



February 26, 2015

Roland Bachmann  
Plant Manager  
Holcim (US) Inc.  
4070 Trident Road  
Three Forks, MT 59752

**RE: Final Title V Operating Permit #OP0982-04**

Dear Mr. Bachmann:

The Department of Environmental Quality has prepared the enclosed Final Operating Permit #OP0982-04, for Holcim (US) Inc., located in Three Forks, Montana. Please review the cover page of the attached permit for information pertaining to the action taking place on Permit #OP0982-04.

If you have any questions, please contact Craig Henrikson the permit writer, at (406) 444-6711 or by email at [chenrikson@mt.gov](mailto:chenrikson@mt.gov).

Sincerely,

A handwritten signature in black ink that reads "Julie A. Merkel".

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

A handwritten signature in black ink that reads "Craig Henrikson".

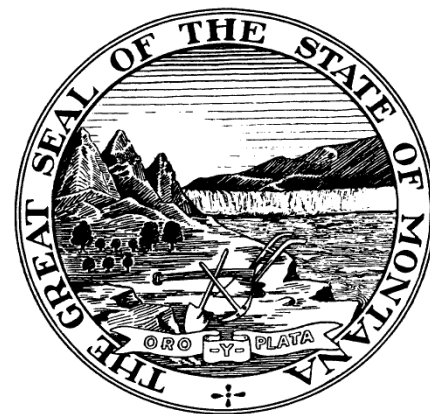
Craig Henrikson, P.E.  
Environmental Engineer  
Air Resources Management Bureau  
406) 444-6711

JM:CH

Enclosure

Cc: Robert Duraski, US EPA Region VIII 8P-AR  
Bob Gallagher, US EPA Region VIII, Montana Office  
Greg Gannon, 4070 Trident Road, Three Forks, MT 59752

STATE OF MONTANA  
Department of Environmental Quality  
Helena, Montana 59620



**AIR QUALITY OPERATING PERMIT NUMBER OP0982-04**

**Issued to: Holcim (US), Inc.  
East, Gallatin County  
4070 Trident Road  
Three Forks, MT 59752**

Final Date: February 26, 2015  
Expiration Date: August 27, 2018  
Renewal Application Due: February 27, 2018

Effective Date: February 26, 2015  
Date of Decision: January 26, 2015

Administrative Amendment Received: **December 18, 2014**  
Application Deemed Administratively Complete: **December 18, 2014**  
Application Deemed Technically Complete: **December 18, 2014**  
AFS Number: 030-031-0005A

**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 February 26, 2015. 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: **Holcim (US), Inc.**

Mailing Address: **4070 Trident Road**

City: **Three Forks**

State: **MT**

Zip: **59752**

Plant Location: **NE ¼ Section 9, SE ¼ Section 4, SW ¼ Section 3, NW ¼ Section 10,  
Township 2 North, Range 2 East, Gallatin County, MT**

Responsible Official: **Roland Bachmann, Plant Manager** Phone: **(406) 285-3985**  
Email: [roland.bachmann@holcim.com](mailto:roland.bachmann@holcim.com)

Facility Contact Person: **Greg Gannon, Environmental Manager** Phone: **(406) 285-4977**  
Email: [Greg.Gannon@Holcim.com](mailto:Greg.Gannon@Holcim.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. Most of the raw material used in the cement process is combined high and low-grade limestone quarried from Holcim's 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 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 is then sent to storage tanks. In the tanks, the slurry is blended thoroughly before entering the kiln.

The slurry is pumped to the uphill end of the kiln where the slurry is heated, evaporating water from the slurry and turning it into clinker. The plant uses a combination of natural gas, coal and/or coke 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 the clinker bins, clinker and gypsum go to the "finish" ball mills, where it is ground to produce Portland cement. The final cement product is conveyed to storage silos where it is loaded into railroad cars or bulk trucks.

## SECTION II. SUMMARY OF EMISSION UNITS

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

Emissions Unit ID	Description	Pollution Control Device/Practice
EU001	Fugitive Emissions: Disturbed Areas	None
EU002	Quarry Drilling	None
EU003	Quarry Blasting	None
EU004	Limestone, Sand and Shale Removal	None
EU005	Raw Material Transfer and Conveying	Baghouses
EU006	Raw Material Storage Piles	Water and/or Chemical Dust Suppressant
EU007	Fugitive Emissions: Haul Roads	Water and/or Chemical Dust Suppressant
EU008	Primary Crusher	Baghouse
EU009	Crusher Screen	Baghouse
EU010	Raw Material Silo #1	Baghouse
EU011	Raw Material Silos #2 & #3	Baghouse
EU012	Raw Material Silos #4 & #5	Baghouse
EU013	Raw Material Silos #6 & #7	Baghouse
EU014	Fuel Unloading	None
EU015	Fuel Transfer/Crushing	Baghouse
EU016	Coal Outside Storage Piles	None
EU017	Coke Outside Storage Piles	None
EU018	Coal Silo	Baghouse
EU019	Fuel Elevator	Baghouse
EU020	Coke Silo	Baghouse
EU021	Kiln	ESP
EU022	Clinker Cooler	Baghouse
EU023	Main Clinker Elevator	Baghouse
EU024	Finish Mill Feed Silos	Baghouse
EU025	CKD Silo	Baghouse
EU026	CKD Silo to Landfill	Water and/or Chemical Dust Suppressant
EU027	Outside Clinker Bins	Baghouse
EU028-031	Outside Clinker Storage Silos 1-4	None
EU032	Finish Mill #2	Baghouse
EU033	Clinker Transfer to #3 Finish Mill	Baghouse
EU034	Finish Mill #3	Baghouse
EU035	Clinker Transfer to #4 Finish Mill	Baghouse
EU036	Finish Mill #4 Separator	Baghouse
EU037	Finish Mill #4	Baghouse
EU038	Dust Discharge between Kiln and Precipitator	3-Sided Enclosure
EU039	Transfer of Reclaimed Clinker to Ground	None
EU040	Import Clinker Unloading & Transfer	Baghouse
EU041	Gypsum Unloading & Transfer	Baghouse
EU042	Outside Clinker Transfer to Pile	None
EU043	Outside Clinker Transfer to Reclaim Building	Baghouse
EU044	Cement Silos #1-7, 10, 11, & 13	2 Baghouses
EU045	Cement Silos #8, 9, & 12	2 Baghouses

EU046	Cement Transferred from Silos #1-13 to Bulk Load Silos #14-25	Baghouse
EU047	Cement Silos #14-25	2 Baghouse
EU048	Cement Silos #26-30	Baghouse
EU049	Cement Truck Loadout #1	Baghouse
EU050	Cement Truck Loadout #2	Baghouse
EU051	Cement Railcar Transfer/Loadout	2 Baghouses
EU052	Fuel Tanks	None
EU053	Pozzolan Silo	Baghouse
EU054	Landfilled Cement Kiln Dust Extraction	None
EU055	Slag Feeders to Finish Mills	2 Baghouses
EU056	Space Heating	None
EU057	Slag Feeder Storage Piles	None
EU058	Post Consumer Recycled Glass Piles	None
EU059	Post Consumer Recycled Glass Handling	None
EU060	Overflow Gypsum Transfer to Ground	None
EU061	Overflow Gypsum Transfer to Reclaim Building	Feed Hopper Enclosed in Building
EU062	CKD Dust Scoops	Baghouse
EU063	Emergency Generators	None
EU064	Secondary Crusher	Baghouse



### 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 17.8.340	New Source Performance Standards	All Applicable Provisions of Subparts F & Y, OOO	-----
A.15	ARM 17.8.342	NESHAPs General Provisions	SSM Plans	Submittal
A.16	ARM 17.8.749	Permit Conditions, Facility Clinker Handling	Operational Limit	500,000 tons/rolling 12-Month Period of Clinker Handled
A.17	40 CFR 63	National Emission Standards for Hazardous Air Pollutants	All Applicable Provisions of Subpart LLL	Beginning September 9, 2015
A.18	ARM 17.8.1211(1)(c) and 40 CFR Part 98	Greenhouse Gas Reporting	Reporting	-----
A.19	ARM 17.8.1212	Reporting Requirements	Prompt Deviation Reporting	-----
A.20	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-----
A.21	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), Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.3. Pursuant to ARM 17.8.304(2), Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.4. Pursuant to ARM 17.8.308(1), Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.5. Pursuant to ARM 17.8.308(2), Holcim 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, Holcim 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 6 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, Holcim 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, Holcim 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:

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

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), Holcim 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), Holcim 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), Holcim 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, Holcim 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, Holcim 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. Holcim shall comply with all applicable provisions, as appropriate, of 40 CFR 60, Subpart F – Standards of Performance for Portland Cement Plants and Subpart Y – Standards of Performance for Coal Preparation Plants. Additionally, the secondary crusher (EU064) is also subject to 40 CFR 60 OOO – Standards of Performance for Nonmetallic Mineral Processing Plants (ARM 17.8.340, and 40 CFR 60, Subpart F, Y and OOO).

- A.15. Pursuant to ARM 17.8.342 and 40 CFR 63.6, Holcim 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.16. Holcim shall limit clinker handling to 500,000 tons during any rolling 12-month period (ARM 17.8.749).
- A.17. Holcim shall comply with all applicable provisions of 40 CFR 63, Subpart LLL – National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. In 2000, the Trident facility was designated an area source for the purpose of determining the applicability of Portland Cement Maximum Achievable Control Technology (PC MACT). The compliance date for an owner or operator of an existing affected source subject to the provisions of Subpart LLL was June 14, 2002. The PC MACT was finalized on December 20, 2012, following litigation and the compliance date for PM and organic air toxics set to September 9, 2015, and if needed, sources may request an additional year. Holcim shall comply with the subpart requirements. Holcim shall comply with 40 CFR 63, Subpart LLL, which includes but is not limited to:
- a. Notification to the Department within 15 days of a significant change in raw material or fuel;
  - b. Preparation of a written operations and maintenance plan for the kiln (40 CFR 63.6); and
  - c. Development and implementation of a written startup, shutdown, and malfunction plan (40 CFR 63.6).
  - d. Other requirements specific to Subpart LLL which come into force at a later date, as specified in this permit.
- A.18. Pursuant to ARM 17.8.1211(1)(c) and 40 CFR Part 98, Holcim 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.19. Holcim 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.20. On or before February 15 and August 15 of each year, Holcim 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, Holcim may submit a single report, provided that it contains all the information required by Sections 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.21. By February 15 of each year, Holcim 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 which 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 Fugitive Emissions: Disturbed Areas  
EU003 Quarry Blasting  
EU014 Fuel Unloading**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
B.1,B.2, B.3, B.4, B.5, B.6, B.7	Opacity	20%	Method 9 or	Semiannual	Semiannual
			Visual Surveys	Weekly	

**Conditions**

- B.1. Holcim shall 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 6 consecutive minutes (ARM 17.8.308(1)).

**Compliance Demonstration**

- B.2. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the disturbed areas. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the disturbed areas for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the disturbed areas for that reporting period.

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).

### **Recordkeeping**

- B.3. Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.B.2. Each log entry must include the date, time, results of the survey, and observer's initials. Whether visual surveys or Method 9 tests are conducted, if any corrective action is required, the time, date, observer's initials, and any preventative or corrective action taken must be recorded in the log (ARM 17.8.1212).
- B.4. 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**

- B.5. 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).
- B.6. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- B.7. The semiannual monitoring report shall provide (ARM 18.8.1212):
  - a. A summary of the results of any compliance test conducted during the last reporting period; and
  - b. A summary of visual surveys performed and logged as required in Sections III.B.3 and III.B.4.
  - c. A summary of any instances of excessive fugitive emissions and any corrective action taken.

**C. EU006 Raw Material Storage Piles  
EU007 Fugitive Emissions: Haul Roads**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
C.1, C.3, C.4, C.5, C.6, C.7, C.8	Opacity	20%	Method 9 or	Semiannual	Semiannual
			Visual Survey	Weekly	
C.2, C.3, C.4, C.7, C.8	Airborne Particulate Matter	Reasonable Precaution	Water and/or Chemical Dust Suppressants	As Needed	Semiannual

**Conditions**

- C.1. Holcim shall 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 6 consecutive minutes (ARM 17.8.308(1)).
- C.2. Holcim 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**

- C.3. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the storage piles. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the storage piles for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the storage piles for that reporting period.

