

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT
Permit #OP2005-06**

Permitting and Compliance Division
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P.O. Box 200901
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Ash Grove Cement Company
100 MT Highway 518
Clancy, Montana 59634

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

Facility Compliance Requirements	Yes	No	Comments
Source Tests Required	X		
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required		X	
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 Preconstruction Permitting	X		Permit #2005-09
New Source Performance Standards (NSPS)	X		Subpart F; Subpart Y; Subpart OOO
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	
Maximum Achievable Control Technology (MACT)	X		Subpart LLL; Subpart ZZZZ; Subpart CCCCCC
Major New Source Review (NSR)		X	
Prevention of Significant Deterioration (PSD)		X	
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	
State Implementation Plan (SIP)		X	
Compliance Assurance Monitoring Plan (CAM)	X		Appendix F; Appendix G; Appendix H

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Section I. General Information

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the Environmental Protection Agency (EPA) and the public. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in previous submittals, the renewal application submitted by Ash Grove Cement Company (Ash Grove) on April 23, 2003, the renewal application submitted by Ash Grove on March 29, 2010, and Ash Grove Cement Company's submittals on January 17, 2006, November 15, 2005, April 6, 2006, December 4, 2006, September 13, 2007, January 2, 2008, November 4, 2009, December 5, 2009, and April 21, 2010.

B. Facility Location

The facility is located approximately 5 kilometers south of East Helena and approximately 1.8 kilometers east of the Highway 518 and I-15 interchange near Montana City, Montana. The legal description is Section 12, Township 9 North, Range 3 West, in Jefferson County, Montana.

C. Facility Permitting History

Montana Air Quality Permit

Permit #**62-100169** was issued on July 9, 1969, to Kaiser Cement & Gypsum Corporation for a Joseph Goder Incinerator Model 7P-UD and a H-250-32 secondary gas burner.

Permit #**853-091775** was issued on September 8, 1975, to Kaiser Cement and Gypsum Corporation for a coal conversion fuel system on the nodulizing kiln. The permit was renewed on September 12, 1977, for a coal grinding plant.

Permit #**2005-00** was issued to Kaiser Cement & Gypsum Company to allow for the combustion of coke and coal in the kiln on July 11, 1986. Shortly thereafter, Ash Grove Cement Company purchased Kaiser Cement & Gypsum Corporation.

On July 13, 1991, Ash Grove Cement Company applied for Permit #**2005-01** to allow the facility to use hazardous waste derived fuel in the kiln. This application was subsequently withdrawn on November 15, 1995.

On June 16, 1996, Ash Grove Cement Company was issued Permit #**2005-02** for several construction projects at the facility. This permit allowed Ash Grove Cement Company to alter their existing primary crusher by replacing the 1962 Traylor Blake-Type jaw component rated at 345 ton/hr with a 1988 Hazemag horizontal impact component rated at 300 ton/hr. During this project Ash Grove Cement Company also proposed to upgrade dust collector DA-1. This upgrade consisted of replacing the existing Norblo reverse air shakerless dust collector with a BHA pulsejet conversion package. The flow through the baghouse increased from approximately 5500 (cubic feet per minute) cfm to 11,000 cfm as a result of this upgrade. In addition, Ash Grove Cement Company also proposed to alter the crusher discharge belt system during this project. A channel from belt conveyor designated FB-1 was installed to transport material leaving the primary crusher to the existing BC-1 conveyor. Drag conveyor #1 was abandoned and removed. Emissions from both the primary crusher and FB-1 are controlled by dust collector DA-1.

Ash Grove Cement Company upgraded the finish mill dust collection system (DA-9). This project replaced the existing Norblo DA shakerless dust collector with a BHA pulse jet conversion package. Two of the five compartments of this dust collection system have been dedicated to providing dust control to auxiliary equipment (DA-9 East), while the three remaining compartments have been dedicated to controlling emissions from the mill sweep function (DA-9 West). The existing 9200 cfm booster fan has been utilized as the DA-9 East discharge fan while an existing 14,300 cfm fan has been retained and modified and used as the DA-9 West discharge fan. This modification resulted in a flow increase of 9200 cfm.

Ash Grove Cement Company installed a new mixing system for cement kiln dust (CKD) management. This project is known as the turbulator project. The project consists of a 5-ton/hr turbulator that is used to wet CKD prior to its transport to the CKD monofill. This project resulted in a decrease in emissions because the CKD will now be wet prior to transport and the number of vehicle trips to the monofill per day are decreased.

Ash Grove Cement Company modified the petroleum coke feed system. This project involves installation of a 50 ton/hr Gundlach lump breaker in the existing coke hopper. The Gundlach lump breaker does not crush the coke, but rather it contains rollers that will separate the aggregated coke into individual coke nodules. There will not be an increase in emissions as a result of this project. As of June 17, 1997, the Gundlach lump breaker was not installed. Ash Grove Cement Company was required to begin construction by June 13, 1999, and proceed with due diligence until the Gundlach lump breaker is completed otherwise the authority to construct and operate the Gundlach lump breaker would be revoked.

Ash Grove Cement Company installed a second cement cooler in a parallel configuration to the existing cooler. This unit provided the facility with 100% standby capability if the primary cooler fails or is out of service for extended maintenance. The cooler system has been sized so that either cooler #1 or cooler #2 can handle the entire process throughput of the upstream air separator independently. Both coolers are operated simultaneously at reduced rates to improve product-cooling efficiency. There is not an increase in production or emissions as a result of this project, and both coolers are controlled by mill room dust collector DA-9 East.

