



Montana Department of  
**ENVIRONMENTAL QUALITY**

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August 22, 2013

Richard Johnson  
Ash Grove Cement Company  
100 Montana Highway 518  
Clancy, MT 59634

RE: Final Title V Operating Permit #OP2005-08 - Ash Grove Cement Company

Dear Mr. Johnson:

The Department of Environmental Quality has prepared the enclosed Final Operating Permit #OP2005-08, for Ash Grove Cement Company, located in Section 12, Township 9 North, Range 3 West, in Jefferson County, Montana. Please review the cover page of the attached permit for information pertaining to the action taking place on Permit # OP2005-08.

If you have any questions, please contact Deanne Fischer, the permit writer, at (406) 444-3403 or by email at [dfischer@mt.gov](mailto:dfischer@mt.gov).

Sincerely,

Julie Merkel  
Air Permitting Supervisor  
Air Resources Management Bureau  
(406) 444-3626

Deanne Fischer, P.E.  
Environmental Engineer  
Air Resources Management Bureau  
(406) 444-3403

JM: DF  
Enclosure

cc: Robert Duraski, US EPA Region VIII 8P-AR  
Carson Coate, US EPA Region VIII, Montana Office  
Jeff Briggs, Ash Grove Cement Company

STATE OF MONTANA  
Department of Environmental Quality  
Helena, Montana 59620



**AIR QUALITY OPERATING PERMIT OP1427-09**

Issued to: **Ash Grove Cement Company**  
**Montana City Plant**  
**100 Montana Highway 518**  
**Clancy, MT 59634**

Final Date: **August 22, 2013**  
Expiration Date: **September 15, 2016**  
Renewal Application Due: **March 15, 2016**

Effective Date: **August 22, 2013**  
Date of Decision: **July 22, 2013**  
End of EPA 45-day Review: **July 15, 2013**  
Proposed Issue Date: **May 29, 2013**  
Draft Issue Date: **April 17, 2013**

Application Received: **November 30, 2012**  
Application Deemed Administratively Complete: **November 30, 2012**  
Application Deemed Technically Complete: **November 30, 2012**  
AFS Number: **030-043-0001A**

**Permit Issuance and Appeal Processes:** In accordance with Montana Code Annotated (MCA) Sections 75-2-217 and 218 and the Administrative Rules of Montana (ARM), ARM Title 17, Chapter 8, Subchapter 12, Operating Permit Program, this operating permit is hereby issued by the Department of Environmental Quality (Department) as effective and final on August 22, 2013. This permit must be kept on-site at the above named facility.

Montana Air Quality Operating Permit  
Department of Environmental Quality

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit have the meaning assigned to them in the referenced regulations.

## SECTION I. GENERAL INFORMATION

The following general information is provided pursuant to ARM 17.8.1210(1).

**Company Name:** Ash Grove Cement Company

**Mailing Address:** 100 Montana Highway 518

**City:** Clancy

**State:** Montana

**Zip:** 59634

**Plant Location:** Approximately 1.8 km east of the I-15 and Highway 518 interchange near Montana City and approximately 5 km south of East Helena.

**Responsible Official:** Richard Johnson      **Phone:** (406) 442-8855

**E-mail:** [Dick.johnson@ashgrove.com](mailto:Dick.johnson@ashgrove.com)

**Facility Contact Person:** Jeff Briggs      **Phone:** (406) 444-7128

**E-Mail:** [Jeff.briggs@ashgrove.com](mailto:Jeff.briggs@ashgrove.com)

**Primary SIC Code:** 3241 (plant), 1422 (quarry)

**Nature of Business:** Portland Cement Manufacturing

### Description of Process:

The production of Portland cement begins at the quarry. For Ash Grove, approximately 85 to 99 percent of the raw materials used in the cement process are combined high and low-grade limestone quarried from Clark's Gulch quarry. Limestone rock and other raw materials are blasted and loaded onto trucks and transported to the crusher or to stockpiles. The raw materials are conveyed from the primary and secondary crushers and delivered by bucket elevator to the storage bins. From the storage bins, the raw materials are conveyed to the ball mill where the ore is ground with water to form slurry and sent to storage tanks. In the tanks, the slurry is blended thoroughly before entering the kiln. Slurry is pumped to the uphill end of the kiln and heated, evaporating water from the slurry forming clinker. The Ash Grove plant uses a combination of natural gas, coal and/or coke, heavy oils and pitch as fuel sources for the clinker production. When the clinker leaves the kiln, it is cooled, transported by drag chains, pan conveyor and bucket elevator to the clinker bins or outside storage. From there, clinker and gypsum go to the finish ball mill, where it is ground together with gypsum to produce Portland cement. The final cement product is conveyed to storage silos where it is loaded into railroad cars, bulk trucks, or bagged and loaded onto trucks.

## SECTION II. SUMMARY OF EMISSION UNITS

The emission units regulated by this permit include the following (ARM 17.8.1211):

Emissions Unit ID		Description	Pollution Control Device/Practice
EU001	AS	Air Separator	Baghouse (DA-21)
EU002	CLC	Clinker Cooler	Baghouse (DA-23)
EU003	CPC	Convey/Primary Crusher	Baghouse (DA-1)
EU004	FC	Fuel Conveyors	None/ Conveyor and Transfer Point Covers, and Structural Enclosures
EU005	FT	Fuel Transfer	None/Structural Enclosures
EU006	KILN	Cement Kiln	Pulse Jet Baghouse
EU007	PSC	Product Separator and Cement Coolers	Baghouse (DA-9 East)
EU008	RD	Road Dust	None/Reasonable Precautions
EU009	SLB	Storage Loadout - B	Baghouse (DA-15)
EU010	ST	Stone Transfer	None
EU011	TBC	Transfer Belt Conveyors	Baghouse (DA-4)
EU012	TBM	Transfer/Convey to Ball Mill	Baghouse (DA-6)
EU013	TFM	Transfer to/from Finish Mill	Baghouse (DA-9 West)
EU014	TLS	Transfer to Limestone Silos	Baghouse (DA-5)
EU015	WE	Wind Erosion	None

### SECTION III. PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

#### A. Facility-Wide

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	-----
A.2	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.3	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.4	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.5	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	-----
A.6	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.7	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E = 0.882 * H^{0.1664}$ Or $E = 1.026 * H^{0.233}$
A.8	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$
A.9	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu fired
A.10	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.11	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-----
A.12	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	-----
A.13	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-----
A.14	ARM 17.8.342	NESHAPs General Provisions	SSM Plans	Submittal
A.15	ARM 17.8.1211(1)(c) and 40 CFR Part 98	Greenhouse Gas Reporting	Reporting	-----
A.16	ARM 17.8.1212	Reporting Requirements	Prompt Deviation Reporting	-----
A.17	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-----
A.18	ARM 17.8.1207	Reporting Requirements	Annual Certification	-----

#### Conditions

- A.1. Pursuant to ARM 17.8.105, any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

Compliance demonstration frequencies that list “as required by the Department” refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing “as required by the Department” as the frequency, is verified annually using emission factors and engineering calculations by the Department’s compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the regular inspection by the compliance inspector.

- A.2. Pursuant to ARM 17.8.304(1), Ash Grove shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over six consecutive minutes, unless otherwise specified by rule or in this permit.
- A.3. Pursuant to ARM 17.8.304(2), Ash Grove shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over six consecutive minutes, unless otherwise specified by rule or in this permit.
- A.4. Pursuant to ARM 17.8.308(1), Ash Grove shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over six consecutive minutes, unless otherwise specified by rule or in this permit.
- A.5. Pursuant to ARM 17.8.308(2), Ash Grove shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.
- A.6. Pursuant to ARM 17.8.308, Ash Grove shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over six consecutive minutes, unless otherwise specified by rule or in this permit.
- A.7. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, Ash Grove shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):  
 $E = 0.882 * H^{-0.1664}$

For new fuel burning equipment (installed on or after November 23, 1968):  
 $E = 1.026 * H^{-0.233}$

Where H is the heat input capacity in million BTU (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu.

- A.8. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, Ash Grove shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter calculated using the following equations:

For process weight rates up to 30 tons per hour:  $E = 4.10 * P^{0.67}$   
 For process weight rates in excess of 30 tons per hour:  $E = 55.0 * P^{0.11} - 40$

Where E = rate of emissions in pounds per hour and p = process weight rate in tons per hour.

- A.9. Pursuant to ARM 17.8.322(4), Ash Grove shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million BTU fired, unless otherwise specified by rule or in this permit.
- A.10. Pursuant to ARM 17.8.322(5), Ash Grove shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.
- A.11. Pursuant to ARM 17.8.324(3), Ash Grove shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.
- A.12. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, Ash Grove shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.
- A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, Ash Grove shall not use any compartment of any single or multiple-compartment oil-effluent water separator, which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.
- A.14. Pursuant to ARM 17.8.342 and 40 CFR 63.6, Ash Grove shall submit to the Department a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new National Emission Standard for Hazardous Air Pollutants (NESHAPs) or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. The Department requests submittal of such plans in electronic form, when possible.
- A.15. Pursuant to ARM 17.8.1211(1)(c) and 40 CFR Part 98, Ash Grove shall comply with requirements of 40 CFR Part 98 – Mandatory Greenhouse Gas Reporting, as applicable (ARM 17.8.1211(1)(c), NOT an applicable requirement under Title V).
- A.16. Ash Grove shall promptly report deviations from permit requirements including those attributable to upset conditions, as upset is defined in the permit. To be considered prompt, deviations shall be reported to the Department using the schedule and content as described in Section V.E (unless otherwise specified in an applicable requirement) (ARM 17.8.1212).
- A.17. On or before February 15 and August 15 of each year, Ash Grove shall submit to the Department the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For the reports due by February 15 of each year, Ash Grove may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,

*any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”*

A.18. By February 15 of each year, Ash Grove shall submit to the Department the compliance certification required by Section V.B. The annual certification required by Section V.B must include a statement of compliance based on the information available that identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

*any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”*

**B. EU001 – Air Separator (AS)**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
B.1, B.4, B.7, B.9., B.10., B.11	Opacity	10%	Method 9	As Required by the Department and Section III.A.1	Semi-Annual
B.2, B.5, B.7, B.9., B.10., B.11	Particulate Matter	0.01 gr/dscf	Method 5	Once during 5-year permit term	Semi-Annual
B.3, B.6, B.8, B.10., B.11	Emission Control Equipment	Operation and maintenance of emission control equipment	Operation and maintenance of baghouse	Whenever process equipment is operating	Semi-Annual

**Conditions**

- B.1. Ash Grove shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the air separator baghouse that exhibit an opacity of 10% or greater averaged over six consecutive minutes (ARM 17.8.340).
- B.2. Particulate emissions from the air separator baghouse shall not exceed 0.01 gr/dscf (ARM 17.8.752).
- B.3. Ash Grove shall operate and maintain the baghouse when process equipment is operating (ARM 17.8.749).