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).

## Recordkeeping

- C.4. 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.5. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.C.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

- C.6. 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).
- C.7. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- C.8. The semiannual monitoring report shall provide (ARM 17.8.1212):
- A summary of the results of any compliance test conducted during the last reporting period;
  - A summary of the visual surveys performed and logged as required in Sections III.C.3 and III.C.4; and
  - A summary of any instances of excessive fugitive emissions and any corrective action taken.

## D. EU008 Primary Crusher EU009 Crusher Screen

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
D.1, D.5, D.10, D.12, D.13, D.14, D.15	Opacity	20%	Method 9 or	Semiannual	Semiannual
			Visual Survey	Weekly	
D.2, D.6, D.9, D.13, D.14, D.15	Particulate Matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$	Method 5	Every 5 years	Semiannual
D.3, D.7, D.11, D.14, D.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse(s)	Whenever Process Equipment is Operating	Semiannual
D.4, D.8, D.12, D.14, D.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual



## Conditions

- D.1. Holcim shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- D.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 4.10 * P^{0.67}$  for process weight rates up to 30 tons per hour and/or  $E = 55.0 * P^{0.11} - 40$  for process weight rates in excess of 30 tons per hour, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- D.3. Holcim shall operate and maintain baghouse(s) to control emissions from the emitting units (ARM 17.8.749).
- D.4. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

## Compliance Demonstration

- D.5. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the primary crusher and screen. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the primary crusher and screen for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the primary crusher and screen for that reporting period.

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).

- D.6. Holcim shall monitor compliance with the particulate emission limitation contained in Section III.D.2 by performing a Method 5 test, or another test method approved by the Department, once every 5 years or according to another testing/monitoring schedule as may be approved by the Department. 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.7. Holcim shall monitor compliance with Section III.D.3 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).
- D.8. Holcim shall monitor compliance with Section III.D.4 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

### **Recordkeeping**

- D.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, shall be maintained on site, and shall be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- D.10. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.D.5. 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).
- D.11. Holcim shall maintain records of all inspection and maintenance activities performed on the baghouse(s) 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).
- D.12. Holcim shall maintain the records required by Section III.D.8 on site and submit the information to the Department upon request (ARM 17.8.1212).

### **Reporting**

- D.13. 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).
- D.14. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- D.15. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. Summary of the records required by Section III.D.7 for any time periods that the records were not maintained; and
  - c. A summary of results of the records required in Section III.D.8 for any time periods that the records were not maintained.

**E. EU005 Raw Materials Transfer and Conveying**  
**EU010 Raw Material Silo #1**  
**EU011 Raw Material Silos #2 and #3**  
**EU012 Raw Material Silos #4 and #5**  
**EU013 Raw Material Silos #6 and #7**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
E.1, E.5, E.9, E.10, E.13, E.14, E.15	Opacity	20%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
E.2, E.6, E.9, E.13, E.14, E.15	Particulate Matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semiannual
E.3, E.7, E.11, E.14, E.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse(s)	Whenever Process Equipment is Operating	Semiannual
E.4, E.8, E.12, E.14, E.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

**Conditions**

- E.1. Holcim shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- E.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 4.10 * P^{0.67}$  for process weight rates up to 30 tons per hour and/or  $E = 55.0 * P^{0.11} - 40$  for process weight rates in excess of 30 tons per hour, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- E.3. Holcim shall operate and maintain baghouse(s) to control emissions from the emitting units (ARM 17.8.749).
- E.4. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

**Compliance Demonstration**

- E.5. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting

units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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.6. Holcim shall monitor compliance with the particulate emission limitation contained in Section III.E.2 by performing a Method 5 test, or another test method approved by the Department, 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).
- E.7. Holcim shall monitor compliance with Section III.E.3 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).
- E.8. Holcim shall monitor compliance with Section III.E.4 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

### **Recordkeeping**

- E.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, shall be maintained on site, and shall be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- E.10. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.E.5. 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.11. Holcim shall maintain records of all inspection and maintenance activities performed on the baghouse(s) 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).
- E.12. Holcim shall maintain the records required by Section III.E.8 on site and submit the information to the Department upon request (ARM 17.8.1212).

**Reporting**

- E.13. 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).
- E.14. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements ARM 17.8.1212.
- E.15. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. Summary of the records required by Section III E.7 for any time periods that the records were not maintained; and
  - c. A summary of results of the records required in Section III.E.8 for any time periods that the records were not maintained.

**F. EU015 Fuel Transfer/Crushing  
EU018 Coal Silo  
EU019 Fuel Elevator  
EU020 Coke Silo**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
F.1, F.3, F.5, F.9, F.10, F.13, F.14, F.15	Opacity	20%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
F.2, F.6, F.11, F.14, F.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse(s)	Whenever Process Equipment is Operating	Semiannual
F.3, F.7, F.9, F.13, F.14, F.15	Particulate Matter	0.02 gr/dscf	Method 5	Every 5 years	Semiannual
F.4, F.8, F.12, F.14, F.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

## Conditions

- F.1. Holcim shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- F.2. Holcim shall operate and maintain baghouse(s) to control emissions from the following coal and coke handling equipment (ARM 17.8.752):
- a. Screw conveyor from the coal/coke crusher to the bucket elevator;
  - b. “Raw” coke storage silo, 290-ton;
  - c. Coke storage silo;
  - d. Two diverter valves;
  - e. Hammermill;
  - f. Bucket elevator;
  - g. Coal storage silo;
  - h. Belt conveyor with weighing system at the base of the “raw” coke storage silo;
  - i. Coke grinding mill; and
  - j. “Fine” coke storage silo, 220-ton.
- F.3. Holcim shall not cause or authorize to be discharged into the atmosphere from the coal and coke handling baghouse(s):
- a. Particulate matter in excess of 0.02 grains per dry standard cubic foot (gr/dscf) (ARM 17.8.752); and
  - b. Visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- F.4. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

## Compliance Demonstration

- F.5. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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.6. Holcim shall monitor compliance with Section III.F.2 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).
- F.7. Holcim shall monitor compliance with the particulate emission limitation in Section III.F.3 by performing a Method 5 test or another test method approved by the Department once every 5 years or according to another testing/monitoring schedule as may be approved by the Department. 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).
- F.8. Holcim shall monitor compliance with Section III.F.4 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

### **Recordkeeping**

- F.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, shall be maintained on site, and shall be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- F.10. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.F.5. 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.11. Holcim 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).
- F.12. Holcim shall maintain the records required by Section III.F.8 on site and submit the information to the Department upon request (ARM 17.8.1212).

**Reporting**

- F.13. 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).
- F.14. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- F.15. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. Summary of the records required by Section III.F.6 for any time periods that the records were not maintained; and
  - c. A summary of results of the records required in Section III.F.8 for any time periods that the records were not maintained.

**G. EU021 Kiln**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirements
G.1, G.23, G.42, G.50, G.56, G.58	Opacity	20%	Continuous Monitor	On-going	Semiannual
G.2, G.24, G.43, G.56, G.58	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of ESP	Whenever Process Equipment is Operating	Semiannual
G.3, G.25, G.44, G.56, G.58	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual
G.4, G.26, G.45, G.53, G.56, G.57, G.58	Particulate Matter (Effective 11/17/2012) (Effective thru 9/8/2015)	0.77 lb/ton of Clinker	Method 5 Stack Test conducted within 60 days of 11/17/2012 if previous test not used for compliance	Annual	Semiannual



Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
G.5, G.27, G.45, G.46, G.50, G.53, G.56, G.58	Particulate Matter * * (Beginning 9/9/2015)	0.07 lb/ton of Clinker	Initial Method 5 Performance Test and then Annually	On-going Parametric Monitoring	Semiannual
G.6, G.28, G.45, G.47, G.50, G.53, G.56, G.58	Mercury Emissions * * (Beginning 9/9/2015)	55 lbs/Million Tons of clinker produced averaged over any rolling 30-Day Period	Initial Compliance Test using Mercury CEMS	On-going	Semiannual
G.7, G.29, G.45, G.48, G.50, G.53, G.56, G.58	Total Hydrocarbon Emissions * * (Beginning 9/9/2015)	24 ppmvd THC or alternatively 12 ppmvd Organic Air Toxics averaged over any rolling 30-Day Period	Initial Compliance Test using THC CEMS	On-going	Semiannual
G.8, G.30, G.45, G.53, G.56, G.58	Sulfur Dioxide	As Allowed in ARM 17.8.322(6)(c)	Method 6	Every 5 years	Semiannual
G.9, G.30, G.49, G.50, G.53, G.56, G.58	Sulfur Dioxide* *(Reporting requirement only in place until more stringent limit of 1.3 lb/ton begins)	124 lb/hr averaged over any rolling 30-Day Period	SO <sub>2</sub> CEMS	On-going	Semiannual
G.10, G.30, G.50, G.53, G.56, G.57, G.58	Sulfur Dioxide* *(Beginning 4/17/2013 unless new control device required)	1.3 lb/ton of clinker produced averaged over any rolling 30-Day Period	SO <sub>2</sub> CEMS with clinker data	On-going	Semiannual
G.11, G.31, G.45, G.53, G.54, G.56, G.58	Dioxins/Furans	0.20 or 0.40 ng per dscm Corrected to 7% Oxygen— depending on avg. temp of source tests	Method 23	Every 30 Months	Semiannual
G.12, G.32, G.49, G.50, G.56, G.58	Nitrogen Oxide* *(Reporting requirement only in place until more stringent limit of 6.5 lb/ton begins)	1,568 lb/hr averaged over any rolling 30-Day Period	NO <sub>x</sub> CEMS	On-going	Semiannual
G.13, G.32, G.44, G.50, G.53, G.57, G.58	Nitrogen Oxide * * (Beginning 4/17/2013 unless new control device required)	6.5 lb/ton of clinker produced averaged over any rolling 30-Day Period	NO <sub>x</sub> CEMS with clinker data	On-going	Semiannual

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
G.14, G.33, G.44, G.56, G.58	Clinker Production	425,000 tons/rolling 12-Month Period	Recordkeeping	Monthly	Semiannual
G.15, G.34, G.44, G.56, G.58	Start-up/Shutdown Fuel Restrictions	Acceptable Fuels when Temperature <1200 F	Recordkeeping	Monthly	Semiannual
G.16, G.35, G.44, G.56, G.58	Normal Operation Fuel Mix	Any combination of natural gas, coke or coal	Recordkeeping	Monthly	Semiannual
G.17, G.36, G.44, G.56, G.58	Post-Consumer Glass	Post-Consumer glass < 800 tons during any 12-Month rolling period	Recordkeeping	Monthly	Semiannual
G.18, G.37, G.44, G.54, G.56, G.58	Inspection and Maintenance Plan	Prepared and In Use for affected equipment	Recordkeeping	On-going	Semiannual
G.19, G.38, G.44, G.55, G.56, G.58	Startup, Shutdown, and Malfunction Plan	Prepared and in use for affected equipment	Recordkeeping	On-going	Semiannual
G.20, G.39, G.44, G.54, G.56, G.58	Operational Limit	Inlet Temperatures to PMCD	Continuous Monitor	On-going	Semiannual
G.21, G.40, G.44, G.51, G.56, G.57, G.58	PM <sub>10</sub> CAM Plan	CAM Plan Appendix F	CAM Plan Appendix F	On-going	Semiannual
G.22, G.41, G.44, G.52, G.56, G.58	Emissions Monitoring Plans	For each CMS required, submit for approval upon request	Recordkeeping	On-going	Semiannual

### Conditions

- G.1. Holcim shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- G.2. Holcim shall operate and maintain an electrostatic precipitator (ESP) to control kiln emissions (ARM 17.8.749).
- G.3. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

