) Exception. Monitoring requirements which require reporting more frequently than semi-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, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
  - 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.A 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 semi-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(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(6)(C)1.F Severability Clause**

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

#### **10 CSR 10-6.065(6)(C)1.G 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 pursuant to 10 CSR 10-6.065(6)(C)1.

#### **10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions**

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

#### **10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios**

None.

#### **10 CSR 10-6.065(6)(C)3 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 EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, as well as the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions 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(6)(C)6 Permit Shield**

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
  - a) The application requirements are included and specifically identified in this permit, or
  - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
  - a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
  - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
  - c) The applicable requirements of the acid rain program,
  - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
  - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

#### **10 CSR 10-6.065(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(6)(C)8 Operational Flexibility**

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable

under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
  - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
  - b) The permit shield shall not apply to these changes.

#### **10 CSR 10-6.065(6)(C)9 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. 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 subject to any requirements under Title IV of the Act or is a Title I modification;
  - 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, 901 North 5th Street, Kansas City, KS 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. 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.
  - 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; and

- d) The permit shield shall not apply to these changes.

**10 CSR 10-6.020(2)(R)11 Responsible Official**

The application utilized in the preparation of this permit was signed by Mr. Matthew Dantine, Vice President - Aggregates. 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(6)(E)6 Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) The Missouri Department of Natural Resources 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,
- 3) 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,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit;  
or
- 5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

**10 CSR 10-6.065(6)(E)1.C Statement of Basis**

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 E**  
 Method 9 Opacity 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

## STATEMENT OF BASIS

### 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) Part 70 Operating Permit Application, received July 8, 2010
- 2) 2009 Emissions Inventory Questionnaire
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition
- 4) U.S. EPA's Factor Information Retrieval (FIRE) Data System version 6.25
- 5) Construction Permit 112008-011, Issued November 24, 2008
- 6) Construction Permit 022009-005, Issued February 6, 2009
- 7) Construction Permit 022009-005A, Issued October 5, 2010

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

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

10 CSR 10-2.260 *Control of Petroleum Liquid Storage, Loading, and Transfer* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to petroleum storage tanks with a capacity greater than 40,000 gallons, gasoline loading, gasoline transfer, and gasoline delivery vessels. The installation's only petroleum storage tank contains diesel and has a capacity of 10,000 gallons.

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes* is not applicable to the installation and has not been applied within this permit. All of the particulate matter emission sources at the installation are fugitive emission sources and are exempt under 10 CSR 10-6.400(1)(B)7.

### Construction Permits

Courtney Ridge Quarry's construction permits were issued to Sugar Creek Portland Cement Plant (095-0030) prior to the separation of the two facilities in March of 2010. The installations are still one for potential to emit purposes, but Courtney Ridge Quarry (095-0321) now maintains separate EIQ reports, construction permits, and operating permits.

Construction Permit 112008-011, Issued November 24, 2008:

- This construction permit is for the installation of a bottom ash storage pile and the expansion of an existing coal storage pile at Sugar Creek Portland Cement Plant as well as the installation of a new primary crusher at Courtney Ridge Quarry.
- Special Condition 1 is applicable to EP-95 Ash Pile Hauling at Sugar Creek Portland Cement Plant, as this condition is not applicable to Courtney Ridge Quarry it was not included within this permit.

- Special Condition 2 is applicable to EP-105 Haul Road – Mine Entrance to Primary Hopper and EP-133 Bottom Ash Pile at Sugar Creek Portland Cement Plant, as this condition is not applicable to Courtney Ridge Quarry it was not included within this permit.
- Special Condition 3 is applicable to EP-137 Primary Crusher at Aggregate Plant. Due to emission unit renumbering EP-137 is now EP-142 Primary Crusher. This moisture content testing was required to be completed within 45 days of initial startup and is assumed to have already been completed. The permittee shall retain this testing onsite.
- Special Condition 4 is applicable to EP-110 Screens S1 and S2, EP-132 Secondary Crusher CR2 (this emission unit has since been renumbered EP-139), and EP-137 Primary Crusher (this emission unit has since been renumbered EP-142) and has been applied within this permit (see Permit Condition 001).