## **Compliance Demonstration**

- B.4. As required by the Department and Section III.A.1, Ash Grove shall perform a Method 9 test, to demonstrate compliance with the 10% opacity limit in Section III.B.1. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures manual (ARM 17.8.106 and ARM 17.8.1213).
- B.5. A Method 5 or other Department approved test shall be performed once during the 5-year permit period, to monitor compliance with the particulate emission limit in Section III.B.2. The test shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual and maintained on site (ARM 17.8.106 and ARM 17.8.1213).
- B.6. Ash Grove shall operate, inspect, and maintain the baghouse in accordance with Appendix E to monitor compliance with Section III.B.3 (ARM 17.8.1213).

## **Recordkeeping**

- B.7. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).
- B.8. Ash Grove shall maintain, on site, records of all inspection and maintenance activities performed on the baghouse in accordance with the requirements in Appendix E. All inspection and maintenance records must be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.1212).

## **Reporting**

- B.9. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- B.10. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- B.11. The semiannual monitoring report shall provide (ARM 17.8.1212):
  - a. A summary of results of any source testing that was performed during the semiannual period;
  - b. A summary of any instance that the baghouse was not operated and maintained as required by Section III.B.6;
  - c. A summary of any instance in which the documents required in Section III.B.7, Section III.B.8, and Section III.B.9 were not maintained.

**C. EU002 – Clinker Cooler (CLC)**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
C.1, C.6, C.11, C.14, C.16, C.17.	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semiannual
C.2, C.3, C.4, C.7, C.8, C.9, C.11, C.12, C.13, C.14, C.15, C.16, C.17.	Particulate Matter	E=55.0P <sup>0.11</sup> - 40	Operation and maintenance of baghouse	Whenever process equipment is operating	Semiannual
			Method 5	Once during 5-year permit term	Semiannual
			As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)
C.5, C.10, C.14, C.16, C.17.	PM CAM Plan	ARM 17.8.1506	Provisions from CAM Plan, Appendix H	Ongoing	Semiannual

**Conditions**

- C.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from the clinker cooler baghouse that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(1)).
- C.2. Pursuant to ARM 17.8.310, and until September 9, 2015 (effective date of 40 CFR 63 Subpart LLL), the particulate emissions from the clinker cooler shall not exceed the value calculated by  $E=55.0P^{0.11} - 40$ , where E = rate of emission in pounds per hour and P = process weight rate in tons per hour (ARM 17.8.310).
- C.3. No later than September 9, 2015, Ash Grove shall comply with all applicable standards and limitations contained in 40 CFR 63 Subpart LLL—National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry (40 CFR Part 63).
- C.4. Ash Grove shall operate and maintain the baghouse when process equipment is operating (ARM 17.8.749).
- C.5. Ash Grove shall provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at the Clinker Cooler for PM (ARM 17.8.1504).

**Compliance Demonstration**

- C.6. As required by the Department and Section III.A.1, Ash Grove shall perform a Method 9 test, to demonstrate compliance with the 20% opacity limit in Section III.C.1. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures manual and maintained on site (ARM 17.8.106 and ARM 17.8.1213).

- C.7. A Method 5 or other Department approved test shall be performed once during the 5-year permit period, to monitor compliance with the particulate emission limit in Section III.C.2. The test shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual and maintained on site (ARM 17.8.106 and ARM 17.8.1213).
- C.8. No later than September 9, 2015, Ash Grove shall comply with all applicable standards and limitations, and notification requirements contained in 40 CFR 63 Subpart LLL (40 CFR Part 63).
- C.9. Ash Grove shall operate, inspect, and maintain the baghouse in accordance with Appendix E to monitor compliance with Section III.C.4 (ARM 17.8.1213).
- C.10. Until September 9, 2015 (effective date of 40 CFR 63 Subpart LLL), Ash Grove shall monitor compliance by following the Compliance Assurance Monitoring (CAM) Plan (Appendix H). The CAM Plan, written by Ash Grove in accordance with ARM 17.8.1504 is summarized in Appendix H and is available in full upon request by the Department or the facility (ARM 17.8.1503 and ARM 17.8.1213).

### **Recordkeeping**

- C.11. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).
- C.12. Ash Grove shall maintain, on site, records of all inspection and maintenance activities performed on the baghouse in accordance with the requirements in Appendix E. All inspection and maintenance records must be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.1212).
- C.13. No later than September 9, 2015, Ash Grove shall comply with all applicable recordkeeping requirements contained in 40 CFR 63 Subpart LLL (ARM 17.8.1212 and 40 CFR Part 63).
- C.14. Until September 9, 2015, Ash Grove shall prepare and keep data in accordance with 40 CFR Part 64 and the CAM Plan, Appendix H of this permit (ARM 17.8.1212 and 40 CFR 64).

### **Reporting**

- C.15. No later than September 9, 2015, Ash Grove shall comply with all applicable reporting requirements contained in 40 CFR 63 Subpart LLL (ARM 17.8.1212 and 40 CFR Part 63).
- C.16. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- C.17. The semiannual reporting shall provide the following (ARM 17.8.1212);
  - a. A summary of results of any source testing that was performed during that semiannual period;
  - b. A summary of any instance that the baghouse was not operated and maintained as required by Section III.C.4;
  - c. A summary of any time period when documents required in and Section III.C.12 were not maintained.

**D. EU003 – Convey/Primary Crushing (CPC)**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
D.1., D.4., D.7., D.9., D.10	Opacity	7%	Method 9	Once during 5-year permit term	As required by the Protocol
D.2.,D.5., D.7., D.9., D.10	Particulate Matter	0.02 gr/dscf	Method 5	Once during 5-year permit term	As required by the Protocol
D.3.,D.6., D.8., D.9., D.10	Emissions Control Equipment	Operation and maintenance of emission control equipment	Operation and maintenance of baghouse	Semiannual	Semiannual

**Conditions**

- D.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from any transfer point or belt conveyor or from any other affected facility any stack emissions that exhibit greater than 7 percent opacity (40 CFR 60.672(a)).
- D.2. Particulate emissions from the dust collection system shall not exceed 0.02 gr/dscf (ARM 17.8.752).
- D.3. Ash Grove shall operate and maintain emission control equipment when process equipment is operating (ARM 17.8.749).

**Compliance Demonstration**

- D.4. A Method 9 test shall be performed once during the 5-year permit period to monitor compliance with the 7% opacity limit in Section III.D.1. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- D.5. A Method 5 or other Department approved test shall be performed once during the 5-year permit period to monitor compliance with the particulate emission limitation in Section III.D.2. The test methods and procedures shall be conducted in accordance with 40 CFR 60.675(b) and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- D.6. Ash Grove shall inspect and maintain the baghouse in accordance with Appendix E of this permit to monitor compliance with Section III.D.3 (ARM 17.8.1213).

**Recordkeeping**

- D.7. All source testing recordkeeping shall be performed in accordance with the Source Test Protocol and Procedures Manual and maintained on site (ARM 17.8.106 and ARM 17.8.1212).
- D.8. Ash Grove shall maintain records of all inspection and maintenance activities performed on the baghouse in accordance with the requirements in Appendix E of this permit. All inspection and maintenance records must be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.1212).

## Reporting

- D.9. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- D.10. The semiannual reporting shall provide (ARM 17.8.1212):
- A summary of the records required by Section III.D.8 for any time period that the records were not maintained;
  - A summary of results of any source testing that was performed during that semiannual period.

## E. EU004 – Fuel Conveyors (FC)

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
E.1., E.3., E.4., E.5., E.6., E.7	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Semiannual
			Use and maintenance of structural enclosures and covers	Whenever process equipment is operating	Semiannual
E.2., E.4., E.5., E.6., E.7	Particulate Matter	$E=55.0p^{0.11}-40$	Use and maintenance of structural enclosures and covers	Whenever process equipment is operating	Semiannual

## Conditions

- E.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968 that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304).
- E.2. Pursuant to ARM 17.8.310, the particulate emissions from process weight shall not exceed the value calculated by  $E=55.0p^{0.11}-40$ , where E = rate of emission in pounds per hour and p = process weight rate in tons per hour (ARM 17.8.310).

## Compliance Demonstration

- E.3. As required by the Department and Section III.A.1, Ash Grove shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the Fuel Conveyors. Under the visual survey option, once per calendar week, during daylight hours, Ash Grove shall visually survey the Fuel Conveyors for any visible emissions. If visible emissions are observed during the visual survey, Ash Grove must either conduct a Method 9 source test, or shut down the equipment for repairs. The Method 9 source test or source shutdown must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, Ash Grove shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Ash Grove shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve Ash Grove of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

- E.4. Whenever process equipment is operating, Ash Grove shall use and maintain, as they were intended, all conveyor covers, transfer point cover, or structural enclosures surrounding process equipment to monitor compliance with Section III.E.1 and III.E.2 (ARM 17.8.1213).