- G.4. Starting November 17, 2012, Holcim shall meet a particulate emission limit of 0.77 lb/ton of clinker produced from the kiln based on an annual 3-run Method 5 (or equivalent) stack performance test. This emission limit shall apply during startup, shutdown, malfunction, emergencies and normal operation. Condensable particulate matter is not included in Method 5 reporting (Regional Haze FIP 40 CFR 52.1396).
- G.5. No later than September 9, 2015, Holcim shall limit particulate emissions from the kiln during normal operation to 0.07 pound per ton (lb/ton) of clinker produced based on an annual 3-run Method 5 stack performance test and continuous PM parametric monitoring system (CPMS). Condensable particulate matter is not included in Method 5 reporting (40 CFR 63.1343).
- G.6. No later than September 9, 2015, Holcim shall limit mercury emissions from the kiln during normal operation to 55 lbs per million tons (lb/MM tons) of clinker produced based on a 30-day rolling average (40 CFR 63.1343).
- G.7. Holcim shall meet one of the following limits for Total Hydrocarbons or Organic Air Toxics:
- a. No later than September 9, 2015, Holcim shall limit total hydrocarbons from the kiln during normal operation to 24 parts per million vapor by volume, dry (ppmvd) corrected to 7% oxygen and reported as propane on a 30-day rolling average (40 CFR 63.1343).
  - b. Alternatively, Holcim may choose to demonstrate compliance with limit established in Section III.G.7.(a) by using the Organic Air Toxics Alternative Limit which is demonstrated by maintaining 12 ppmvd Total Organic HAP corrected to 7% oxygen and reported as propane based on a three-run stack test required every 30 months (40 CFR 63.1343)
- G.8. Holcim shall comply with the sulfur in fuel rule (ARM 17.8.322(6)(c)).
- G.9. Holcim shall not cause or authorize to be discharged into the atmosphere from the kiln any gases that contain sulfur dioxide (SO<sub>2</sub>) in excess of 124 pounds per hour (lb/hr) averaged over any rolling 30-day period (ARM 17.8.749).
- G.10. No later than April 17, 2013 (180 days following October 18, 2012), Holcim shall limit SO<sub>2</sub> emissions from the kiln during startup, shutdown, malfunction, emergencies and normal operation to 1.3 lb/ton of clinker produced based on a 30-day rolling average unless Holcim is unable to meet the limit with existing control equipment and then the compliance date is extended to October 18, 2017. (Regional Haze FIP 40 CFR 52.1396).
- G.11. Holcim shall not cause to be discharged into the atmosphere from the kiln any gases that contain dioxins and furans in excess of:
- a. 0.20 ng per dscm ( $8.7 \times 10^{-11}$  gr/dscf)(TEQ) corrected to 7% oxygen; or
  - b. 0.40 ng per dscm ( $1.7 \times 10^{-10}$  gr/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.12. Holcim shall not cause or authorize to be discharged into the atmosphere from the kiln any gases that contain NO<sub>x</sub> in excess of 1,568 lb/hr averaged over any rolling 30-day period (ARM 17.8.749).
- G.13. No later than April 17, 2013 (180 days following October 18, 2012), Holcim shall limit NO<sub>x</sub> emissions from the kiln during startup, shutdown, malfunction, emergencies and normal operation to 6.5 lb/ton of clinker produced based on a 30-day rolling average unless Holcim is unable to meet the limit with existing control equipment and then the compliance date is extended to October 18, 2017 (Regional Haze FIP 40 CFR 52.1396).
- G.14. Holcim shall limit kiln production to 425,000 tons of clinker during any rolling 12-month period (ARM 17.8.749).
- G.15. During start-up and shutdown Holcim shall utilize work practices to limit emissions. Acceptable work practices include one or a combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas or ultra-low sulfur diesel fuel until the temperature reaches a temperature of 1200 degrees Fahrenheit (40 CFR 63.1346 (g)).
- G.16. In the cement kiln, Holcim is authorized to burn up to 100% natural gas, up to 100% coal, up to 100% coke, or any combination of these fuels within the previously stated limits with the exception of during startup and shutdown where “work practice” clean fuels must be used (ARM 17.8.749 and 40 CFR 63.1343).
- G.17. Holcim shall limit post-consumer glass to 800 tons during any 12-month rolling period (ARM 17.8.752).
- G.18. Holcim shall prepare an inspection and maintenance plan as required by 40 CFR 63.1347 (40 CFR 63.1347).
- G.19. Holcim shall prepare a startup, shutdown, and malfunction plan as required by 40 CFR 63.6(e) (3). (40 CFR 63.6 (e) (3)).
- G.20. Holcim shall operate the kiln such that the temperature of the gas at the inlet of the kiln particulate matter control device (PMCD) does not exceed the appropriate temperature limit specified in 40 CFR 63.1344(b), as applicable (40 CFR 63.1344, CFR 63.1346 and 40 CFR 63.6).
- G.21. Holcim shall provide a reasonable assurance of compliance with the emission limitations or standards for the operation of the emitting unit by following the Compliance Assurance Monitoring (CAM) plan contained in Appendix F of this permit (ARM 17.8.1504).
- G.22. Holcim shall prepare an emissions monitoring plan for each continuous monitoring system required by 40 CFR 63 Subpart LLL and submit it to the Department upon request (40 CFR 63.1350 (p)).

## Compliance Demonstration

- G.23. Holcim shall monitor compliance with Section III.G.1 by operating and maintaining a Continuous Opacity Monitoring System (COMS) in accordance with Appendix B to 40 CFR 60, Performance Specification 1. The COMS must be operated while the kiln is operating. In addition, Holcim shall inspect and audit the COMS annually, using neutral density filters. Holcim shall conduct these audits using the applicable procedures and forms in the EPA Technical Assistance Document: Performance Audit Procedures for Opacity Monitors (EPA-450/4-92-010, April 1992) (ARM 17.8.1213).
- G.24. Holcim shall monitor compliance with Section III.G.2 by inspecting and maintaining the ESP in accordance with Appendix E of this permit (ARM 17.8.1213).
- G.25. Holcim shall monitor compliance with Section III.G.3 by documenting that conveyor covers, transfer point conveyors, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).
- G.26. Holcim shall monitor compliance with Section III.G.4 by conducting an annual 3-run Method 5 performance stack test. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual with the following exceptions: a 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 (Regional Haze FIP 40 CFR 52, ARM 17.8.106 and ARM 17.8.1213).
- G.27. Holcim shall monitor compliance with Section III.G.5 by conducting an initial and then annually, 3-run performance stack test and by operation of a continuous PM parametric monitoring system. 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).
- G.28. Holcim shall monitor compliance with Section III.G.6 by installing, calibrating and maintaining a Continuous Emissions Monitor (CEMS) for mercury and using the mercury concentration data and plant process data to calculate the respective value versus the associated permit condition. The CEMS must be operated while the kiln is operating and must measure the mercury emissions, including the volumetric flow rate. The CEMS shall complete one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period (40 CFR 63.1343).
- G.29. Holcim shall demonstrate compliance with Section III.G.7 by installing, calibrating, and maintaining a CEMS for monitoring total hydrocarbons. The CEMS must be operated while the kiln is operating and must measure the THC emissions, including the volumetric flow rate. The CEMS shall complete one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period (40 CFR 63.1343).
- G.30. Holcim shall monitor compliance with Section III.G.8., G.9 and G.10 by documenting, by day, the lb/hr amount of SO<sub>2</sub> emissions discharged into the atmosphere from the kiln, the lbs/day of clinker produced, and million BTUs of fuel fired. Holcim shall monitor

compliance by maintaining and operating an SO<sub>2</sub> CEMS monitor. Total SO<sub>2</sub> emissions shall be calculated from 12:00 midnight to 12:00 midnight on a daily basis and averaged over 30-day rolling time periods. The CEMS must be operated while the kiln is operating and must measure the SO<sub>2</sub> emissions, including the volumetric flow rate. (ARM 17.8.749, ARM 17.8.1213 and Regional Haze FIP 40 CFR 52.1396).

- G.31. Holcim shall monitor compliance with Section III.G.11 by conducting a Method 23 (40 CFR 60, Appendix A) performance test every 30 months. Holcim 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. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106, 40 CFR 63.1349 and ARM 17.8.1213).

In addition, Holcim shall conduct an inspection of the components of the combustion system of the kiln at least once per year (40 CFR 63.1350 and ARM 17.8.1213).

- G.32. Holcim shall monitor compliance with Sections III.G.12 and III.G.13 by documenting, by day, the lb/hr amount of NO<sub>x</sub> emissions discharged into the atmosphere from the kiln and the lbs/hr of clinker produced. Holcim shall monitor compliance by calibrating, maintaining, and operating a NO<sub>x</sub> CEMS monitor. Total NO<sub>x</sub> emissions and total clinker produced shall be calculated from 12:00 midnight to 12:00 midnight on a daily basis and averaged over rolling 30-day time periods. The CEMS must be operated while the kiln is operating and must measure the NO<sub>x</sub> emissions, including the volumetric flow rate. (ARM 17.8.749, 17.8.1213 and Regional Haze FIP 40 CFR 52.1396).
- G.33. Holcim shall document, by month, the amount of clinker produced in the kiln. By the 25th day of each month, Holcim shall total the amount of clinker produced during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.G.14. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749 and ARM 17.8.1213).
- G.34. Holcim shall monitor compliance with Section III.G.15 by maintaining start-up and shutdown best practices (records), including date, time and duration, type, and quantity of fuel added whenever the temperature is less than 1200 degrees Fahrenheit (40 CFR 63.1347).
- G.35. Holcim shall monitor compliance with Section III.G.16 by maintaining records during normal operation whenever the temperature is 1200 degrees Fahrenheit or greater, the date, time and duration, type and quantity of fuel added (40 CFR 63.1347).
- G.36. Holcim shall document, by month, the amount of post-consumer glass used in the kiln. By the 25th day of each month, Holcim shall total the amount of post-consumer glass used during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.G.18. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749 and ARM 17.8.1213).
- G.37. Holcim shall demonstrate compliance with Section III.G.18 by having available on request the inspection and maintenance plan and shall maintain a log of activities completed according to the Inspection and Maintenance Plan (ARM 17.8.1213).

- G.38. Holcim shall demonstrate compliance with Section III.G.19 by having available on request the startup, shutdown and malfunction plan (ARM 17.8.1213).
- G.39. Holcim shall monitor compliance with Section III.G.20 by calibrating, maintaining, and operating a monitor to record the temperature of the exhaust gases from the kiln for monitoring Dioxin/Furan emissions. The calibration of all thermocouples and other temperature sensors required by 40 CFR 63.1350 shall be verified at least once every 3 months (40 CFR 63.1350 and ARM 17.8.1213).
- G.40. Holcim shall monitor compliance with Section III.G.21 by monitoring emissions according to the CAM Plan contained in Appendix F of this permit (ARM 17.8.1503 and ARM 17.8.1213).
- G.41. Holcim shall demonstrate compliance with Section III.G.22 by having available for Department review, the continuous emissions monitoring plans (ARM 17.8.1213).

### **Recordkeeping**

- G.42. Holcim shall maintain on file, all measurements from the COMS, and performance testing measurements; all performance evaluations; all monitoring device calibration checks and audits; and adjustments and maintenance performed on these systems or devices, recorded in a permanent form suitable for inspection. This shall apply to Section III. G.23. The records shall be retained on site for at least 5 years following the date of such measurements and reports. Holcim shall supply these records to the Department upon request (ARM 17.8.1212).
- G.43. Holcim shall maintain records of all inspection and maintenance activities performed on the ESP under Section III.G.24 and in accordance with Appendix E of this permit. All inspection and maintenance records must be maintained on site and must be submitted to the Department upon request (ARM 17.8.1212).
- G.44. Holcim shall maintain records as required by Sections III.G.25, G.28, G.29, G.30, G.33, G.34, G.35, G.36, G.37, G.38, G.39, G.40 and G.41 on site and submit the information to the Department upon request (ARM 17.8.1212).
- G.45. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- G.46. Holcim shall maintain on file, all measurements from the parametric particulate monitor, and performance testing measurements; all performance evaluations; all monitoring device calibration checks and audits; and adjustments and maintenance performed on these systems or devices, recorded in a permanent form suitable for inspection. This shall apply to Section III. G.27. The records shall be retained on site for at least 5 years following the date of such measurements and reports. Holcim shall supply these records to the Department upon request (ARM 17.8.1212).