Construction Permit 022009-005, Issued February 6, 2009 and  
Construction Permit 022009-005A, Issued October 5, 2010:

- This construction permit is for the installation of two screens and associated equipment (EP-01 – EP-13).
- Amendment A modifies the special conditions as a smaller screen was installed in place of Screen 1.
- Special Condition 1 states that the special conditions of Amendment A supersede those found within the original construction permit no. 022009-005.
- Special Condition 2 limits EP-01 – EP-13 to 40 tons of NO<sub>x</sub> emissions per consecutive 12-month period; however, only EP-12 and EP-13 Diesel Engines for Screens 1 and 2 emit NO<sub>x</sub> so the special condition was only applied to them within this permit (see Permit Condition 002).
- Special Condition 3 applies to EP-11 Storage Pile, to the existing storage pile EP-143 Stockpiles which will also be used to hold aggregate processed by EP-01 – EP-13, and to the existing haul road EP-144 Haul Road which will be used to haul aggregate processed by EP-01 – EP-13. This special condition has been applied within this permit (see Permit Condition 003).
- Special Conditions 4 and 5 have been applied within this permit (see Permit Conditions 002 and 003).

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

40 CFR Part 60, Subparts K, Ka, and Kb – *Standards of Performance for Storage Vessels* is not applicable to the installation and has not been applied within this permit. These regulations are applicable to storage vessels with a capacity of 75 m<sup>3</sup> (19,812 gallons) or more. The installation's only petroleum storage tank contains diesel and has a capacity of 10,000 gallons.

40 CFR Part 60, Subpart OOO – *Standards of Performance for Nonmetallic Mineral Processing Plants* is applicable to the installation and has been applied within this permit (see Permit Condition 004). This regulation applies to crushers, screening operations and belt conveyors. [§60.670(a)(1)]

40 CFR Part 60, Subpart III – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* is not applicable to the installation and has not been applied within this permit. Internal combustion engines EP-12 and EP-13 do not meet the applicability requirements of §60.4200(a)(2)(i) as they were manufactured prior to April 1, 2006, and are not fire pump engines; however, 40 CFR Part 63, Subpart ZZZZ requires the engines to meet the requirements of this subpart anyway (see Permit Condition 007).

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

40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* is applicable to the installation and has been applied within this permit (see Permit Condition 007). EP-12 and EP-13 Diesel Engines must meet the requirements for new stationary RICE with a site rating of equal to or less than 500 HP located at a major source. The only requirement for these engines is to comply with the requirements of 40 CFR Part 60, Subpart III (see §63.6590(c)).

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

40 CFR Part 61, Subpart M – *National Emission Standards for Asbestos* is applicable to the installation and has been applied within this permit (see Section IV. Core Permit Requirements).

### **Compliance Assurance Monitoring (CAM) Applicability**

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

### **Greenhouse Gas Emissions**

On May 13, 2010, EPA issued the GHG Tailoring Rule which set the major source threshold for CO<sub>2</sub>e to be 100,000 tons/year within 40 CFR Part 70. As of July 1, 2011, all Title V operating permits are required to include GHG emissions. This installation is a major source of greenhouse gases.