**Recordkeeping**

- E.5. If visual surveys are performed, Ash Grove shall maintain a log to verify that the visual surveys were performed as specified in Section III.E.3. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer’s initials. If any corrective action is required, the time, date, observer’s initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).
- E.6. Ash Grove shall maintain on site a log of all repair and maintenance activity to structural enclosures. The log must include, but is not limited to, the date, time, and action(s) taken. The maintenance log shall be maintained as a permanent business record for at least five years following the activity. The log shall be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).

**Reporting**

- E.7. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- E.8. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of results of any source testing that was performed during the semiannual period; and
  - b. A summary of any time frame in which the log was not maintained as required in Section III.E.6.

**F. EU005 –Fuel Transfer (FT)**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
F.1., F.3., F.5., F.6., F.7	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Semiannual
F.2., F.4., F.5., F.6., F.7	Particulate Matter	$E=55.0p^{0.11}-40$	Use and maintenance of structural enclosure	Whenever process equipment is operating	Semiannual

## Conditions

- F.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).
- F.2. Pursuant to ARM 17.8.310, the particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0p^{0.11}-40$ , where E = rate of emission in pounds per hour and p = process weight rate in tons per hour (ARM 17.8.310).

## Compliance Demonstration

- F.3. As required by the Department and Section III.A.1, Ash Grove shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the Fuel Transfer. Under the visual survey option, once per calendar week, during daylight hours, Ash Grove shall visually survey the Fuel Transfer for any visible emissions. If visible emissions are observed during the visual survey, Ash Grove must either conduct a Method 9 source test, or shut down the equipment for repairs. The Method 9 source test or source shutdown must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 15% opacity based on the Method 9 source test, Ash Grove shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Ash Grove shall immediately conduct a subsequent visual survey (and subsequent Method 9 source test if visible emissions remain) to monitor compliance. The person conducting the visual survey shall record the results of the survey (including the results of any Method 9 source test performed) in a log, including any corrective action taken. Conducting a visual survey does not relieve Ash Grove of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

Method 9 source tests must be performed in accordance with the Montana Source Test Protocol and Procedures Manual, except that prior notification of the test is not required. Each observation period must be a minimum of 6 minutes unless any one reading is 20% or greater, then the observation period must be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

- F.4. During truck or rail car unloading, Ash Grove shall use and maintain the structural enclosure surrounding the hopper, dual flow feeder, and a portion of a conveyor belt CB-22 for monitoring pertaining to the particulate matter limit in Section III.F.2 (ARM 17.8.309).

## Recordkeeping

- F.5. If visual surveys are performed, Ash Grove shall maintain a log to verify that the visual surveys were performed as specified in Section III.E.3. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).
- F.6. Ash Grove shall maintain on site a log of all repair and maintenance activity to structural enclosures. The log must include, but is not limited to, the date, time, and action(s) taken. The maintenance log shall be maintained as a permanent business record for at least five years following the activity. The log shall be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).

## Reporting

F.7. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

F.8. The semiannual monitoring report shall provide (ARM 17.8.1212):

- a. A summary of results of any source testing that was performed during the semiannual period; and
- b. A summary of any time frame when the log was not maintained as required in Section III.F.6.

### G. EU006 – Cement Kiln (KILN)

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
G.1, G.11, G.12, G.23, G.25, G.31, G.35, G.36, G.37.	Opacity	40%	Operation and maintenance of Pulse Jet Baghouse	Whenever process equipment is operating	Semiannual
			Method 9	Annually	Semiannual
G.2, G.3, G.11, G.13, G.14, G.23, G.24, G.25, G.28, G.31, G.32, G.35, G.36, G.37.	Filterable Particulate Matter	E=4.10p <sup>0.67</sup> (for process weights rates up to 30 tons/hr)	Operation and maintenance of Pulse Jet Baghouse	Whenever process equipment is operating	Semiannual
		E=55.0p <sup>0.11</sup> - 40 (for process weight rates in excess of 30 tons/hr)			
		As required by 40 CFR 63 Subpart LLL (PC MACT) (Beginning 9/9/2015)	As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)
G.4, G.15, G.25, G.31, G.35, G.36, G.37.	Sulfur Oxide/ SO <sub>2</sub>	As allowed in ARM 17.8.322	Method 6	Every 5 years	Semiannual
G.5, G.16, G.17, G.27, G.28, G.33, G.34, G.35, G.36, G.37.	Sulfur dioxide (SO <sub>2</sub> )	11.5 lb/ton clinker (rolling 30 day) (40 CFR Part 52.1396)	CEMS	Ongoing	Semiannual
G.7, G.18, G.26, G.35, G.36, G.37.	Operational Limit (glass)	250 tons/year	Recordkeeping	When using glass	Semiannual
G.8, G.19, G.20, G.21, G.25, G.29, G.31, G.33, G.35, G.36, G.37	Dioxins/Furans	0.20 ng per dscm corrected to 7% Oxygen	Method 23	Every 30 Months	Semiannual
			Inspection of Combustion Components	Annual	Semiannual

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
G.9, G.20, G.21, G.29, G.33, G.35, G.36, G.37.	Operational Limit	Inlet temperature to PMCD	Continuous Monitor	Ongoing	Semiannual
G.10, G.22, G.30, G.35, G.36, G.37.	PM CAM Plan	ARM 17.8.1506	Provisions from CAM Plan, Appendix F  Pressure drop across baghouse	Ongoing	Semiannual
G.6, G.16, G.17, G.27, G.28, G.33, G.34, G.35, G.36, G.37.	NO <sub>x</sub>	8.0 lb/ton clinker (rolling 30 day) (40CFR Part 52.1396) (no later than October 18, 2017)	CEMS	Ongoing	Semiannual
G.3, G.14, G.24, G.31, G.32, G.35, G.36, G.37.	Hg	As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)
G.3, G.14, G.24, G.31, G.32, G.35, G.36, G.37.	THC or Total Organic HAP	As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)	As required by 40 CFR 63 Subpart LLL (PC MACT)

### Conditions

- G.1. Ash Grove may not cause or authorize to be discharged into the atmosphere from the cement kiln any stack emissions that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
- G.2. Until September 9, 2015 (effective date of 40 CFR 63 Subpart LLL), Ash Grove shall not cause or authorize to be discharged into the atmosphere from the cement kiln any stack emissions which contain particulate matter in excess of the amount allowed by the following equations (in III.G.2.(a) and (b)). This emission limitation shall apply at all times, including startups, shutdowns, emergencies and malfunctions (ARM 17.8.310, ARM 17.8.752, and 40 CFR Part 52.1396):
- a. If the process weight rate of the kiln is less than or equal to 30 tons per hour, then the emission limit shall be calculated using  $E=4.10p^{0.67}$  where E = rate of emission in pounds per hour and p = process weight rate in tons per hour.
  - b. If the process weight rate of the kiln is greater than 30 tons per hour, then the emission limit shall be calculated using  $E = 55.0p^{0.11} - 40$ , where E = rate of emission in pounds per hour and P = process weight rate in tons per hour.
- G.3. No later than September 9, 2015, Ash Grove shall comply with all applicable standards and limitations contained in 40 CFR 63 Subpart LLL (40 CFR Part 63).
- G.4. Ash Grove shall apply a sulfur dioxide control process (the kiln) to remove the sulfur dioxide from the gases emitted by burning of fuel of any sulfur content which results in an emission of sulfur in pounds per hour not in excess of the pounds per hour of sulfur that would have been emitted by burning fuel of the sulfur content indicated without such a cleaning device (ARM 17.8.322).

- G.5. No later than April 17, 2013 (180 days following October 18, 2012), Ash Grove shall not emit or cause to be emitted from the kiln SO<sub>2</sub> in excess of 11.5 lb/ton clinker produced, averaged over a rolling 30-day period unless Ash Grove is unable to meet the limit with existing control equipment. If installation of additional emission controls is necessary to comply with the SO<sub>2</sub> emission limitations under this rule, compliance is extended to October 18, 2017 (within five years of the effective date of this rule) in accordance with 40 CFR Part 52.1396. This emission limitation shall apply at all times, including startups, shutdowns, emergencies and malfunctions (40 CFR Part 52.1396).
- G.6. No later than April 17, 2013 (180 days following October 18, 2012), Ash Grove shall not emit or cause to be emitted from the kiln NO<sub>x</sub> in excess of 8.0 lb/ton clinker produced, averaged over a rolling 30-day period unless Ash Grove is unable to meet the limit with existing control equipment. If installation of additional emission controls is necessary to comply with the NO<sub>x</sub> emission limitations under this rule, compliance is extended to October 18, 2017 (within five years of the effective date of this rule) in accordance with 40 CFR Part 52.1396. This emission limitation shall apply at all times, including startups, shutdowns, emergencies and malfunctions (40 CFR Part 52.1396).
- G.7. The amount of post-consumer recycled glass used by Ash Grove in the cement kiln shall be limited to 250 tons during any rolling 12-month period (ARM 17.8.752).
- G.8. Ash Grove shall not cause to be discharged into the atmosphere from the kiln any gases that contain dioxins and furans (D/F) in excess of:
- 0.20 nanograms per dry standard cubic meter (ng per dscm) ( $8.7 \times 10^{-11}$  grains per dry standard cubic feet (gr per dscf)) (TEQ) corrected to 7% oxygen; and
  - 0.40 ng per dscm ( $1.7 \times 10^{-10}$  gr per dscf) (TEQ) corrected to 7% oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204° C (400° F) or less (40 CFR 63.1343).
- G.9. Ash Grove shall operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) does not exceed the applicable temperature limit specified in 40 CFR 63.1346(b) (NESHAP, 40 CFR 63 Subpart LLL).
- G.10. Ash Grove shall provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at the Cement Kiln for PM (ARM 17.8.1504).