- G.47. Holcim shall maintain on file, all measurements from the mercury CEMS, and performance testing measurements; all performance evaluations; all monitoring device calibration checks and audits; and adjustments and maintenance performed on these systems or devices, recorded in a permanent form suitable for inspection. This shall apply to Section III.G.28. The records shall be retained on site for at least 5 years following the date of such measurements and reports. Holcim shall supply these records to the Department upon request (ARM 17.8.1212 and 40 CFR 63.1343).
- G.48. Holcim shall maintain on file, all measurements from the THC CEMS, and performance testing measurements; all performance evaluations; all monitoring device calibration checks and audits; and adjustments and maintenance performed on these systems or devices, recorded in a permanent form suitable for inspection. This shall apply to Section III.G.29. The records shall be retained on site for at least 5 years following the date of such measurements and reports. Holcim shall supply these records to the Department upon request (ARM 17.8.1212 and 40 CFR 63.1343).
- G.49. Holcim shall maintain on file, all measurements from the SO<sub>2</sub> and NO<sub>x</sub> CEMS, and performance testing measurements; all performance evaluations; all monitoring device calibration checks and audits; and adjustments and maintenance performed on these systems or devices, recorded in a permanent form suitable for inspection. This shall apply to Sections III.G.30 and G.32. The records shall be retained on site for at least 5 years following the date of such measurements and reports. Holcim shall supply these records to the Department upon request (ARM 17.8.1212 and 40 CFR 52.1396).
- G.50. Holcim shall maintain calibration records as required by Sections III.G.23, G.28, G.29, G.30, and G.32 on site and submit the information to the Department upon request (ARM 17.8.1212).
- G.51. Holcim shall maintain CAM applicable records in accordance with 40 CFR Part 64 and the CAM Plan contained in Appendix F of this permit (ARM 17.8.1212, ARM 17.8.1513, and 40 CFR 64).
- G.52. Holcim shall maintain emission monitoring records as required by Section III.G.22 (ARM 17.8.1212).

## Reporting

- G.53. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- G.54. Holcim shall submit a summary report semiannually, which contains the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:
- a. All exceedances of maximum control device inlet gas temperature limits;
  - b. All failures to validate thermocouple calibration and other temperature sensors required by 40 CFR 63.1350;
  - c. All failures to comply with any provision of the inspection and maintenance plan (40 CFR 63.1354).



- G.55. If any action taken by Holcim during a startup, shutdown, or malfunction is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, Holcim shall record the actions taken for that event and shall report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event (40 CFR 63.6(e)(3)).
- G.56. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- G.57. Holcim shall submit the following reports to the Department as well as to the Director, Office of Enforcement, (Regional Haze FIP 40 CFR 52.1396):
- a. Semiannual excess emissions reports for the SO<sub>2</sub> and NO<sub>x</sub> limits described in Sections III.G.10 and III.G.13. Reports shall include the magnitude, date(s), and duration of each period of excess emissions, specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the unit, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.
  - b. Semiannual SO<sub>2</sub> and NO<sub>x</sub> CEMS performance reports that include dates and duration of each period during which the CEMS was inoperative (except for zero and span adjustments and calibration checks), reason(s) why the CEMS was inoperative and steps taken to prevent recurrence, any CEMS repairs or adjustments, and any other CEMS performance tests required (Relative Accuracy Test Audits, Relative Accuracy Audits, and Cylinder Gas Audits).
  - c. When no excess emissions have occurred or a CEMS has not been inoperative, repaired, or adjusted during the reporting period, Holcim shall state such information in the semiannual reports referenced in Sections III.G.57.a and b.
  - d. Results of any particulate matter stack tests conducted for demonstrating compliance with the limit described in Section III.G.4 within 60 days after the completion of the test.
  - e. Semiannual reports of any excursions under the CAM plan described in Section III.G.40.
- G.58. The semiannual reporting shall provide (ARM 17.8.1212):
- a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. Summary of the records required by Section III G.24 for any time periods that the records were not maintained;
  - c. Summary of the records required for Section III.G.23, G.28, G.29, G.30 and G.32 for any time periods that the records were not maintained;
  - d. Summary of the records required for that the tests required in Sections III.G.26, G.27, G.30, G.31 and G.32, for any time periods the tests were not conducted;
  - e. Summary of the Recordkeeping Requirements Section for any time periods that the requirements have not been met;

- f. A summary of the amount of post-consumer recycled glass used in the kiln for the semiannual period;
- g. A summary of the amount of clinker produced for the semiannual period;
- h. Annual certification that the written report required in Section III.G.57 was submitted; and
- i. Summary of records any time the CAM Plan contained in Appendix F of this permit was not followed.

## H. EU022 Clinker Cooler

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
H.1, H.11, H.21, H.26, H.27, H.28	Opacity	20%	Method 9	Every 5 years	Semiannual
H.2, H.12, H.21, H.26, H.27, H.28	Particulate Matter	$E = 55.0P^{0.11} - 40$	Method 5	Every 5 years	Semiannual
H.3, H.14, H.21, H.26, H.27, H.28	Particulate Matter* * Beginning 9/9/2015	0.07 lb/ton of clinker	Initial Method 5 Performance Test and then Annually	On-going Parametric Monitoring	Semiannual
H.4, H.14, H.23, H.27, H.28	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse	Whenever Process Equipment is Operating	Semiannual
H.5, H.15, H.23, H.27, H.28	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual
H.6, H.16, H.22, H.27, H.28	Operational Limit	500,000 tons/rolling 12-Month Period Clinker Handled	Recordkeeping	Monthly	Semiannual
H.7, H.17, H.22, H.27, H.28	Inspection and Maintenance Plan	Prepared and In Use for affected equipment	Recordkeeping	Ongoing	Semiannual
H.8, H.18, H.22, H.27, H.28	Startup, Shutdown, and Malfunction Plan	Prepared and in use for affected equipment	Recordkeeping	Ongoing	Semiannual
H.9, H.19, H.22, H.24, H.27, H.28	Emissions Monitoring Plans	For each CMS required, submit for approval upon request	Recordkeeping	Ongoing	Semiannual
H.10, H.20, H.25, H.27, H.28	PM <sub>10</sub> CAM Plan	CAM Plan Appendix F	CAM Plan Appendix F	Ongoing	Semiannual

## Conditions

- H.1. Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.304(2)).
- H.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- H.3. No later than September 9, 2015, particulate emissions from the clinker cooler during normal operation are limited to 0.07 lb/ton of clinker produced based on a 30-day rolling average (40 CFR 63.1343).
- H.4. Holcim shall operate and maintain a baghouse to control emissions from the emitting unit (ARM 17.8.749).
- H.5. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).
- H.6. Holcim shall limit clinker handling to 500,000 tons during any rolling 12-month period (ARM 17.8.749).
- H.7. Holcim shall prepare an inspection and maintenance plan as required by 40 CFR 63.1347 (40 CFR 63.1347)
- H.8. Holcim shall prepare a startup, shutdown, and malfunction plan as required by 40 CFR 63.6(e) (3). (40 CFR 63.6 (e) (3)).
- H.9. Holcim shall prepare an emissions monitoring plan for each continuous monitoring system required by 40 CFR 63 Subpart LLL and submit it to the Department upon request (40 CFR 63.1350 (p)).
- H.10. Holcim shall provide a reasonable assurance of compliance with the emission limitations or standards for the operation of the emitting unit by following the CAM plan contained in Appendix F of this permit (ARM 17.8.1504).

## Compliance Demonstration

- H.11. Holcim shall monitor compliance with the 20% opacity limit contained in Section III.H.1 by performing a Method 9 test once every 5 years or according to another testing/monitoring schedule as may be approved by the Department. 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).
- H.12. Holcim shall monitor compliance with the particulate emission limitation contained in Section III.H.2 by performing a Method 5 test or another test method approved by the Department once every 5 years or according to another testing/monitoring schedule as may

be approved by the Department. 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).

- H.13. Holcim shall monitor compliance with Section III.H.3 by conducting an initial and then annually, 3-run Method 5 performance stack test and by operation of a continuous PM parametric monitoring system (ARM 17.8.1213 and 40 CFR 63.1343).
- H.14. Holcim shall monitor compliance with Section III.H.4 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).
- H.15. Holcim shall monitor compliance with Section III.H.5 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).
- H.16. Holcim shall document, by month, the amount of clinker handled. By the 25<sup>th</sup> day of each month, Holcim shall total the amount of clinker handled during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.H.6. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.1213).
- H.17. Holcim shall demonstrate compliance with Section III.H.7 by having available on request the inspection and maintenance plan and shall maintain a log of activities completed according to the Inspection and Maintenance Plan (ARM 17.8.1213).
- H.18. Holcim shall demonstrate compliance with Section III.H.8 by having available on request the startup, shutdown and malfunction plan (ARM 17.8.1213).
- H.19. Holcim shall demonstrate compliance with Section III.H.9 by having available for Department review, the continuous emissions monitoring plans (ARM 17.8.1213).
- H.20. Holcim shall monitor compliance with Section III.H.10 by monitoring emissions according to the CAM Plan contained in Appendix F of this permit (ARM 17.8.1503 and ARM 17.8.1213).

### **Recordkeeping**

- H.21. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- H.22. Holcim shall maintain records as required by Sections III. H.6, H.7, H.8, and H.9 on site and submit the information to the Department upon request (ARM 17.8.1212).

- H.23. Holcim 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).
- H.24. Holcim shall maintain emission monitoring records as required by Section III.H.19 (ARM 17.81212).
- H.25. Holcim shall maintain CAM applicable records in accordance with 40 CFR Part 64 and the CAM Plan contained in Appendix F of this permit (ARM 17.8.1212, ARM 17.8.1513, and 40 CFR 64).

### **Reporting**

- H.26. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- H.27. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- H.28. The semiannual reporting shall provide (ARM 17.8.1212):
- a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. A summary of the records required by Section III.H.14 for any time period that the records were not maintained;
  - c. A summary of the records required by Section III.H.22 for any time period that the records were not maintained;
  - d. A summary of the amount of clinker handled during the semiannual period; and
  - e. A summary of the records required by the CAM Plan contained in Appendix F of this permit for any time period that the CAM Plan was not followed.

## I. EU023 Main Clinker Elevator

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
I.1, I.6, I.11, I.12, I.15, I.16, I.17	Opacity	20%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
I.2, I.7, I.11, I.15, I.16, I.17	Particulate Matter	$E = 55.0P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semiannual
I.3, I.8, I.13, I.16, I.17	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse	Whenever Process Equipment is Operating	Semiannual
I.4, I.9, I.14, I.16, I.17	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual
I.5, I.10, I.14, I.16, I.17	Operational Limit	500,000 tons/rolling 12-Month Period Clinker Handled	Recordkeeping	Monthly	Semiannual

### Conditions

- I.1. Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.304(2)).
- I.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- I.3. Holcim shall operate and maintain a baghouse to control emissions from the emitting unit (ARM 17.8.749).
- I.4. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).
- I.5. Holcim shall limit clinker handling to 500,000 tons during any rolling 12-month period (ARM 17.8.749).

## Compliance Demonstration

- I.6. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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).

- I.7. Holcim shall monitor compliance with the particulate emission limitation contained in Section III.I.2 by performing a Method 5 test, or another test method approved by the Department, 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).
- I.8. Holcim shall monitor compliance with Section III.I.3 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).
- I.9. Holcim shall monitor compliance with Section III.I.4 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).
- I.10. Holcim shall document, by month, the amount of clinker handled. By the 25<sup>th</sup> day of each month, Holcim shall total the amount of clinker handled during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.I.5. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.1213).

## Recordkeeping

- I.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, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- I.12. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.I.6. 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).
- I.13. Holcim 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).
- I.14. Holcim shall maintain records as required by Sections III.I.9 and III.I.10 on site and submit the information to the Department upon request (ARM 17.8.1212).