### **Other Regulatory Determinations**

10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants* is applicable to the installation and has been applied within this permit (see Permit Condition 005). The regulation is not applicable to the following emission units as they are subject to and complying with an opacity limit under 40 CFR Part 60, Subpart OOO per the exemption listed within 10 CSR 10-6.220(1)(H):

Emission Unit	Description	Emission Unit	Description
EP-01	Screen PS2	EP-117	Conveyor C7
EP-02	Feeder PF2	EP-118	Conveyor C8
EP-03	Conveyor PC4	EP-119	Conveyor C9
EP-04	Conveyor PC5	EP-120	Conveyor C10
EP-05	Conveyor PC6	EP-121	Conveyor C11
EP-06	Screen PS1	EP-122	Conveyor C12
EP-07	Feeder PF1	EP-123	Conveyor C13
EP-08	Conveyor PC1	EP-124	Conveyor C14
EP-09	Conveyor PC2	EP-125	Conveyor C15
EP-110	Screens S1 and S2	EP-126	Conveyor C16
EP-111	Conveyor C1	EP-127	Conveyor C17
EP-112	Conveyor C2	EP-128	Conveyor C18
EP-113	Conveyor C3	EP-138	Feeders F1 and F2
EP-114	Conveyor C4	EP-139	Secondary Crusher CR2
EP-115	Conveyor C5	EP-140	Primary Crusher Conveyor
EP-116	Conveyor C6	EP-142	Primary Crusher CR1

This regulation is not applicable to the diesel engines EP-12 and EP-13 as they are internal combustion engines exempt under 10 CSR 10-6.220(1)(A).

The regulation is not applicable to EP-141 Primary Crusher Hopper as truck dumping of nonmetallic minerals into a feed hopper or crusher is exempt under 10 CSR 10-6.220(1)(G).

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* is applicable to the installation and has been applied within this permit (see Permit Condition 006).

An updated Potential to Emit for the installation is shown in the table below:

Pollutant	Potential to Emit (tons/yr) <sup>1</sup>		
	Courtney Ridge Quarry	Sugar Creek Portland Cement Plant	Combined Facility for Permitting Purposes
CO	7.68	1,164.28	1,171.96
CO <sub>2e</sub>	1,494.75	Major	Major
PM <sub>10</sub>	55.90	639.17	695.07
PM <sub>25</sub>	6.25	239.27	245.52
VOC	0.76	131.98	132.74
NO <sub>x</sub>	40	2668	2708
SO <sub>x</sub>	0.46	3,807.95	3,808.41
HAP	0.04	64.11	64.15
NH <sub>3</sub>	0.19	14.03	14.22

<sup>1</sup>Potential emissions are based upon 8,760 annual hours of uncontrolled operation unless otherwise noted:

- Courtney Ridge Quarry’s potential emissions were calculated during the writing of this operating permit:
  - EP-11, EP-143, and EP-144 were given 90% PM control from documented watering required by Special Condition 3 of Construction Permit 022009-005A.
  - EP-110, EP-139, and EP-142 were given 50% PM control from wet spray devices required by Special Condition 4 of Construction Permit 112008-011.
  - EP-12 and EP-13 were evaluated at a total of 40 tons NO<sub>x</sub> per year as required by Special Condition 2 of Construction Permit 022009-005A.
- Potential emissions for Sugar Creek Portland Cement Plant were taken from the Existing Potential Emissions column of the Potential to Emit within Construction Permit 022009-005.
- The Combined Facility potential emissions for Permitting Purposes were calculated by summing the Courtney Ridge Quarry and Sugar Creek Portland Cement Plant. The combined numbers exceed the major source threshold for all criteria pollutants; therefore, Courtney Ridge Quarry is considered a major source for all criteria pollutants.

**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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Alana L. Rugen  
 Environmental Engineer

CERTIFIED MAIL: 70093410000190188438  
RETURN RECEIPT REQUESTED

Mr. Matthew Dantine  
Lafarge North America - Courtney Ridge Quarry  
1300 S. Rt 31  
South Elgin, MO 60177

Re: Lafarge North America - Courtney Ridge Quarry, 095-0321  
Permit Number: **OP2011-051**

Dear Mr. Dantine:

Enclosed with this letter is your Part 70 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 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you have any questions or need additional information regarding this permit, please do not hesitate to contact Alana Rugen at the Department's 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:ark

Enclosures

c: Kansas City Regional Office  
PAMS File: 2010-07-025