### **Compliance Demonstration**

- G.11. Ash Grove shall inspect and maintain the Pulse Jet Baghouse in accordance with Appendix E of this permit to monitor compliance with the opacity and particulate limits in Section III.G.1 and Section III.G.2 (ARM 17.8.749).
- G.12. Ash Grove shall perform a Method 9 test at least once per calendar year. The test methods shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- G.13. Within 60 days of the compliance deadline and at least once per calendar year thereafter, Ash Grove shall perform a Method 5 stack test to monitor compliance with the particulate matter limit in Section III.G.2. The test methods shall be conducted in accordance with the Montana Source

Test Protocol and Procedures Manual with the following exceptions: the test shall consist of three runs, with each run at least 120 minutes in duration and each run collecting a minimum sample of 60 dry standard cubic feet. The average of the results of three test runs shall be used by the owner/operator for demonstrating compliance (ARM 17.8.106, ARM 17.8.1213, and 40 CFR Part 52.1396).

- G.14. No later than September 9, 2015, Ash Grove shall comply with all applicable all compliance requirements contained in 40 CFR 63 Subpart LLL (40 CFR Part 63).
- G.15. Ash Grove shall conduct a Method 6 or other test approved by the Department at least once every five years. The tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- G.16. Ash Grove shall record the daily clinker production rates in accordance with the requirements found at 40 CFR 60.63(b).
- G.17. Ash Grove shall, at all times after April 17, 2013 (180 days following October 18, 2012), maintain, calibrate, and operate a continuous emissions monitoring system (CEMS) in full compliance with the requirements found at 40 CFR 60.63 (f) and (g) to accurately measure and record concentration by volume of SO<sub>2</sub> and NO<sub>x</sub> emissions into the atmosphere. If installation of additional emission controls is necessary to comply with the SO<sub>2</sub> and NO<sub>x</sub> emissions limitations under this rule, compliance is extended to October 18, 2017 (within five years of the effective date of this rule) in accordance with 40 CFR Part 52.1396. The CEMS shall be used in combination with data on actual clinker production to monitor compliance with the limits in Section III.G.5 and III.G.6 (40 CFR Part 52.1396).
- G.18. Ash Grove shall maintain a log of the amount of recycled glass used in the kiln each month. By the 25<sup>th</sup> day of each month, Ash Grove shall total the amount of recycled glass used in the kiln during the previous 12 months to monitor compliance with the limitation in Section III.G.7 (ARM 17.8.749 and ARM 17.8.1213).
- G.19. Ash Grove shall monitor compliance with the D/F emission limit by conducting a performance test using Method 23 of Appendix A of 40 CFR 60. The performance test shall be conducted every 30 months. Ash Grove shall repeat the performance test for the kiln within 90 days of initiating any significant change in the feed or fuel from that used in the previous performance test (40 CFR 63.1349 and ARM 17.8.1213).
- G.20. Ash Grove shall install, calibrate, maintain and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln for monitoring of D/F emissions. The calibration of all thermocouples and other temperature sensors shall be completed at least once every 3 months (40 CFR 63.1350 and ARM 17.8.1213).
- G.21. Ash Grove shall conduct an inspection of the components of the kiln's combustion system at least once per year (40 CFR 63.1350 and ARM 17.8.1213).
- G.22. Until September 9, 2015, Ash Grove shall monitor compliance by following the Compliance Assurance Monitoring (CAM) Plan (Appendix F). The CAM Plan, written by Ash Grove in accordance with ARM 17.8.1504 is summarized in Appendix F and is available in full upon request by the Department or the facility (ARM 17.8.1503 and ARM 17.8.1213).

## Recordkeeping

- G.23. Ash Grove shall maintain on site records of all inspection and maintenance activities performed on the Pulse Jet Baghouse in accordance with the requirements in Appendix E of this permit. All inspection and maintenance records must be available to the Department upon request (ARM 17.8.1212).
- G.24. No later than September 9, 2015, Ash Grove shall comply with all applicable recordkeeping and notification requirements contained in 40 CFR 63 Subpart LLL (40 CFR Part 63).
- G.25. All test records must be maintained on site and submitted to the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- G.26. Ash Grove shall maintain on site, records required by Section III. G.18 and submit the information to the Department upon request (ARM 17.8.1212).
- G.27. The owner/operator of each unit shall calculate and record the 30-operating day rolling emission rates of SO<sub>2</sub> and NO<sub>x</sub>, in lb/ton of clinker produced, as the total of all hourly emissions data for the cement kiln in the preceding 30 days, divided by the total tons of clinker produced in that kiln during the same 30-day operating period, using the following equation (40 CFR Part 52.1396):

$$E_D = k \frac{1}{(n)} \sum_{i=1}^n C_i Q_i / P_i$$

Where:

$E_D$  = 30 kiln operating day average emission rate of NO<sub>x</sub> or SO<sub>2</sub>, lb/ton of clinker;

$C_i$  = Concentration of NO<sub>x</sub> or SO<sub>2</sub> for hour i, ppm;

$Q_i$  = volumetric flow rate of effluent gas for hour i, where  $C_i$  and  $Q_i$  are on the same basis (either wet or dry), scf/hr;

$P_i$  = total kiln clinker produced during production hour i, ton/hr;

$k$  = conversion factor,  $1.194 \times 10E-7$  for NO<sub>x</sub> and  $1.660 \times 10E-7$  for SO<sub>2</sub>; and.

$n$  = number of kiln operating hours over 30 kiln operating days,  $n = 1$  to 720

For each kiln operating hour for which Ash Grove does not have at least one valid 15-minute CEMS data value, Ash Grove must use the average emissions rate (lb/hr) from the most recent previous hour for which valid data are available. Hourly clinker production shall be determined by Ash Grove in accordance with the requirements found at 40 CFR 60.63(b)

At the end of each kiln operating day, Ash Grove shall calculate and record a new 30-day rolling average SO<sub>2</sub> and NO<sub>x</sub> emission rate in lb/ton clinker from the arithmetic average of all valid hourly emission rates for the current kiln operating day and the previous 29 successive kiln operating days for each unit (40 CFR Part 52.1396).

- a. Ash Grove shall maintain on site the following records for at least five years (40 CFR Part 52.1396 and ARM 17.8.1212):
- b. All CEMS data, including the date, place, and time of sampling or measurement; parameters sampled or measured; and results.
- c. All particulate matter stack test results.
- d. All records of clinker production.

- e. Records of quality assurance and quality control activities for emissions measuring systems including, but not limited to, any records required by 40 CFR Part 60, appendix F, Procedure 1.
  - f. Records of all major maintenance activities conducted on emission units, air pollution control equipment, CEMS and clinker production measurement devices.
  - g. Any other records required by 40 CFR Part 60, Subpart F, or 40 CFR Part 60, Appendix F, Procedure 1.
- G.28. Ash Grove shall maintain on site, records of calibration as required by Section III.G.20 (ARM 17.8.1212).
- G.29. Until September 9, 2015, Ash Grove shall prepare and keep data in accordance with 40 CFR Part 64 and the CAM Plan, Appendix F of this permit (ARM 17.8.1212 and 40 CFR Part 64).

### **Reporting**

- G.30. Ash Grove shall submit Method 9, Method 5, Method 6 or other Department approved test reports in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212)
- G.31. No later than September 9, 2015, Ash Grove shall comply with all applicable reporting and notification requirements contained in 40 CFR 63 Subpart LLL (40 CFR Part 63).
- G.32. Ash Grove shall submit a summary report semiannually, which contains the information specified in 40 CFR 63.10(e)(3)(vi) and 40 CFR 63.1354. The summary report shall include the following (ARM 17.8.1212, 40 CFR Part 63):
- a. The company name and address of the affected source (40 CFR 63.10);
  - b. An identification of each hazardous air pollutant monitored at the affected source (40 CFR 63.10);
  - c. The beginning and ending dates of the reporting period (40 CFR 63.10);
  - d. A brief description of the process units (40 CFR 63.10);
  - e. The emission and operating parameter limitations specified in the relevant standard(s) (40 CFR 63.10);
  - f. The monitoring equipment manufacturer(s) and model number(s) (40 CFR 63.10);
  - g. The date of the latest CMS certification or audit (40 CFR 63.10);
  - h. The total operating time of the affected source during the reporting period (40 CFR 63.10);
  - i. An emission data summary (or similar summary if the owner or operator monitors control system parameters) (40 CFR 63.10);
  - j. A CMS performance summary (or similar summary if the owner or operator monitors control system parameters) (40 CFR 63.10);

- k. A description of any changes in CMS, processes, or controls since the last reporting period (40 CFR 63.10);
  - l. The name, title, and signature of the responsible official who is certifying the accuracy of the report (40 CFR 63.10);
  - m. The date of the report (40 CFR 63.10).
  - n. All exceedances of maximum control device inlet gas temperature limits (40 CFR 63.1354);
  - o. All failures to calibrate thermocouples and other temperature sensors (40 CFR 63.1354);
  - p. The results of any combustion system component inspections conducted within the reporting period (40 CFR 63.1354); and
  - q. All failures to comply with any provision of the Operation and Maintenance Plan (40 CFR 63.1354).
- G.33. Ash Grove shall submit excess emissions reports for SO<sub>2</sub> and NO<sub>x</sub> emissions exceeding the limits in Sections III.G.5, and III.G.6. Reports shall be submitted semiannually, no later than the 30th day following the end of each semiannual period, respectively. The excess emissions reports shall be submitted to the Department as well as to the Director, Office of Enforcement, Compliance and Environmental Justice, U.S. Environmental Protection Agency, Region 8, and shall include the following:
- a. The magnitude, date(s), and duration of each period of excess emission,
  - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the unit,
  - c. The nature and cause of an malfunction (if known), and
  - d. The corrective action taken or preventative measures adopted.
  - e. CEMS performance reports including dates and duration of each period during which the CEMS was inoperative, reason(s) why the CEMS was inoperative, steps taken to prevent recurrence, and CEMS repairs or adjustments.
  - f. A statement indicating when no excess emissions have occurred or the CEMS has not been inoperative, repaired, or adjusted during the reporting period.