## Reporting

- I.15. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- I.16. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- I.17. The semiannual reporting shall provide (ARM 17.8.1212):
  - a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. A summary of the records required by Section III.I.8 for any time period that the records were not maintained;
  - c. A summary of the records required by Section III.I.9 for any time period that the records were not maintained;
  - d. A summary of the amount of clinker handled during the semiannual period.



- J. EU024 Finish Mill Feed Silos
- EU027 Outside Clinker Bins
- EU033 Clinker Transfer to #3 Finish Mill
- EU035 Clinker Transfer to #4 Finish Mill
- EU041 Gypsum Unloading and Transfer
- EU043 Outside Clinker Transfer to Reclaim Building

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
J.1, J.5, J.9, J.10, J.13, J.14, J.15	Opacity	20%	Method 9 or	Semiannual	Semiannual
			Visual Survey	Weekly	
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
J.2, J.6, J.9, J.11, J.13, J.14, J.15	Particulate Matter	E = 55.0P <sup>0.11</sup> - 40	Method 5	As Required by the Department and Section III.A.1	Semiannual
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
J.3, J.7, J.12, J.14, J.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual
J.4, J.8, J.12, J.14, J.15	Operational Limit	500,000 tons/rolling 12-Month Period Clinker Handled	Recordkeeping	Monthly	Semiannual

**Conditions**

- J.1. Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.304(2)).
- J.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- J.3. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

- J.4. Holcim shall limit clinker handling to 500,000 tons during any rolling 12-month period (ARM 17.8.749).

### **Compliance Demonstration**

- J.5. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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).

- J.6. Holcim shall monitor compliance with Section III.J.2 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit. In addition, as required by the Department and Section III.A.1, Holcim shall perform a Method 5 test or another test method approved by the Department. 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).
- J.7. Holcim shall monitor compliance with Section III.J.3 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).
- J.8. Holcim shall document, by month, the amount of clinker handled. By the 25<sup>th</sup> day of each month, Holcim shall total the amount of clinker handled during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.J.4. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.1213).

## Recordkeeping

- J.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, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- J.10. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.J.5. 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).
- J.11. Holcim shall maintain records of all inspection and maintenance activities performed on the baghouse(s) 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.12. Holcim shall maintain records as required by Sections III.J.7 and III.J.8 on site and submit the information to the Department upon request (ARM 17.8.1212).

## Reporting

- J.13. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- J.14. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- J.15. The semiannual reporting shall provide (ARM 17.8.1212):
  - a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. A summary that the records required by Section III.J.6 for any time period that the records were not maintained.
  - c. A summary of the records required in Section III.J.7 for any time period the records were not maintained;
  - d. A summary of clinker handled during the semiannual period.

## K. EU025 CKD Silo

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
K.1, K.5, K.9, K.10, K.13, K.14, K.15	Opacity	20%	Method 9 or	Semiannual	Semiannual
			Visual Survey	Weekly	
K.2, K.6, K.9, K.13, K.14, K.15	Particulate Matter	$E = 55.0P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semiannual
K.3, K.7, K.11, K.14, K.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse	Whenever Process Equipment is Operating	Semiannual
K.4, K.8, K.12, K.14, K.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

### Conditions

- K.1. Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.304(2)).
- K.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- K.3. Holcim shall operate and maintain a baghouse to control emissions from the emitting unit (ARM 17.8.749).
- K.4. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

### Compliance Demonstration

- K.5. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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).

- K.6. Holcim shall monitor compliance with the particulate emission limitation contained in Section III.K.2 by performing a Method 5 test, or another test method approved by the Department, 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).
- K.7. Holcim shall monitor compliance with Section III.K.3 by inspecting and maintaining the baghouse in accordance with Appendix E of this permit (ARM 17.8.1213).
- K.8. Holcim shall monitor compliance with Section III.K.4 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

### **Recordkeeping**

- K.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, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- K.10. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.K.5. 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).
- K.11. Holcim 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).

K.12. Holcim shall maintain records as required by Section III.K.8 on site and submit the information to the Department upon request (ARM 17.8.1212).

**Reporting**

K.13. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

K.14. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

K.15. The semiannual reporting shall provide (ARM 17.8.1212):

- a. A summary of the results of any compliance test conducted during the last reporting period;
- b. A summary of the records required by Section III.K.6 for any time period that the records were not maintained; and
- c. A summary of results required by Section III.K.8 for any time period that the records were not maintained.

**L. EU026 CKD Silo to Landfill**

**EU028-031 Outside Clinker Storage Silos #1-#4**

**EU038 Dust Discharge between Kiln and Precipitator**

**EU040 Import Clinker Unloading and Transfer**

**EU059 Post-Consumer Recycled Glass Handling**

**EU060 Overflow Gypsum Transfer to Ground**

**EU061 Overflow Gypsum Transfer to Reclaim Building**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
L.1, L.4, L.5, L.8, L.10, L.11, L.12	Opacity	20%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
L.2, L.5, L.7, L.10, L.11, L.12	Particulate Matter	E = 55.0P <sup>0.11</sup> - 40	Method 5	As Required by the Department and Section III.A.1	Semiannual
L.3, L.6, L.11, L.12	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

**Conditions**

L.1. Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.304(2)).

- L.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- L.3. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

### **Compliance Demonstration**

- L.4. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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).

- L.5. Holcim shall monitor compliance with the particulate emission limitation contained in Section III.L.2 by performing a Method 5 test, or another test method approved by the Department, 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).
- L.6. Holcim shall monitor compliance with Section III.L.3 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

## **Recordkeeping**

- L.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, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- L.8. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.L.5. 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).
- L.9. Holcim shall maintain records as required by Section III.L.6 on site and submit the information to the Department upon request (ARM 17.8.1212).

## **Reporting**

- L.10. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- L.11. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- L.12. The semiannual reporting shall provide (ARM 17.8.1212):
  - a. A summary of the results of any compliance test conducted during the last reporting period; and
  - b. Certification that the document required in Section III.L.6 was maintained.



**M. EU032 Finish Mill #2**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
M.1, M.6, M.12, M.13, M.17, M.18, M.19	Opacity	10%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
M.1, M.7, M.12, M.17, M.18, M.19	Particulate Matter	0.02 gr/dscf	Method 5	Every 5 years	Semiannual
M.2, M.8, M.14, M.18, M.19	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse	Whenever Process Equipment is Operating	Semiannual
M.3, M.9, M.15, M.18, M.19	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual
M.4, M.10, M.15, M.18, M.19	Operational Limit	245,280 tons/rolling 12-Month Period Clinker Handled	Recordkeeping	Monthly	Semiannual
M.5, M.11, M.16, M.18, M.19	PM <sub>10</sub> CAM Plan	CAM Plan Appendix F	CAM Plan Appendix F	Ongoing	Semiannual

**Conditions**

- M.1. Holcim shall not cause or authorize to be discharged into the atmosphere, from the Finish Mill #2 baghouse:
- a. Visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes, as required by 40 CFR Part 60, Subpart F (ARM 17.8.340); and
  - b. Particulate matter in excess of 0.02 gr/dscf (ARM 17.8.752).
- M.2. Holcim shall operate and maintain baghouse(s) to control emissions from the Finish Mill #2 sources listed below (ARM 17.8.752):
- a. A replacement air slide;
  - b. The clinker/gypsum feed belt via a booster fan;
  - c. The Finish Mill #2;
  - d. The bucket elevator; and
  - e. The product separator.

- M.3. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).
- M.4. Holcim shall limit clinker handling to 245,280 tons during any rolling 12-month period (ARM 17.8.749).
- M.5. Holcim shall provide a reasonable assurance of compliance with the emission limitations or standards for the operation of the emitting unit by following the CAM plan contained in Appendix F of this permit (ARM 17.8.1504).

### **Compliance Demonstration**

- M.6. Holcim shall monitor compliance with the 10% opacity limit contained in Section III.M.1.a by conducting either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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 10% 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).

- M.7. Holcim shall monitor compliance with the particulate emission limitation in Section III.M.1.b by performing a Method 5 test or another test method approved by the Department once every 5 years or according to another testing/monitoring schedule as may be approved by the Department. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106, ARM 17.8.340, and ARM 17.8.1213).
- M.8. Holcim shall monitor compliance with Section III.M.2 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).

- M.9. Holcim shall monitor compliance with Section III.M.3 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).
- M.10. Holcim shall document, by month, the amount of clinker handled. By the 25<sup>th</sup> day of each month, Holcim shall total the amount of clinker handled during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.M.4. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.1213).
- M.11. Holcim shall monitor compliance with Section III.M.5 by monitoring emissions according to the CAM Plan contained in Appendix F of this permit (ARM 17.8.1503 and ARM 17.8.1213).

### **Recordkeeping**

- M.12. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site, and shall be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- M.13. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.M.6. 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).
- M.14. Holcim 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).
- M.15. Holcim shall maintain the records required by Sections III.M.9 and III.M.10 on site and submit the information to the Department upon request (ARM 17.8.1212).
- M.16. Holcim shall maintain CAM applicable records in accordance with 40 CFR Part 64 and the CAM Plan contained in Appendix F of this permit (ARM 17.8.1212, ARM 17.8.1513, and 40 CFR 64).

### **Reporting**

- M.17. 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).
- M.18. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

M.19. The semiannual monitoring reporting shall provide (ARM 17.8.1212):

- a. A summary of the results of any compliance test conducted during the last reporting period;
- b. A summary of the records required by Section III.M.9 for any time period that the records were not maintained;
- c. A summary of the amount of clinker handled in the semiannual period; and
- d. A summary of the records for any time period that the CAM Plan contained in Appendix F of this permit was not followed.

**N. EU034 Finish Mill #3**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
N.1, N.6, N.7, N.11, N.12, N.13, N.17, N.18, N.19	Opacity	40%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
N.2, N.8, N.12, N.14, N.17, N.18, N.19	Particulate Matter	E = 55.0P <sup>0.11</sup> – 40	Method 5	Every 5 years	Semiannual
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
N.3, N.9, N.14, N.15, N.18, N.19	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual
N.4, N.10, N.15, N.18, N.19	Operational Limit	245,280 tons/rolling 12-Month Period Clinker Handled	Recordkeeping	Monthly	Semiannual
N.5, N.11, N.16, N.18, N.19	PM <sub>10</sub> CAM Plan	CAM Plan Appendix F	CAM Plan Appendix F	Ongoing	Semiannual

**Conditions**

N.1. Holcim 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 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.304(1)).

- N.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- N.3. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).
- N.4. Holcim shall limit clinker handling to 245,280 tons during any rolling 12-month period (ARM 17.8.749).
- N.5. Holcim shall provide a reasonable assurance of compliance with the emission limitations or standards for the operation of the emitting unit by following the CAM plan contained in Appendix F of this permit (ARM 17.8.1504).

### Compliance Demonstration

- N.6. Holcim shall monitor compliance with the 40% opacity limit contained in Section III.N.1 by conducting either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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 35% 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).

- N.7. Holcim shall monitor compliance with Section III.N.1 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.106 and 17.8.1213).
- N.8. Holcim shall monitor compliance with Section III.N.2 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit. In addition, once every 5 years or according to another testing/monitoring schedule as may be approved by the Department, Holcim shall perform a Method 5 test or another Department approved test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and 17.8.1213).

- N.9. Holcim shall monitor compliance with Section III.N.3 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).
- N.10. Holcim shall document, by month, the amount of clinker handled. By the 25<sup>th</sup> day of each month, Holcim shall total the amount of clinker handled during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.N.4. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.1213).
- N.11. Holcim shall monitor compliance with Section III.N.5 by monitoring emissions according to the CAM Plan contained in Appendix F of this permit (ARM 17.8.1503 and ARM 17.8.1213).

### **Recordkeeping**

- N.12. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- N.13. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.N.6. 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).
- N.14. Holcim 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).
- N.15. Holcim shall maintain records as required by Sections III.N.9 and III.N.10 on site and submit the information to the Department upon request (ARM 17.8.1212).
- N.16. Holcim shall maintain CAM applicable records in accordance with 40 CFR Part 64 and the CAM Plan contained in Appendix F of this permit (ARM 17.8.1212, ARM 17.8.1513, and 40 CFR 64).

### **Reporting**

- N.17. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- N.18. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

N.19. The semiannual monitoring report shall provide (ARM 17.8.1212):

- a. A summary of the results of any compliance test conducted during the last reporting period;
- b. A summary of the records required by Section III.N.7 for any time periods that the records were not maintained;
- c. A summary of the records required by Section III.N.8 for any time periods that the records were not maintained;
- d. A summary of the amount of clinker handled in the semiannual period; and
- e. A summary of the records by the CAM Plan contained in Appendix F of this permit for any time period that the CAM Plan was not followed.

**O. EU036 Finish Mill #4 Separator  
EU037 Finish Mill #4**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
O.1, O.7, O.13, O.18, O.19, O.20	Opacity	10%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
O.2, O.8, O.13, O.18, O.19, O.20	Particulate Matter	$E = 55.0P^{0.11} - 40$	Method 5	Every 5 years	Semiannual
O.3, O.9, O.15, O.19, O.20	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse	Whenever Process Equipment is Operating	Semiannual
O.4, O.10, O.16, O.19, O.20	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual
O.5, O.11, O.16, O.19, O.20	Operational Limit	395,000 tons/rolling 12-Month Period Clinker Handled	Recordkeeping	Monthly	Semiannual
O.6, O.12, O.17, O.19, O.20	PM <sub>10</sub> CAM Plan	CAM Plan Appendix F	CAM Plan Appendix F	Ongoing	Semiannual

**Conditions**

- O.1. Holcim shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the Finish Mill #4 visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes, as required by 40 CFR Part 60, Subpart F (ARM 17.8.340).

- O.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- O.3. Holcim shall operate and maintain baghouse to control emissions from the emitting units (ARM 17.8.749).
- O.4. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).
- O.5. Holcim shall limit clinker handling to 395,000 tons during any rolling 12-month period (ARM 17.8.749).
- O.6. Holcim shall provide a reasonable assurance of compliance with the emission limitations or standards for the operation of the #4 Finish Mill (EU037) by following the CAM plan contained in Appendix F of this permit (ARM 17.8.1504).

### **Compliance Demonstration**

- O.7. Holcim shall monitor compliance with the 10% opacity limit contained in Section III.O.1. by conducting either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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 10% 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).

- O.8. Holcim shall monitor compliance with the particulate emission limitation in Section III.O.2 by performing a Method 5 test or another test method approved by the Department once every 5 years or according to another testing/monitoring schedule as may be approved by the Department. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106, 17.8.340, and ARM 17.8.1213).



- O.9. Holcim shall monitor compliance with Section III.O.3 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).
- O.10. Holcim shall monitor compliance with Section III.O.4 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).
- O.11. Holcim shall document, by month, the amount of clinker handled. By the 25<sup>th</sup> day of each month, Holcim shall total the amount of clinker handled during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.O.5. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.1213).
- O.12. Holcim shall monitor compliance with Section III.O.6 by monitoring emissions from the #4 Finish Mill (EU037) according to the CAM Plan contained in Appendix F of this permit (ARM 17.8.1503 and ARM 17.8.1213).

### **Recordkeeping**

- O.13. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site, and shall be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- O.14. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.O.7. 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).
- O.15. Holcim 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).
- O.16. Holcim shall maintain records as required by Sections III.O.10 and III.O.11 on site and submit the information to the Department upon request (ARM 17.8.1212).
- O.17. Holcim shall maintain CAM applicable records in accordance with 40 CFR Part 64 and the CAM Plan contained in Appendix F of this permit (ARM 17.8.1212, ARM 17.8.1513, and 40 CFR 64).

### **Reporting**

- O.18. 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).

O.19. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

O.20. The semiannual monitoring report shall provide (ARM 17.8.1212):

- a. A summary of the results of any compliance test conducted during the last reporting period;
- b. A summary of the records required by Section III.O.9 for any time period that the records were not maintained;
- c. A summary of the records required by Section III.O.10 for any time period that the records were not maintained;
- d. A summary of the amount of clinker handled during the semiannual period; and
- e. A summary of the records required by the CAM Plan contained in Appendix F of this permit for any time period that the CAM Plan was not followed.

**P. EU044 Cement Silos #1-#7, #10, #11, & #13  
EU045 Cement Silos #8, #9, & #12**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
P.1, P.4, P.5, P.8, P.9, P.10, P.12, P.13, P.14	Opacity	40%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
P.2, P.6, P.8, P.9, P.10, P.12, P.13, P.14	Particulate Matter	$E = 55.0P^{0.11} - 40$	Method 5	As Required by the Department and Section III.A.1	Semiannual
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
P.3, P.7, P.11, P.13, P.14	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

**Conditions**

P.1. Holcim 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 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.304(2)).

- P.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- P.3. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

### Compliance Demonstration

- P.4. Holcim shall monitor compliance with Section III.P.1 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.106 and ARM 17.8.1213).
- P.5. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. If visible emissions meet or exceed 35% opacity based on the Method 9 source test, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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 40% 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).

- P.6. Holcim shall monitor compliance with Section III.P.2 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit. In addition, as required by the Department and Section III.A.1, Holcim shall perform a Method 5 test or another test method approved by the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- P.7. Holcim shall monitor compliance with Section III.P.3 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

## Recordkeeping

- P.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, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- P.9. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.P.5. 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).
- P.10. Holcim shall maintain records of all inspection and maintenance activities performed on the baghouse(s) 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).
- P.11. Holcim shall maintain records as required by Section III.P.6 on site and submit the information to the Department upon request (ARM 17.8.1212).

## Reporting

- P.12. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- P.13. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- P.14. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. A summary of the records required by Section III.P.5 for any time periods that the records were not maintained; and
  - c. A summary of results of the records required by Section III.P.6 for any time periods that the records were not maintained.

**Q. EU046 Cement Transferred From Silos #1 - #13 to Bulk Load Silos #14 - #25**  
**EU047 Cement Silos #14 - #25**  
**EU062 CKD Dust Scoops**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
Q.1, Q.4, Q.5, Q.8, Q.9, Q.12, Q.13, Q.14	Opacity	20%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
Q.2, Q.5, Q.6, Q.10, Q.12, Q.13, Q.14	Particulate Matter	$E = 55.0P^{0.11} - 40$	Method 5	Every 5 years	Semiannual
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
Q.3, Q.7, Q.11, Q.13, Q.14	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

**Conditions**

- Q.1. Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.304(2)).
- Q.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- Q.3. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

**Compliance Demonstration**

- Q.4. Holcim shall monitor compliance with the 20% opacity limit contained in Section III.Q.1 by conducting either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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).

- Q.5. Holcim shall monitor compliance with Section III.Q.1 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).
- Q.6. Holcim shall monitor compliance with Section III.Q.2 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit. In addition, once every 5 years or according to another testing/monitoring schedule as may be approved by the Department, Holcim shall perform a Method 5 test or another test method approved by the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- Q.7. Holcim shall monitor compliance with Section III.Q.3 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

### **Recordkeeping**

- Q.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, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- Q.9. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.Q.5. 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).
- Q.10. Holcim 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).

Q.11. Holcim shall maintain records as required by Section III.Q.7 on site and submit the information to the Department upon request (ARM 17.8.1212).

**Reporting**

Q.12. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

Q.13. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

Q.14. The semiannual monitoring report shall provide (ARM 17.8.1212):

- a. A summary of the results of any compliance test conducted during the last reporting period;
- b. A summary of the records required by Section III.Q.6 for any time periods that the records were not maintained; and
- c. A summary of the results of the records required by Section III.Q.7 for any time period that the records were not maintained.

**R. EU048 Cement Silos #26 - #30**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
R.1, R.5, R.9, R.10, R.13, R.14, R.15	Opacity	10%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
R.2, R.6, R.9, R.13, R.14, R.15	Particulate Matter	E = 55.0P <sup>0.11</sup> - 40	Method 5	Every 5 years	Semiannual
R.3, R.7, R.11, R.14, R.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse	Whenever Process Equipment is Operating	Semiannual
R.4, R.8, R.12, R.14, R.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

**Conditions**

R.1. Holcim shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source, visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes, as required by 40 CFR Part 60, Subpart F (ARM 17.8.340).

- R.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- R.3. Holcim shall operate and maintain baghouse to control emissions from the emitting units (ARM 17.8.749).
- R.4. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

### **Compliance Demonstration**

- R.5. Holcim shall monitor compliance with the 10% opacity limit contained in Section III.R.1 by conducting either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test must begin within one hour of any observation of visible emissions. Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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 10% 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).

- R.6. Holcim shall monitor compliance with the particulate emission limitation in Section III.R.2 by performing a Method 5 test, or another test method approved by the Department, once every 5 years or according to another testing/monitoring schedule as may be approved by the Department. The test methods and procedures shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106, 17.8.340, and ARM 17.8.1213).
- R.7. Holcim shall monitor compliance with Section III.R.3 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).



- R.8. Holcim shall monitor compliance with Section III.R.4 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

### **Recordkeeping**

- R.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, shall be maintained on site, and shall be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- R.10. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.R.5. 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).
- R.11. Holcim 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).
- R.12. Holcim shall maintain records as required by Section III.R.8 on site and submit the information to the Department upon request (ARM 17.8.1212).

### **Reporting**

- R.13. 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).
- R.14. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- R.15. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. A summary of the records required by Section III.R.7 for any time periods that records were not maintained; and
  - c. A summary of results of the records required by Section III.R.8 for any time periods that records were not maintained.

**S. EU053 Pozzolan Silo**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
S.1, S.5, S.10, S.11, S.13, S.14, S.15, S.16	Opacity	20%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
S.1, S.2, S.6, S.10, S.13, S.14, S.15, S.16	Particulate Matter	0.02 gr/dscf	Method 5	As Required by the Department and Section III.A.1	Semiannual
S.2, S.7, S.11, S.12, S.15, S.16	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse	Whenever Process Equipment is Operating	Semiannual
S.3, S.8, S.13, S.15, S.16	Enclosures	Installation, Use, and Maintenance of Enclosures	Use and Maintenance	Whenever Process Equipment is Operating	Semiannual
S.4, S.9, S.12, S.13, S.15, S.16	Operational Limit	50,000 tons/rolling 12-Month Period Pozzolan Material Used	Recordkeeping	Monthly	Semiannual

**Conditions**

- S.1. Holcim shall not cause or authorize to be discharged into the atmosphere, from the pozzolan material silo baghouse:
  - a. Particulate matter in excess of 0.02 gr/dscf (ARM 17.8.752); and
  - b. Visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.752).
  
- S.2. Holcim shall operate and maintain baghouse(s) to control emissions from the pozzolan material silo (ARM 17.8.752).
  
- S.3. Holcim shall use and maintain enclosures around the pozzolan material system components listed below (ARM 17.8.752):
  - a. Rotary feeder;
  - b. Weighbelt conveyor; and
  - c. Screw line (conveyor).

- S.4. Holcim shall not use, in any rolling 12-month period, greater than 50,000 tons of pozzolan material in the pozzolan material system (ARM 17.8.752).

### **Compliance Demonstration**

- S.5. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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). Procedures Manual (ARM 17.8.106 and 17.8.1213).

- S.6. Holcim shall monitor compliance with the particulate emission limitation in Section III.S.1 by performing a Method 5 test or another test method approved by the Department, 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, 17.8.340, and ARM 17.8.1213).
- S.7. Holcim shall monitor compliance with Section III.S.2 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).
- S.8. Holcim shall monitor compliance with Section III.S.3 by documenting that enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).
- S.9. Holcim shall document, by month, the amount of pozzolan material used in the pozzolan material system. By the 25<sup>th</sup> day of each month, Holcim shall total the amount of pozzolan material used in the pozzolan material system during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.S.4. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.1213).