If installation of additional emission controls is necessary to comply with the SO<sub>2</sub> and NO<sub>x</sub> emissions limitations under this rule, compliance is extended to October 18, 2017 (within five years of the effective date of this rule) in accordance with 40 CFR Part 52.1396 (40 CFR Part 52.1396).

- G.34. If an action taken by Ash Grove during a startup, shutdown, or malfunction is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, Ash Grove shall record the actions taken and shall report such actions within 2 working days followed by a letter within 7 working days after the event (40 CFR 63.6(e)(3)).

- G.35. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- G.36. The semiannual monitoring report shall provide the following (ARM 17.8.1212 and 40 CFR Part 52.1396):
- A summary of results of any source testing that was performed during that semiannual period;
  - A summary of any instance that varied from the inspection and maintenance of the Pulse Jet Baghouse as required by Section III.G.11;
  - A summary of any timeframe when the logs required in Section III.G.18 and III.G.26 were not maintained; and
  - The results of any CEMS performance tests required by 40 CFR Part 60, Appendix F, Procedure 1.
  - A summary of any excursions under the approved CAM plan.
  - Notification of commencement of construction, notification of initial startup, and semi-annual progress reports on construction of any equipment which is constructed to comply with the SO<sub>2</sub> or NO<sub>x</sub> emission limits in Sections III.G.5. and III.G.6.

**H. EU007 – Product Separator and Cement Coolers (PSC)**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
H.1., H.4., H.7., H.8., H.9., H.10., H.11	Opacity	40%	Method 9	Once during 5-year permit term	As required by Protocol
H.2., H.5., H.8., H.9., H.10., H.11	Particulate Matter	0.02 gr/dscf	Method 5	Once during 5-year permit term	As required by Protocol
H.3., H.6., H.7., H.10., H.11	Emission Control Equipment	Operation and maintenance of emission control equipment	Operation and maintenance of baghouse	Whenever process equipment is operating	Semiannual

**Conditions**

- H.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304).
- H.2. Particulate emissions from the dust collection system shall not exceed 0.02 gr/dscf (ARM 17.8.752).
- H.3. Ash Grove shall operate and maintain emissions control equipment when process equipment is operating (ARM 17.8.729).

## Compliance Demonstration

- H.4. Ash Grove shall perform a Method 9 test once during the 5-year permit period to monitor compliance with the 40% opacity limit in Section III.H.1. The test shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- H.5. A Method 5 or other Department approved test shall be performed once during the 5-year permit period to monitor compliance with the particulate emission limit in Section III.H.2. The test shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- H.6. Ash Grove shall operate, inspect, and maintain a baghouse in accordance with Appendix E to monitor compliance with Section III.H.3 (ARM 17.8.1213).

## Recordkeeping

- H.7. Ash Grove shall maintain on site records of all inspection and maintenance activities performed on the baghouse in accordance with the requirements in Appendix E. All inspections and maintenance records must be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.1212).
- H.8. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).

## Reporting

- H.9. All test reports shall be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- H.10. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- H.11. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of results of any source testing that was performed during the semiannual period; and
  - b. A summary of any time the baghouse was not operated, inspected, and maintained as required by Section III.H.6.

## I. EU008 –Road Dust (RD)

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
I.1., I.3., I.5., I.6., I.7., I.8	Opacity	20%	Visual Survey	Weekly	Semiannual
I.2., I.4., I.5., I.6., I.7., I.8	Airborne Particulate Matter	Reasonable Precautions	Water and/or chemical dust suppressants	As needed	Semiannual

## Conditions

- I.1. Ash Grove may not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of airborne particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.308(1)).
- I.2. Ash Grove shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308(2)).

## Compliance Demonstration

- I.3. Once per calendar week, during daylight hours, Ash Grove shall visually survey active roads for any sources of excessive emissions. If visible emissions are observed during the visual survey, Ash Grove shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Ash Grove shall immediately conduct a subsequent visual survey. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve Ash Grove of the liability for a violation determined using Method 9 (ARM 17.8.101(27) and ARM 17.8.1213).
- I.4. Ash Grove shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation (ARM 17.8.752).

## Recordkeeping

- I.5. Ash Grove shall maintain on site a weekly log recording the results of the visual surveys. The log shall include, but is not limited to, the date, time, observer(s), observer(s) location, the area being surveyed, and the results of the visual survey(s). If any preventative or corrective action is required, the time, date, and a description of the action taken must be included in the log. The log shall be maintained as a permanent business record for at least five years following the activity. The log shall be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.1212).
- I.6. If visual surveys are performed, Ash Grove shall maintain a log to verify that the visual surveys were performed as specified in Section III.I.3. Each log entry must include the date, time, results of survey (and results of subsequent Method 9, if applicable), and observer's initials. If any corrective action is required, the time, date, observer's initials, and any preventive or corrective action taken must be recorded in the log (ARM 17.8.1212).

## Reporting

- I.7. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- I.8. The semiannual monitoring report shall provide (ARM 17.8.1212):
  - a. A summary of any deviations from the visual surveys required by Section III.I.3
  - b. A summary of the log of any preventative and corrective actions as required by Section III.I.5

**J. EU009 –Storage Loadout – B (SLB)**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
J.1., J.3., J.4., J.5., J.6., J.7	Opacity	40%	Method 9	As required by the Department and Section III.A.1	As required by the Protocol
			O&M of baghouse	Whenever process equipment is operating	Semiannual
J.2., J.3., J.4., J.5., J.6., J.7	Particulate Matter	$E=55.0P^{0.11}-40$	Method 5	As required by the Department and Section III.A.1	As required by the Protocol
			O&M of baghouse	Whenever process equipment is operating	Semiannual

**Conditions**

- J.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968 that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304).
- J.2. Pursuant to ARM 17.8.310, the particulate emissions from process weight shall not exceed the value calculated by  $E=55.0P^{0.11}-40$ , where E = rate of emission in pounds per hour and P = process weight rate in tons per hour (ARM 17.8.310).

**Compliance Demonstration**

- J.3. Ash Grove shall inspect and maintain a baghouse in accordance with Appendix E to monitor the opacity limit in Section III.J.1 and Section III.J.2 (ARM 17.8.304 and Appendix E).

**Recordkeeping**

- J.4. Ash Grove shall maintain on site records of all inspection and maintenance activities performed on the baghouse in accordance with the requirements in Appendix E of this permit. All inspection and maintenance records must be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.1212).
- J.5. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).

**Reporting**

- J.6. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- J.7. The semiannual reporting shall provide a summary of any time the baghouse was not inspected and maintained as required by Section III.J.3 and Section III.J.4 (ARM 17.8.1212).

**K. EU010 – Stone Transfer (ST)**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
K.1., K.2., K.3., K.4., K.5	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Semiannual

**Conditions**

K.1. Ash Grove may not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of airborne particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater over six consecutive minutes (ARM 17.8.308).

**Compliance Demonstration**

K.2. Ash Grove shall perform a Method 9 test on transfer points as requested by the Department and Section III.A.1 to monitor compliance with Section III.K.1. The test and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

**Recordkeeping**

K.3. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).

**Reporting**

K.4. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

K.5. The semiannual reporting shall provide a summary of any source testing that was performed during the annual period (ARM 17.8.1212).

**L. EU011 – Transfer Belt Conveyors (TBC)**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
L.1., L.3., L.5., L.6., L.7., L.8., L.9.	Opacity	40%	Method 9	As required by the Department and Section III.A.1	As required by the Protocol
			Operation and maintenance of baghouse	Whenever process equipment is operating	Semiannual
L.2., L.4., L.5., L.6., L.7., L.8., L.9.	Particulate Matter	$E=55.0P^{0.11}-40$	Method 5	As required by the Department and Section III.A.1	As required by the Protocol
			Operation and maintenance of baghouse	Whenever process equipment is operating	Semiannual

## Conditions

- L.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968 that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304).
- L.2. The particulate emissions from process weight shall not exceed the value calculated by  $E=55.0 * P^{0.11}-40$ , where E is the rate of emissions in pounds/hour and P is the process weight rate in tons/hour (ARM 17.8.310).

## Compliance Demonstration

- L.3. As required by the Department and Section III.A.1, a Method 9 opacity test shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- L.4. Ash Grove shall inspect and maintain a baghouse in accordance with Appendix E to monitor the opacity limit in Section III.L.1 (ARM 17.8.304 and Appendix E).
- L.5. As required by the Department and Section III.A.1, Ash Grove shall perform a Method 5 test or another approved test to monitor compliance with the particulate emissions limit in Section III.L.2. The test shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

## Recordkeeping

- L.6. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- L.7. Ash Grove shall maintain on site records of all inspection and maintenance activities performed on the baghouse in accordance with the requirements in Appendix E of this permit. All inspection and maintenance records must be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.1212).

## Reporting

- L.8. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- L.9. The semiannual monitoring report shall provide (ARM 17.8.1212):
  - a. A summary of any time the baghouse was not inspected and maintained as required by Section III.L.4; and
  - b. A summary of results of any source testing that was performed during the semiannual period.

**M. EU012 –Transfer/Convey to Ball Mill (TBM)**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirements
M.1., M.3., M.5., M.6., M.7., M.8., M.9	Opacity	40%	Method 9	As required by the Department and Section III.A.1	As required by the Protocol
			Operation and Maintenance of baghouse	Whenever process equipment is operating	Semiannual
M.2., M.4., M.5., M.6., M.7., M.8., M.9	Particulate Matter	$E=55.0P^{0.11}-40$	Method 5	As required by the Department and Section III.A.1	As required by the Department
			Operation and maintenance of baghouse	Whenever process equipment is operating	Semiannual

**Conditions**

- M.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968 that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304).
- M.2. The particulate emissions from process weight shall not exceed the value calculated by  $E=55.0 * P^{0.11}-40$ , where E is the rate of emissions in pounds/hour and P is the process weight in tons/hour (ARM 17.8.310).

**Compliance Demonstration**

- M.3. As required by the Department and Section III.A.1, Ash Grove shall conduct a Method 9 opacity test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- M.4. As required by the Department and Section III.A.1, Ash Grove shall conduct a Method 5 test or another Department approved test to monitor compliance with the particulate emissions limit in Section III.M.2. The test shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- M.5. Ash Grove shall inspect and maintain the baghouse in accordance with Appendix E of this permit to monitor compliance with the limits in Sections III.M.1 and III.M.2 (ARM 17.8.1213).

**Recordkeeping**

- M.6. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).
- M.7. Ash Grove shall maintain on site records of all inspection and maintenance activities performed on the baghouse in accordance with Appendix E of this permit. All inspection and maintenance records shall be available to the Department for inspection and shall be submitted to the Department upon request (ARM 17.8.1212).

## Reporting

- M.8. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- M.9. The semiannual monitoring report shall provide (ARM 17.8.1212):
- A summary of any time that records were not maintained for all inspection and maintenance activities performed on the baghouse as required in Section III.M.5; and
  - A summary of results of any source testing that was performed during the semiannual period.

## N. EU013 –Transfer to/from Finish Mill (TFM)

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
N.1., N.5., N.10., N.12., N.13., N.14	Opacity	40%	Method 9	Every 2 years	As required by the Protocol
N.2., N.6., N.10., N.12., N.13., N.14	Particulate Matter	0.02 gr/dscf	Method 5	Every 2 years	As required by the Protocol
N.3., N.7., N.9., N.13., N.14	Emission Control Equipment	Operation and maintenance of emission control equipment	Operation and maintenance of baghouse	Whenever process equipment is operating	Semiannual
N.4., N.8., N.11., N.14.	PM CAM Plan	ARM 17.8.1506	Provisions from CAM Plan, Appendix G	Ongoing	Semiannual

## Conditions

- N.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304).
- N.2. Particulate emissions from the dust collection system shall not exceed 0.02 gr/dscf (ARM 17.8.752).
- N.3. Ash Grove shall operate and maintain emission control equipment when process equipment is operating (ARM 17.8.749).
- N.4. Ash Grove shall provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at the Finish Mill House Baghouse for PM (ARM 17.8.1504).

## Compliance Demonstration

- N.5. Ash Grove shall perform a Method 9 test every two years to monitor compliance with the opacity limit in Section III.N.1. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- N.6. Ash Grove shall conduct a Method 5 or another Department approved test every two years to monitor compliance with the particulate emission limit in Section III.N.2. The test shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

- N.7. Ash Grove shall operate, inspect, and maintain a baghouse in accordance with Appendix E of this permit to monitor compliance with Section III.N.3 (ARM 17.8.1213).
- N.8. Ash Grove shall monitor compliance by following the Compliance Assurance Monitoring (CAM) Plan (Appendix G). The CAM Plan, written by Ash Grove in accordance with ARM 17.8.1504 is summarized in Appendix G and is available in full upon request by the Department or the facility (ARM 17.8.1503 and ARM 17.8.1213).

**Recordkeeping**

- N.9. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106 and ARM 17.8.1212).
- N.10. Ash Grove shall maintain on site records of all inspection and maintenance activities performed on the baghouse in accordance with the requirements in Appendix E of this permit. All inspection and maintenance records must be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.1212).
- N.11. Ash Grove shall prepare and keep data in accordance with 40 CFR Part 64 and the CAM Plan, Appendix G of this permit (ARM 17.8.1212 and 40 CFR Part 64).

**Reporting**

- N.12. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- N.13. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- N.14. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of any time the baghouse was not operated, inspected, and maintained as required by Section III.N.6;
  - b. A summary of results of any source testing that was performed during the semiannual period; and
  - c. Any reporting required by 40 CFR Part 64 (CAM), Appendix G, as applicable, during that semiannual period.

**O. EU014 –Transfer to Limestone Silos (TLS)**

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
O.1., O.3., O.5., O.6., O.7., O.8., O.9	Opacity	40%	Method 9	As required by the Department and Section III.A.1	As required by the Protocol
			Operation and maintenance of baghouse	Whenever process equipment is operating	Semiannual
O.2.,O.4., O.5., O.6., O.7., O.8., O.9	Particulate Matter	E=55.0P <sup>0.11</sup> -40	Method 5	As required by the Department and Section III.A.1	As required by the Protocol
			Operation and maintenance of baghouse	Whenever process equipment is operating	Semiannual

## Conditions

- O.1. Ash Grove may not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304).
- O.2. The particulate emissions from process weight shall not exceed the value calculated by  $E=55.0 * P^{0.11} - 40$ , where e is the rate of emissions in pounds/hour and P is the process weight rate in tons/hour (ARM 17.8.310).

## Compliance Demonstration

- O.3. As required by the Department and Section III.A.1, Ash Grove shall perform a Method 9 opacity test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- O.4. As required by the Department and Section III.A.1, Ash Grove shall perform a Method 9 or another Department approved test to monitor compliance with the particulate emissions limit in Section III.O.2. The test shall be conducted in accordance with the Montana Source Test Protocol and Procedures (ARM 17.8.106 and ARM 17.8.1213).
- O.5. Ash Grove shall inspect and maintain the baghouse in accordance with Appendix E of this permit to monitor compliance with the limits in Section III.O.1 and 2 (ARM 17.8.1213).

## Recordkeeping

- O.6. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (ARM 17.8.106).
- O.7. Ash Grove shall maintain on site records of all inspection and maintenance activities performed on the baghouse in accordance with the requirements in Appendix E of this permit. All inspection and maintenance records must be available to the Department for inspection and must be submitted to the Department upon request (ARM 17.8.1212).

## Reporting

- O.8. The annual compliance certification must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- O.9. The semiannual monitoring report shall provide (ARM 17.8.1212):
  - a. A summary of any time the baghouse was not inspected and maintained as required by Section III.O.5; and
  - b. A summary of results of any source testing that was performed during the semiannual period.

## P. EU015 – Wind Erosion (WE) – (from quarry activities)

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
P.1., P.2., P.3., P.4., P.5	Airborne Particulate Matter	20%	Method 9	As required by the Department and Section III.A.1	Annually

## **Conditions**

- P.1. Ash Grove may not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of airborne particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.308(1)).

## **Compliance Demonstration**

- P.2. Ash Grove shall perform a Method 9 test as required by the Department and Section III.A.1. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

## **Recordkeeping**

- P.3. Ash Grove shall maintain on site any Method 9 test report. The test report shall be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

## **Reporting**

- P.4. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- P.5. The semiannual monitoring report shall provide a summary of results of any source testing that was performed during that semiannual period (ARM 17.8.1212).

## SECTION IV. NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana (ARM) and Federal Regulations identified as not applicable to the facility or to a specific emissions unit at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term.

### Facility-Wide

The following table contains non-applicable requirements that are administrated by the Air Resources Management Bureau of the Department of Environmental Quality.

Rule Citation	Reason
ARM 17.8.320 ARM 17.8.321 ARM 17.8.323 ARM 17.8.330 through 334 ARM 17.8.340	These rules are not applicable because the facility is not listed in the source category cited in the rule.
ARM 17.8.1106 to 1107 ARM 17.8.1110 to 1111	These rules do not apply because no changes have been made at the facility that would trigger these procedural requirements.
40 CFR 60, Subparts C, Ca, Cb, Cc, Cd 40 CFR 60, Subparts D, Da, Db, Dc 40 CFR 60, Subparts E, Ea, Eb 40 CFR 60, Subpart G, H, I, J 40 CFR 60, Subparts K, Ka, Kb 40 CFR 60, Subparts L-X 40 CFR 60, Subpart Z 40 CFR 60, Subparts AA-EE 40 CFR 60, Subparts GG-HH 40 CFR 60, Subparts KK-NN 40 CFR 60, Subparts PP-XX 40 CFR 60, Subparts AAA-BBB 40 CFR 60, Subparts DDD 40 CFR 60, Subparts FFF-LLL 40 CFR 60, Subpart NNN 40 CFR 60, Subparts PPP-QQQ 40 CFR 60, Subparts RRR-WWW 40 CFR 60, Subparts BBBB-DDDD 40 CFR 61, Subparts B-F 40 CFR 61, Subparts H-L 40 CFR 61, Subparts N-R 40 CFR 61, Subpart T 40 CFR 61, Subparts V-W 40 CFR 61, Subpart Y 40 CFR 61, Subpart BB 40 CFR 61, Subpart FF 40 CFR 63, Subparts F-I 40 CFR 63, Subparts L-O 40 CFR 63, Subparts Q-U 40 CFR 63, Subparts W-Y 40 CFR 63, Subparts AA-EE	These requirements are not applicable because the facility is not an affected source as defined in these regulations.

40 CFR 63, Subparts GG-MM 40 CFR 63, Subparts OO-WW 40 CFR 63, Subpart YY 40 CFR 63, Subparts CCC-EEE 40 CFR 63, Subparts GGG-JJJ 40 CFR 63, Subparts MMM-RRR 40 CFR 63, Subparts TTT-VVV 40 CFR 63, Subpart XXX 40 CFR 63, Subpart CCCC 40 CFR 63, Subparts GGGG-HHHH 40 CFR 63, Subparts SSSS-VVVV 40 CFR 63, Subpart XXXX 40 CFR 63, Subpart QQQQ 40 CFR 63, Appendices B-E 40 CFR 68 40 CFR 72-78 40 CFR 79-80 40 CFR 85-97 (83 and 84 are reserved)	
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**Emission Units**

The permit application identified applicable requirements: non-applicable requirements for individual or specific emission units were not listed. The Department has listed all non-applicable requirements in Section IV.A, these requirements relate to each specific unit, as well as facility wide.