## Recordkeeping

- S.10. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site, and shall be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- S.11. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.S.6. 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).
- S.12. Holcim 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).
- S.13. Holcim shall maintain records as required by Section III.S.7, III.S.8 and III.S.9 on site and submit the information to the Department upon request (ARM 17.8.1212).

## Reporting

- S.14. 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).
- S.15. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- S.16. The semiannual monitoring report shall provide (ARM 17.8.1212):
  - a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. A summary of the records required by Section III.S.7 for any time periods that the records were not maintained;
  - c. A summary of the result of the records required by Section III.S.8 for any time period that the records were not maintained;
  - d. A summary of the amount of pozzolan material used in the pozzolan material system for the semiannual period.

## T. EU054 Landfilled Cement Kiln Dust Extraction

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
T.1, T.4, T.7, T.10, T.11	Opacity	20%	Water Spray	As Needed	Semiannual
T.2, T.5, T.8, T.10, T.11	Airborne Particulate Matter	Reasonable Precautions	Water and/or Chemical Dust Suppressants	As Needed	Semiannual
T.3, T.6, T.9, T.10, T.11	Operational Limit	85,000 Tons of Landfilled CKD/Rolling 12-Month Period	Recordkeeping	Monthly	Semiannual

### Conditions

- T.1. Holcim 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 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.304(2)).
- T.2. Holcim 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)).
- T.3. Holcim shall not handle more than 85,000 tons of landfilled CKD in any rolling 12-month period (ARM 17.8.752).

### Compliance Demonstration

- T.4. Holcim shall monitor compliance with Section III.T.1 by using water spray, as necessary, when handling landfilled CKD (ARM 17.8.752 and 17.8.1213).
- T.5. Holcim shall monitor compliance with Section III.T.2 by treating 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 (ARM 17.8.749).
- T.6. Holcim shall document, by month, the amount CKD reclaimed from the landfill. By the 25<sup>th</sup> day of each month, Holcim shall total the amount of CKD reclaimed from the landfill during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation contained in Section III.T.3. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.1213).

### Recordkeeping

- T.7. Holcim shall maintain records that water spray was used, as necessary, when handling landfilled CKD. The records must include, but are not limited to, the date and time that water spray was used (ARM 17.8.1213).

- T.8. Holcim shall maintain records that all unpaved portions of the haul roads, access roads, parking lots, or the general plant area were treated with water and/or chemical dust suppressant, as necessary. The records must include, but are not limited to, the date and time of the application of the water and/or chemical dust suppressant (ARM 17.8.1213).
- T.9. Holcim shall maintain records as required by Section III.T.6 on site and submit the information to the Department upon request (ARM 17.8.1212).

**Reporting**

- T.10. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- T.11. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of the water spray use when handling landfilled CKD for the semiannual period;
  - b. A summary of the water and/or chemical dust suppressant applications for the semiannual period; and
  - c. A summary of the amount of CKD reclaimed from the landfill for the semiannual period.

**U. EU055 Slag Feeders to Finish Mills**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
U.1, U.4, U.5, U.8, U.9, U.10, U.12, U.13, U.14	Opacity	20%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
			Operation and Maintenance of a Baghouse(s)	Whenever Process Equipment is Operating	Semiannual
U.2, U.6, U.8, U.10, U.12, U.13, U.14	Particulate Matter	E = 55.0P <sup>0.11</sup> - 40	Method 5	As Required by the Department and Section III.A.1	Semiannual
			Operation and Maintenance of a Baghouse(s)	Whenever Process Equipment is Operating	
U.3, U.7, U.11, U.13, U.14	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

## Conditions

- U.1. Holcim shall 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 6 consecutive minutes (ARM 17.8.308).
- U.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- U.3. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749)

## Compliance Demonstration

- U.4. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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). Procedures Manual (ARM 17.8.106 and 17.8.1213).

- U.5. Holcim shall monitor compliance with Section III.U.1 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit.
- U.6. Holcim shall monitor compliance with Section III.U.2 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit. In addition, as required by the Department and Section III.A.1, Holcim shall perform a Method 5 test, or another test method approved by the Department, in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and 17.8.1213).

U.7. Holcim shall monitor compliance with Section III.U.3 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

### **Recordkeeping**

U.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, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).

U.9. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.U.5. 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).

U.10. Holcim 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).

U.11. Holcim shall maintain records as required by Section III.U.6 and submit the information to the Department upon request (ARM 17.8.1212).

### **Reporting**

U.12. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

U.13. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

U.14. The semiannual monitoring report shall provide (ARM 17.8.1212):

- a. A summary of any compliance tests conducted during the last reporting period;
- b. Certification that the document required in Sections III.U.6 and III.U.8 were maintained; and



## V. EU042 Outside Clinker Transfer to Pile

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
V.1, V.3, V.4, V.6, V.7, V.9, V.10, V.11	Opacity	20%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
V.2, V.5, V.8, V.10, V.11	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

### Conditions

- V.1. Holcim shall 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 6 consecutive minutes (ARM 17.8.308).
- V.2. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749)

### Compliance Demonstration

- V.3. Holcim shall monitor compliance with Section III.V.1 by conducting a Method 9 test, as required by the Department and Section III.A.1, in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and 17.8.1213).
- V.4. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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).Procedures Manual (ARM 17.8.106 and 17.8.1213).

- V.5. Holcim shall monitor compliance with Section III.V.3 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

### **Recordkeeping**

- V.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, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).
- V.7. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.V.4. 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).
- V.8. Holcim shall maintain records as required by Section III.V.5 on site and submit the information to the Department upon request (ARM 17.8.1212).

### **Reporting**

- V.9. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- V.10. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- V.11. The semiannual monitoring report shall provide (ARM 17.8.1212):
- a. A summary of any compliance tests conducted during the last reporting period; and
  - b. A summary of results required by Section III.V.4 for any time periods the records were not maintained.

## W. EU064 Secondary Crusher

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
W.1, W.5, W.13, W.16, W.17, W.18, W.19	Opacity	20%	Method 9 or	Semiannual	Semiannual
			Visual Survey	Weekly	
W.2, W.7, W.12, W.17, W.18, W.19	Particulate Matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$	Method 5	Every 5 years	Semiannual
W.5, W.10, W.11, W.16, W.17, W.18, W.19	Particulate Matter	0.014 grains/dry standard cubic foot	Initial Method 5	Quarterly Method 22 or substitute results of Visual Surveys	Semiannual
W.3, W.9, W.11, W.14, W.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Operation and Maintenance of Baghouse(s)	Whenever Process Equipment is Operating	Semiannual
W.4, W.8, W.12, W.14, W.15	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

### Conditions

- W.1. Holcim shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- W.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 4.10 * P^{0.67}$  for process weight rates up to 30 tons per hour and/or  $E = 55.0 * P^{0.11} - 40$  for process weight rates in excess of 30 tons per hour, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- W.3. Holcim shall operate and maintain baghouse(s) to control emissions from the emitting unit (ARM 17.8.749).
- W.4. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).
- W.5. Holcim shall not exceed baghouse stack particulate matter emissions from the secondary crusher of 0.014 grains per dry standard cubic foot (dscf) according to EPA Method 5 (ARM 17.8.749 and 40 CFR 60.000).

## Compliance Demonstration

W.6. Holcim shall conduct either a semiannual Method 9 source test or a weekly visual survey of visible emissions on the secondary crusher. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the secondary crusher for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test 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, Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the secondary crusher for that reporting period.

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).

W.7. Holcim shall monitor compliance with the particulate emission limitation contained in Section III.W.2 by performing a Method 5 test, or another test method approved by the Department, once every 5 years or according to another testing/monitoring schedule as may be approved by the Department. 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).

W.8. Holcim shall monitor compliance with Section III.W.3 by inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit (ARM 17.8.1213).

W.9. Holcim shall monitor compliance with Section III.W.4 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

W.10. Holcim shall conduct an initial EPA Method 5 performance test within 60 days after achieving maximum production, but no later than 180 days after initial start-up to demonstrate compliance with the emission limitation contained in Section III.W.5 (ARM 17.8.340 and 40 CFR 60, Subpart A and 40 CFR 60 Subpart OOO).

W.11. Holcim shall conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR Subpart 60, Appendix A-7). The Method 22 test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 test, including the date and any corrective actions taken, in a logbook. If Holcim, chooses to perform visual surveys under Section III.W.6, weekly surveys may be substituted for Method 22. (40 CFR 60.676 b).

### **Recordkeeping**

W.12. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, shall be maintained on site, and shall be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).

W.13. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.W.5. 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).

W.14. Holcim shall maintain records of all inspection and maintenance activities performed on the baghouse(s) 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).

W.15. Holcim shall maintain the records required by Section III.W.8 on site and submit the information to the Department upon request (ARM 17.8.1212).

W.16. Holcim shall record each Method 22 test, including the date and any corrective actions taken, in a logbook or other on-site record. If Holcim, chooses to perform visual surveys under Section III.W.6, weekly survey records may be substituted for Method 22 (ARM17.81212).

### **Reporting**

W.17. 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).

W.18. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

W.19. The semiannual monitoring report shall provide (ARM 17.8.1212):

- a. A summary of the results of any compliance test conducted during the last reporting period;
- b. Summary of the records required by Section III.W.7 for any time periods that the records were not maintained; and

- c. A summary of results of the records required in Section III.W.8 for any time periods that the records were not maintained.

**X. EU049 Cement Truck Loadout 1  
EU050 Cement Truck Loadout 2  
EU051 Cement Railcar Transfer/Loadout**

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method	Frequency	Reporting Requirements
X.1, X.4, X.7, X.8, X.10, X.11, X.12	Opacity	10%	Method 9 Or	Semiannual	Semiannual
			Visual Survey	Weekly	
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
X.2, X.5, X.7, X.8, X.10, X.11, X.12	Particulate Matter	$E = 55.0P^{0.11} - 40$	Method 5	Every 5 years	Semiannual
			Operation and Maintenance of a Baghouse	Whenever Process Equipment is Operating	Semiannual
X.3, X.6, X.9, X.11, X.12	Emission Control Equipment	Operation and Maintenance of Emission Control Equipment	Covers and Enclosures	Whenever Process Equipment is Operating	Semiannual

**Conditions**

- X.1. Holcim shall not cause or authorize emissions to be discharged into the outdoor atmosphere from these sources that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit (40 CFR 60 F and ARM 17.8.749).
- X.2. The particulate emissions from process weight shall not exceed the value calculated by  $E = 55.0P^{0.11} - 40$ , where E is the rate of emission in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310).
- X.3. When process equipment is operating, Holcim shall use and maintain, as they were intended, conveyor covers, transfer point covers, or structural enclosures surrounding process equipment (ARM 17.8.749).

**Compliance Demonstration**

- X.4. Holcim shall monitor compliance with the 10% opacity limit contained in Section III.X.1 by conducting either a semiannual Method 9 source test or a weekly visual survey of visible emissions for emitting units listed in this section. Under the visual survey option, once per calendar week, during daylight hours, Holcim shall visually survey the emitting units listed in this section for any visible emissions. If visible emissions are observed during the visual survey, Holcim must conduct a Method 9 source test. The Method 9 source test must begin

within one hour of any observation of visible emissions. Holcim shall immediately take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then Holcim 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 Holcim of the liability for a violation determined using Method 9 (ARM 17.8.101(27)).

If the visual surveys are not performed once per calendar week as specified above during the reporting period, then Holcim shall perform the Method 9 source tests on the emitting units listed in this section for that reporting period.

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 10% 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).

- X.5. Holcim shall monitor compliance with Section III.X.1 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit. (ARM 17.8.106 and ARM 17.8.1213).
- X.6. In addition, once every 5 years or according to another testing/monitoring schedule as may be approved by the Department, Holcim shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- X.7. Holcim shall monitor compliance with Section III.X.2 by operating, and inspecting and maintaining the baghouse(s) in accordance with Appendix E of this permit. In addition, once every 5 years or according to another testing/monitoring schedule as may be approved by the Department, Holcim shall perform a Method 5 test or another test method approved by the Department in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).
- X.8. Holcim shall monitor compliance with Section III.X.3 by documenting that conveyor covers, transfer point covers, or structural enclosures surrounding process equipment were maintained and in place during operation of process equipment. The records shall include all repair and maintenance activity to all conveyor covers, transfer point covers, or structural enclosures. The records must include, but are not limited to, the date, time, and action(s) taken for repair and maintenance (ARM 17.8.1213).