## SECTION V. GENERAL PERMIT CONDITIONS

### A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

1. The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.
4. The permittee shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.
5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

### B. Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
2. Compliance certifications shall be submitted by February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 – December 31).

3. Compliance certifications shall include the following:
  - a. The identification of each term or condition of the permit that is the basis of the certification
  - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term and condition during the certification period, consistent with ARM 17.8.1212
  - c. The status of compliance with each term and condition for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above)
  - d. Such other facts as the Department may require to determine the compliance status of the source
4. All compliance certifications must be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

### **C. Permit Shield**

#### ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.
3. Nothing in this permit alters or affects the following:
  - a. The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section
  - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance
  - c. The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of the FCAA
  - d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA
  - e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA

- f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA
  - g. The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.
4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
  5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
  6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
  7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & N).

**D. Monitoring, Recordkeeping, and Reporting Requirements**

ARM 17.8, Subchapter 12, Operating Permit Program §1212(2)&(3)

1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:
  - a. The date, place as defined in the permit, and time of sampling or measurement
  - b. The date(s) analyses were performed
  - c. The company or entity that performed the analyses
  - d. The analytical techniques or methods used
  - e. The results of such analyses
  - f. The operating conditions at the time of sampling or measurement
2. The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.

3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

#### **E. Prompt Deviation Reporting**

##### ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported to the Department within the following timeframes (unless otherwise specified in an applicable requirement):

1. For deviations which may result in emissions potentially in violation of permit limitations:
  - a. An initial phone notification (or faxed or electronic notification) describing the incident within 24 hours (or the next business day) of discovery: and,
  - b. A follow-up written, faxed, or electronic report within 30 days of discovery of the deviation that describes the probable cause of the reported deviation and any corrective actions or preventative measures taken.
2. For deviations attributable to malfunctions, deviations shall be reported to the Department in accordance with the malfunction reporting requirements under ARM 17.8.110; and
3. For all other deviations, deviations shall be reported to the Department via a written, faxed, or electronic report within 90 days of discovery (as determined through routine internal review by the permittee).

Prompt deviation reports do not need to be resubmitted with regular semiannual (or other routine) reports, but may be referenced by the date of submittal.

#### **F. Emergency Provisions**

##### ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
  - a. An emergency occurred and the permittee can identify the cause(s) of the emergency
  - b. The permitted facility was at the time being properly operated
  - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit
  - d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

#### **G. Inspection and Entry**

##### ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:
  - a. Enter the premises where a source required to obtain a permit is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit
  - c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit
  - d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements
2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

#### **H. Fee Payment**

##### ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.

2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.
3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

**I. Minor Permit Modifications**

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.
2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

**J. Changes Not Requiring Permit Revision**

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met:
  - a. The proposed changes do not require the permittee to obtain an air quality preconstruction permit under ARM Title 17, Chapter 8, Subchapter 7;
  - b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10;
  - c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions;
  - d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit; and
  - e. The facility provides the administrator and the Department with written notification at least seven days prior to making the proposed changes.
2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
3. Pursuant to the conditions above, the permittee is authorized to make Sec. 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:
  - a. Each proposed change does not weaken the enforceability of any existing permit conditions;
  - b. The Department has not objected to such change;
  - c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition; and
  - d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

**K. Significant Permit Modifications**

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
  - a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment
  - b. Every significant change in existing permit monitoring terms or conditions
  - c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule or
  - d. Any other change determined by the Department to be significant
2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.
3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

**L. Reopening for Cause**

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances:

1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed no later than 18 months after promulgation of the applicable requirement. No

reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2);

2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit;
3. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or
4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

#### **M. Permit Expiration and Renewal**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

1. This permit is issued for a fixed term of five years.
2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than six months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

#### **N. Severability Clause**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.
2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

**O. Transfer or Assignment of Ownership**

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

**P. Emissions Trading, Marketable Permits, Economic Incentives**

ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

**Q. No Property Rights Conveyed**

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

**R. Testing Requirements**

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

**S. Source Testing Protocol**

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

**T. Malfunctions**

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

**U. Circumvention**

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

**V. Motor Vehicles**

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

## **W. Annual Emissions Inventory**

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

## **X. Open Burning**

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

## **Y. Montana Air Quality Permits**

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §745 and 764 (ARM 17.8.745(1) and 764(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

1. Except as specified, no person shall construct, install, alter or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.744(1)(a)-(k).
2. The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764.
3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding an air quality preconstruction permit issued under Chapter 8 that does not increase the facility's potential to emit by more than 5 tons per year of any pollutant, except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):
  - a. Any construction or changed condition that would violate any condition in the facility's existing air quality preconstruction permit or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2);
  - b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8;
  - c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804;
  - d. Any construction or improvement project with a potential to emit more than 15 tons per year may not be artificially split into smaller projects to avoid air quality preconstruction permitting; or
  - e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.

4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1) (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP).

**Z. National Emission Standard for Asbestos**

40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

**AA. Asbestos**

ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, *et seq.*, and ARM 17.74.401, *et seq.* (State only)

**BB. Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners**

40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

**CC. Stratospheric Ozone Protection – Recycling and Emission Reductions**

40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156;
2. 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;
3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161;
4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166;
5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and
6. 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.

**DD. Emergency Episode Plan**

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

**EE. Definitions**

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

## APPENDICES

## Appendix A    INSIGNIFICANT EMISSION UNITS

**Disclaimer:**    The information in this appendix is not State or Federally enforceable, but is presented to assist Ash Grove, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than five tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to Sec. 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

### List of Insignificant Activities:

The following table of insignificant sources and/or activities were provided by Ash Grove. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

Emissions Unit ID	Description
CCP	Coal/Coke Preparation
CDA	Clinker Drag Conveyor A
CDB	Clinker Drag Conveyor B
CSA	Transfer to/from Cement Storage Silos A
CSB	Transfer to/from Cement Storage Silos B
DL	Dust Loadout
DT	Dust Return System
EC	Clinker Bucket Conveyor
LS	Lime Silo
PLO2	Product Loadout 2
PST	Petroleum Storage Tanks
QA	Quarry Activities
RT	Raw Material Transfer
SC	Slag/Silica/Clinker Conveyors
SLA	Storage Loadout A
SLM	Specialty Bin
SLN	Storage Loadout at New Silos
TFS	Transfer from Silos
TSC	Transfer/Secondary Crushing
VE	Vehicle Emissions
	Used Oil Fired Heater

## Appendix B DEFINITIONS and ABBREVIATIONS

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, *et seq.*

"Administrative permit amendment" means an air quality operating permit revision that:

- (a) Corrects typographical errors
- (b) Identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source
- (c) Requires more frequent monitoring or reporting by Ash Grove
- (d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements
- (e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225 or
- (f) Incorporates any other type of change that the Department has determined to be similar to those revisions set forth in (a)-(e), above

"Applicable requirement" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA
- (b) Any federally enforceable term, condition or other requirement of any air quality preconstruction permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D
- (c) Any standard or other requirement under Sec. 7411 of the FCAA, including Sec. 7411(d)
- (d) Any standard or other requirement under Sec. 7412 of the FCAA, including any requirement concerning accident prevention under Sec. 7412(r)(7), but excluding the contents of any risk management plan required under Sec. 7412(r)
- (e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder
- (f) Any requirements established pursuant to Sec. 7661c(b) or Sec. 7414(a)(3) of the FCAA
- (g) Any standard or other requirement governing solid waste incineration, under Sec. 7429 of the FCAA

- (h) Any standard or other requirement for consumer and commercial products, under Sec. 7511b(e) of the FCAA
- (i) Any standard or other requirement for tank vessels, under Sec. 7511b(f) of the FCAA
- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Sec. 7661c(e) of the FCAA or
- (l) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under Subchapter 6

**"Department"** means the Montana Department of Environmental Quality.

**"Excess Emissions"** means any visible emissions from a stack or source, viewed during the visual surveys, that meets or exceeds 15% opacity (or 30% opacity if associated with a 40% opacity limit) during normal operating conditions.

**"Emissions unit"** means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Sec. 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

**"FCAA"** means the Federal Clean Air Act, as amended.

**"Federally enforceable"** means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana state implementation plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana state implementation plan and expressly requires adherence to any permit issued under such program.

**"Fugitive emissions"** means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

**"General air quality operating permit" or "general permit"** means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.

**"Hazardous air pollutant"** means any air pollutant listed as a hazardous air pollutant pursuant to Sec. 112(b) of the FCAA.

**"Non-federally enforceable requirement"** means the following as they apply to emission units in a source requiring an air quality operating permit:

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA

- (b) Any term, condition or other requirement contained in any air quality preconstruction permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable
- (c) Does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter

**"Permittee"** means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

**"Regulated air pollutant"** means the following:

- (a) Nitrogen oxides or any volatile organic compounds
- (b) Any pollutant for which a national ambient air quality standard has been promulgated
- (c) Any pollutant that is subject to any standard promulgated under Sec. 7411 of the FCAA
- (d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA or
- (e) Any pollutant subject to a standard or other requirement established or promulgated under Sec. 7412 of the FCAA, including but not limited to the following:
  - (i) Any pollutant subject to requirements under Sec. 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Sec. 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Sec. 7412(e) of the FCAA
  - (ii) Any pollutant for which the requirements of Sec. 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to Sec. 7412(g)(2) requirement

**"Responsible official"** means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars) or
  - (ii) The delegation of authority to such representative is approved in advance by the Department
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively

- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).
  
- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

## Abbreviations:

ARM	Administrative Rules of Montana
ASTM	American Society of Testing Materials
BACT	Best Available Control Technology
BDT	bone dry tons
BTU	British Thermal Unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic foot
dscfm	dry standard cubic foot per minute
EEAP	Emergency Episode Action Plan
EPA	U.S. Environmental Protection Agency
EPA Method	Test methods contained in 40 CFR 60, Appendix A
EU	emissions unit
FCAA	Federal Clean Air Act
gr	grains
HAP	hazardous air pollutant
IEU	insignificant emissions unit
Mbdft	thousand board feet
Method 5	40 CFR 60, Appendix A, Method 5
Method 9	40 CFR 60, Appendix A, Method 9
MMbdft	million board feet
MMBTU	million British Thermal Units
NO <sub>x</sub>	oxides of nitrogen
NO <sub>2</sub>	nitrogen dioxide
O <sub>2</sub>	oxygen
Pb	lead
PM	particulate matter
PM10	particulate matter less than 10 microns in size
psi	pounds per square inch
scf	standard cubic feet
SIC	Source Industrial Classification
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	oxides of sulfur
tpy	tons per year
U.S.C.	United States Code
VE	visible emissions
VOC	volatile organic compound

## Appendix C NOTIFICATION ADDRESSES

### Compliance Notifications:

Montana Department of Environmental Quality  
Permitting and Compliance Division  
Air Resources Management Bureau  
P.O. Box 200901  
Helena, MT 59620-0901

United States EPA  
Air Program Coordinator  
Region VIII, Montana Office  
10 W. 15<sup>th</sup> Street, Suite 3200  
Helena, MT 59626

### Permit Modifications:

Montana Department of Environmental Quality  
Permitting and Compliance Division  
Air Resources Management Bureau  
P.O. Box 200901  
Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance  
Air and Radiation Program  
US EPA Region VIII 8P-AR  
1595 Wynkoop Street  
Denver, CO 80202-1129

## **Appendix D AIR QUALITY INSPECTOR INFORMATION**

**Disclaimer:** The information in this appendix is not State or Federally enforceable, but is presented to assist Ash Grove, permitting authority, inspectors, and the public.

### **1. Direction to Plant:**

Exit Interstate 15 at the Montana City exit. Proceed east on Highway 518 for approximately 1 mile. The facility is located directly south of Highway 518.

### **2. Safety Equipment Required:**

- a. All inspectors will be required to wear hard hats at all times when in the plant area. Hard hats will be furnished by the inspector and are to be maintained in good repair.
- b. Protective eye equipment will be used. Eye protection is mandatory in all plant areas. Safety glasses will meet or exceed ANSI Standard Z-87.
- c. Respirators and other personal equipment are to be used where needed and all such equipment will be provided by the inspector.
- d. Steel-toed safety boots shall be worn by all inspectors.
- e. Hearing protection with a minimum noise reduction rating of 24 DBA is mandatory in posted areas.

### **3. Facility Plot Plan:**

A copy of the facility Plot Plan is on file with the Department or may be received by contacting an Ash Grove representative.

## **Appendix E POLLUTION CONTROL DEVICE INSPECTION AND MAINTENANCE PLAN**

Although the hard copy of the Pollution Control Device Inspection and Maintenance (PCDI&M) Plan has been removed from the permit, the contents of the PCDI&M Plan remain as applicable requirements as stated in the Title V Operating Permit #2005-08. Ash Grove Cement Company submitted the PCDI&M Plan to the Department as part of the application for the current permitting action. To receive a hard copy of the PCDI&M Plan, please contact one of the following:

The Department of Environmental Quality  
Permitting and Compliance Division  
Air Resources Management Bureau  
1520 E. Sixth Ave.  
P.O. Box 200901  
Helena, MT 59620-0901  
Bureau Telephone # (406) 444-3490

Or

Ash Grove Cement Company  
100 Montana Highway 518  
Clancy, MT 59634

**Appendix F CAM PLAN – KILN STACK PULSE JET BAGHOUSE**

I. Indicator	Baghouse Differential Pressure
II. Measurement Approach	Inlet and outlet of the baghouse is monitored using a differential pressure transducer. The signal from the pressure transducer is recorded using a data acquisition system.
III. Indicator Value Target	An excursion is defined as a daily average differential pressure of below 3 or above 10 inches of water pressure. An excursion triggers an inspection and possible corrective action.
IV. Performance Criteria	
A. Data Representativeness	Pressure drop will be measured across the entire baghouse which consists of 6 individual compartments in parallel. Individual compartments can, and will, be isolated from time to time for maintenance without significantly reducing overall baghouse efficiency. Pressure will be measured with transducers with a minimum accuracy of 0.1 in H <sub>2</sub> O
B. Verification of Operational Status	Continuous monitoring of pressure drop
C. QA/QC Practices and Criteria	Pressure transducers will be calibrated in accordance with manufacturer's recommendation
D. Monitoring Frequency	Pressure drop is continuously monitored and recorded. Data is stored in the plant histories and is accessed by the data acquisition system.
E. Data Collection Procedures	A data acquisition system measures pressure drop continually. Data will be compiled into 1-hour block averages by the data acquisition system.
F. Averaging period	1-hour block average.

Although a complete hard copy of Ash Grove's Kiln Stack Pulse Jet Baghouse CAM plan is not included in Appendix F of the permit, the contents of Ash Grove's CAM plan remain as applicable requirements as stated in the Title V Operating Permit #OP2005-08. To receive a hard copy of Ash Grove's Kiln Stack Pulse Jet Baghouse CAM plan, please contact one of the following:

The Department of Environmental Quality  
 Permitting and Compliance Division  
 Air Resources Management Bureau  
 1520 E. Sixth Ave.  
 P.O. Box 200901  
 Helena, Montana 59620-0901  
 Bureau Phone (406) 444-3490

OR

Ash Grove Cement Company.  
 Montana City Plant  
 100 MT Highway 518  
 Clancy, MT 59634  
 Phone (406) 442-8855

## Appendix G CAM PLAN – FINISH MILL HOUSE BAGHOUSE

<b>Monitoring Approach - Baghouse</b>	
I. Indicator Measurement Approach	Baghouse Differential Pressure Inlet and outlet of the baghouse is monitored using a differential pressure transducer. The signal from the pressure transducer is recorded using a data acquisition system.
II. Indicator Range <sup>1</sup>	An excursion is defined as a daily average differential pressure of below 2 or above 10 inches of water pressure. An excursion triggers an inspection and possible corrective action.
III. Performance Criteria	
A. Data Representativeness	Pressure drop across the baghouse is measured across the tube sheet. The minimum accuracy of the device is $\pm 1$ inch water pressure
B. Verification of Operational Status	N/A
C. QA/QC Practices and Criteria	Pressure transducer is calibrated in accordance with manufacturer's recommendations.
D. Monitoring Frequency	Pressure drop is continuously monitored and recorded. Data is stored in the plant histories and is accessed by the data acquisition system.
E. Data Collection Procedures	A data acquisition system measures pressure drop continuously
F. Averaging Period	24-hour

<sup>1</sup>The above indicator ranges are a 24-hour average pressure range. Short-term spikes above or below this average do not necessarily indicate upset conditions. After cleaning, there may be a period of time required for the bags to build up a coating. During this period of time, the baghouse differential pressure may be out of range.

Although a complete hard copy of Ash Grove's Finish Mill House Baghouse CAM plan is not included in Appendix G of the permit, the contents of , Ash Grove's CAM plan remain as applicable requirements as stated in the Title V Operating Permit #OP2005-08. To receive a hard copy of Ash Grove's Finish Mill House Baghouse CAM plan, please contact one of the following:

The Department of Environmental Quality  
Permitting and Compliance Division  
Air Resources Management Bureau  
1520 E. Sixth Ave.  
P.O. Box 200901  
Helena, Montana 59620-0901  
Bureau Phone (406) 444-3490

OR

Ash Grove Cement Plant.  
Montana City Plant  
100 MT Highway 518  
Clancy, MT 59634  
Phone (406) 442-8855

## Appendix H CAM PLAN – CLINKER COOLER STACK BAGHOUSE

<b>Monitoring Approach</b>	
I. Indicator	Baghouse Differential Pressure
Measurement Approach	Inlet and outlet of the baghouse is monitored using a differential pressure transducer. The signal from the pressure transducer is recorded using a data acquisition system.
II. Indicator Range <sup>1</sup>	An excursion is defined as a daily average differential pressure of below 1 or above 10 inches of water pressure. An excursion triggers an inspection and possible corrective action.
III. Performance Criteria	
A. Data Representativeness	Pressure drop across the baghouse is measured across the tube sheet. The minimum accuracy of the device is +/-0.1 inch water pressure
B. Verification of Operational Status	N/A
C. QA/QC Practices and Criteria	Pressure transducer is calibrated in accordance with manufacturer's recommendations
D. Monitoring Frequency	Pressure drop is continuously monitored and recorded. Data is stored in the plant histories and is accessed by the data acquisition system.
E. Data Collection Procedures	A data acquisition system measures pressure drop continuously.
F. Averaging Period	24-hour

<sup>1</sup> The above indicator ranges are a 24-hour average pressure range. Short-term spikes above or below this average do not necessarily indicate upset conditions. After cleaning, there may be a period of time required for the bags to build up a coating. During this period of time, the baghouse differential pressure may be out of range.

Although a complete hard copy of Ash Grove's Clinker Cooler Stack Baghouse CAM plan is not included in Appendix G of the permit, the contents of Ash Grove's CAM plan remain as applicable requirements as stated in the Title V Operating Permit #OP2005-08. To receive a hard copy of Ash Grove's Clinker Cooler Stack Baghouse CAM plan, please contact one of the following:

The Department of Environmental Quality  
 Permitting and Compliance Division  
 Air Resources Management Bureau  
 1520 E. Sixth Ave.  
 P.O. Box 200901  
 Helena, Montana 59620-0901  
 Bureau Phone (406) 444-3490

OR

Ash Grove Cement Company  
 Montana City Plant  
 100 MT Highway 518  
 Clancy, MT 59634  
 Phone (406) 442-8855