## **Recordkeeping**

- X.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, shall be maintained on site and must be submitted to the Department upon request (ARM 17.8.106 and ARM 17.8.1212).

- X.10. If visual surveys are performed, Holcim shall maintain a log to verify that the visual surveys were performed as specified in Section III.X.4. 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).
- X.11. Holcim shall maintain records of all inspection and maintenance activities performed on the baghouse(s) 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).
- X.12. Holcim shall maintain records as required by Section III.X.7 on site and submit the information to the Department upon request (ARM 17.8.1212).

### **Reporting**

- X.13. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- X.14. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- X.15. The semiannual monitoring report shall provide (ARM 17.8.1212):
  - a. A summary of the results of any compliance test conducted during the last reporting period;
  - b. A summary of the records required by Section III.X.6 for any time periods that the records were not maintained; and
  - c. A summary of the results of the records required by Section III.X.7 for any time period that the records were not maintained.



## 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.

### A. Facility-Wide

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

Rule Citation	Reason
ARM 17.8.320 ARM17.8.324	These rules are not applicable because the facility does not have the specific emissions unit cited in the rules.
ARM 17.8.321 ARM 17.8.331 ARM 17.8.332 ARM 17.8.333 ARM 17.8.334 ARM 17.8.323 ARM 17.8.610 40 CFR 57	These rules are not applicable because the facility is not listed in the source category cited in the rules.
40 CFR 55 40 CFR 59 40 CFR 60 Subpart B 40 CFR 60 Subparts C, Ca, Cb, Cc, Cd, and Ce 40 CFR 60 Subparts D, Da, Db, Dc 40CFR 60 Subpart E, Ea, Eb, and Ec 40 CFR 60 Subparts 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 Subparts NNN 40 CFR 60 Subparts PPP-WWW 40 CFR 60 Subparts AAAA-DDDD 40 CFR 60 Subpart HHHH 40 CFR 60 Appendix G 40 CFR 60 Appendix I 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	These requirements are not applicable because the facility is not an affected source as defined in these regulations.

40 CFR 61 Subpart BB 40 CFR 61 Subpart FF 40 CFR 61 Appendices A-E 40 CFR 63 Subparts F-J 40 CFR 63 Subparts L,O 40 CFR 63 Subpart Q-U 40 CFR 63 Subparts W-Y 40 CFR 63 Subparts AA-EE 40 CFR 63 Subparts GG-MM 40 CFR 63 Subparts OO-YY 40 CFR 63 Subparts CCC-EEE 40 CFR 63 Subparts GGG-KKK 40 CFR 63 Subparts MMM-RRR 40 CFR 63 Subparts TTT-XXX 40 CFR 63 Subpart AAAA 40 CFR 63 Subparts CCCC-KKKK 40 CFR 63 Subparts MMMM-ZZZZ 40 CFR 63 Subparts AAAAA-TTTTT 40 CFR 68 40 CFR 79-80 40 CFR 85-99	
40 CFR 72 40 CFR 73 40CFR 74 40 CFR 75 40 CFR 76 40 CFR 77 40 CFR 78	These requirements are not applicable because the facility is not an affected source as defined by the acid rain regulations.
40 CFR 82 Subpart A 40 CFR 82 Subparts C-D 40 CFR 82 Subparts G-H	These rules refers to processes, equipment and/or activities that are not used at the facility

## B. 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); and
  - 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; and
  - 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; and
  - 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 5 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 C 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)(b)

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; and
  - 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; and

- 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 7 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 Section 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 not 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 5 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 6 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. T. Malfunctions**

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

**U. 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

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 15 tons per year of any pollutant, except
  - 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)

## **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 Holcim, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emissions unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than 5 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 Holcim. 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
EU002	Quarry Drilling
EU004	Limestone, Sand and Shale Removal
EU016	Coal Storage Piles
EU017	Coke Storage Piles
EU039	Transfer of Reclaimed Clinker to Ground
EU042	Outside Clinker Transfer to Pile
EU052	Fuel Tanks
EU056	Space Heating
EU057	Storage Pile for Finish Mill Material Handling System
EU058	Post Consumer Recycled Glass Piles
EU063	Emergency Generators

## 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 Holcim;
- (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 which 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 which 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

All reports under this section, with the exception of 40 CFR 52.1396(n) and (o), shall be submitted by the owner/operator to the Director, Office of Enforcement, Compliance and Environmental Justice, U.S. Environmental Protection Agency, Region 8, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, Colorado 80202-1129.

### 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 Holcim, permitting authority, inspectors, and the public.

### 1. Direction to Plant:

Exit Interstate 90 at the Three Forks/Trident, Montana exit. Proceed north towards the Missouri River Headwaters Park. The facility is located north of the Headwaters Park with the main office located just east of the railroad tracks.

### 2. Safety Equipment Required:

Anyone entering the Holcim facility shall, at a minimum, have and utilize the following personnel protective equipment:

- a. Hard Hat,
- b. Safety Glasses,
- c. Hearing Protection, and
- d. Protective Footwear.

Additional personnel protective equipment may be required at the direction of a Holcim representative.

### 3. Facility Plot Plan:

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



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

Although the hard copy of Appendix E has been removed from the permit, the contents of Appendix E, Pollution Control Device Inspection and Maintenance Plan, remain as applicable requirements as stated in the Title V Operating Permit #0982-03. The Inspection and Maintenance Plan was updated within the Title V Operating Permit renewal submittal (#0982-03). To receive a hard copy of this appendix, 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

Holcim (US), Inc.  
4070 Trident Road  
Three Forks, MT 59752

## Appendix F COMPLIANCE ASSURANCE MONITORING (CAM)

**I. Emitting Unit:** EU021 – Kiln

**Pollutant:** PM<sub>10</sub>

**Control Device:** ESP

**Emission Limit:** See Section III.G.

**Monitoring Approach:** Key elements of the monitoring approach for this CAM applicable emitting unit are contained in Table I. A complete CAM plan is contained in Holcim’s application for Title V operating permit renewal (#0982-01) and is on file with the Department. Complete copies of this CAM plan are available from the Department upon request.

<b>Table I</b>	
<b>A. General Criteria</b>	
<b>Indicator</b>	ESP Power
<b>Measurement Approach</b>	Electrical power input is measured using a voltmeter and an ammeter. The total power (P) input to the ESP is the sum of the products of the secondary voltage (V) and current (I) in each field. ( $P = V_1I_1 + V_2I_2$ ).
<b>Indicator Range</b>	Due to the nature of ESP’s, only a lower end value will be established for power input. An excursion occurs if the hourly average power input drops below its respective hourly average indicator value. The indicator value will be established during a source test (See stack test below). An excursion triggers an inspection, corrective action, and a reporting requirement.
<b>B. Performance Criteria</b>	
<b>Data Representativeness</b>	The voltage and current are measured using the instrumentation (voltmeter and ammeter) specifically designed and installed on the ESP to measure and control the performance of the ESP..
<b>Verification of Operational Status</b>	Continuous monitoring of total ESP power input (kW).
<b>Quality Assurance/Quality Control</b>	Validate voltmeter and ammeter output on an annual basis in accordance with good engineering practices.
<b>Monitoring Frequency</b>	Continuous (at least every minute)
<b>Data Collection Procedures</b>	The secondary voltage monitor and current monitor will measure their respective values on a one minute or less basis. The plant will calculate a one-hour block kW arithmetic mean value based on the available values. The data will be permanently stored in the plant data historian.
<b>Averaging Period</b>	One-hour block average.
<b>Stack Test/Monitoring Initiation</b>	After Department approval of the CAM Plan, Holcim will schedule and conduct Method 5 testing to establish a suitable minimum power indicator value. The indicator value shall be 80% of the lowest average power (kW) applied to the ESP over the duration of any one run that resulted in emissions less than the emission limit during the afore mentioned test. The indicator value shall be established as expeditiously as practicable after Department approval (Department Decision on OP0982-01) but in no case shall the establishment of the indicator value prevent monitoring from beginning within 180 days after Department approval of the permit (ARM 17.8.1508(4)).

**II. Emitting Unit:** EU022 – Clinker Cooler

**Pollutant:** PM<sub>10</sub>

**Control Device:** Baghouse

Emission Limit: See Section III.H

**Monitoring Approach:** Key elements of the monitoring approach for this CAM applicable emitting unit are contained in Table II. A complete CAM plan is contained in Holcim's application for Title V operating permit renewal (#0982-01) and is on file with the Department. Complete copies of this CAM plan are available from the Department upon request.

<b>Table II</b>	
<b>A. General Criteria</b>	
<b>Indicator</b>	Baghouse differential pressure.
<b>Measurement Approach</b>	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. One-minute differential pressure values collected will be summed and averaged every 24 hours.
<b>Indicator Range</b>	An excursion is defined as a daily average differential pressure of below 1.0 or above 10 inches of water pressure. An excursion triggers an inspection and possible corrective action.
<b>B. Performance Criteria</b>	
<b>Data Representativeness</b>	Pressure drop across the baghouse is measured across the tube sheet. The minimum accuracy of the device is $\pm 1$ inch of water.
<b>Verification of Operational Status</b>	Pressure drop is continuously monitored and recorded.
<b>Quality Assurance/Quality Control</b>	Pressure transducer is calibrated in accordance with manufacturer's recommendations.
<b>Monitoring Frequency</b>	Every minute
<b>Data Collection Procedures</b>	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. The data will be permanently stored in the plant data historian.
<b>Averaging Period</b>	24-hour
<b>Monitoring Initiation</b>	The monitoring shall commence as expeditiously as practicable after Department approval (Department Decision on OP0982-01) but no later than 180 days after Department approval of the permit (ARM 17.8.1508(4)).

- III. Emitting Units:** EU032, EU034, and EU037 – Finish Mills #2, #3, and #4  
**Pollutant:** PM<sub>10</sub>  
**Control Device:** Pulse Jet Baghouses  
**Emission Limit:** 0.02 gr/dscm (EU032 only), E = 55.0P<sup>0.11</sup>-40 (EU034 and EU037 only)  
**Monitoring Approach:** Key elements of the monitoring approach for this CAM applicable emitting unit are contained in Table III. CAM plan changes were submitted in Holcim’s application for Title V operating permit renewal (#0982-03) and is on file with the Department. Complete copies of this CAM plan are available from the Department upon request.

<b>Table III</b>	
<b>A. General Criteria</b>	
<b>Indicator</b>	Baghouse differential pressure.
<b>Measurement Approach</b>	Inlet and outlet of the baghouses is monitored using a differential pressure transducer. The signal from the pressure transducer is recorded using a data acquisition system. One-minute differential pressure values collected will be summed and averaged every 24 hours.
<b>Indicator Range for Mill #2 and #4</b>	An excursion is defined as a daily average differential pressure of below 1.25 or above 10 inches of water pressure. An excursion triggers an inspection and possible corrective action.
<b>Indicator Range for Mill #3</b>	An excursion is defined as a daily average differential pressure of below 2.5 or above 10 inches of water pressure. An excursion triggers an inspection and possible corrective action.
<b>B. Performance Criteria</b>	
<b>Data Representativeness</b>	Pressure drop across the baghouses is measured across the tube sheet. The minimum accuracy of the device is ± 1 inch of water.
<b>Verification of Operational Status</b>	Pressure drop is continuously monitored and recorded.
<b>Quality Assurance/Quality Control</b>	Pressure transducer is calibrated in accordance with manufacturer’s recommendations.
<b>Monitoring Frequency</b>	Every minute
<b>Data Collection Procedures</b>	Inlet and outlet of the baghouses is monitored using a differential pressure transducer. The signal from the pressure transducer is recorded using a data acquisition system. The data will be permanently stored in the plant data historian.
<b>Averaging Period</b>	24-hour
<b>Monitoring Initiation</b>	Commenced with earlier permit revisions. On-going.