Ash Grove Cement Company proposed to install a bucket elevator (BE-6) as a stand-by clinker transport method in the event drag conveyor DC-3 or apron conveyor AC-4 failed. Bucket elevator BE-6 may also be used for rail car loading of clinker in response to production shortages at other Ash Grove Cement Company plants. In addition, BE-6 may be used to transfer clinker to outdoor clinker storage piles in the winter during low shipping periods. BE-6 is capable of operating at 55 ton/hr and will be controlled by a new dust collector. The new dust collector will be called DA-19 and is a W.W. Sly model with a BHA pulse jet conversion. DA-19 will be operated at 2500 cfm. This project will result in a slight increase in emissions of approximately 0.18 ton/yr. As of June 17, 1997, BE-6 has not been completely installed. Ash Grove Cement Company was required to begin construction by June 13, 1999, and proceed with due diligence until the BE-6 is completed otherwise the authority to construct and operate the BE-6 would be revoked. In addition, during the permitting action Permit **#853-091775** was incorporated into Permit #2005-02.

On June 6, 1996, Ash Grove Cement Company applied for Permit **#2005-03** to install a 1980 belt conveyor (BC-0) rated at 200 ton/hr to remove clinker or crushed limestone from existing Storage Bin #3 or #5. Crushed limestone transported on this conveyor will be loaded into trucks for in-plant usage or customer sale. Clinker transported on this conveyor will either be loaded into trucks for stockpiling outside or loaded into rail cars for customer shipments. A 1000 cfm pulse jet baghouse (DA-20) will be used to control particulate emissions from the conveyor-to-truck material transfer point. This alteration will result in an increase in particulate emissions of 0.75 ton/yr. As of June 17, 1997,

construction on BE-0 had not begun. Ash Grove Cement Company was required to begin construction by August 10, 1999, and proceed with due diligence until BC-0 is completed otherwise the authority to construct and operate BC-0 would be revoked.

On July 25, 1996, Ash Grove Cement Company applied for Permit #**2005-04** to allow the facility to place a 900 ton/hour portable primary crusher and associated material transfer equipment at the Clark's Gulch Quarry. Ash Grove Cement Company placed this application on hold and Permit #2005-04 was never issued.

On July 29, 1997, the Department revoked Permit #**62-100169**. The Joseph Goder Incinerator Model 7P-UD and a H-250-32 secondary gas burner are no longer at the facility.

On August 8, 1997, Permit #**2005-05** was issued to Ash Grove Cement Company to allow the facility to substitute 250 ton/year of post-consumer recycled glass for 250 ton/year of mined silica. The Department determined that this activity met the statutory definition of an incinerator contained in Montana Code Annotated (MCA) 75-2-103 and the intent of House Bill 380; therefore, Ash Grove Cement Company was required to demonstrate that this activity posed no more than a negligible risk to human health and the environment.

On November 11, 1998, Permit #**2005-06** was issued to Ash Grove Cement Company for replacement of the existing Raymond air separator in the finish cement circuit with a new high efficiency separator. A 35,850 dry cubic feet per minute (dscm) pulse jet dust collector was proposed to control particulate emissions from the separator and to collect "on-spec" product. The product is forwarded on to cement cooler #2. Permit #2005-06 replaced Permit #2005-05.

On February 2, 2001, Permit # **2005-07** was issued to Ash Grove Cement Company for the installation and operation of seven temporary, diesel-fired generators at their facility. These generators are necessary because the high cost of electricity has forced Ash Grove Cement Company to curtail operations at their facility. The operation of the generators would not occur beyond 2 years and was not expected to last for an extended period of time, but rather only for the length of time necessary for Ash Grove Cement Company to acquire a permanent, more economical supply of power. Permit #2005-07 replaced Permit #2005-06.

Ash Grove submitted an application for an administrative amendment to MAQP #2005-07 for the replacement of the existing reverse-air type Dust Collector DA-2 to a pulse-jet cleaning style. The proposed dust collector will reduce particulate matter emissions by half. The project was part of a Supplemental Environmental Project (SEP) required by Administrative Order on Consent Docket Number AQ-07-10. The Department determined the change could be accomplished under the provisions of ARM 17.8.745(1) because the project did not cause or contribute to a violation of any ambient air quality standard and the potential emissions of the project were less than the 15 tons per year de minimis threshold. The dust collector is an insignificant emitting unit listed in Ash Grove's Title V Operating Permit #OP2005-06. **MAQP #2005-08** replaced MAQP #2005-07.

On April 21, 2010, the Department of Environmental Quality (Department) received a request from Ash Grove for an administrative amendment to MAQP #2005-08. Ash Grove requested the removal of the hourly crusher throughput limit and to identify that the crusher has a maximum rated throughput of 400 tons per hour (ton/hr). Because the potential to emit (PTE) was calculated based on emissions from the baghouse operated continuously for 8760 hours per year, and the baghouse operation will not change, removal of the limit will not result in a change to the PTE of the facility. In addition, when using updated AP-42 emission factors, the uncontrolled PTE for the primary crusher is significantly lower at 400 ton/hr than when originally permitted at 300 ton/hr. **MAQP #2005-09** replaced MAQP #2005-08.

Title V Operating Permit

The original operating permit application was submitted July 12, 1995. Additional information was received October 7, 1996, October 16, 1996, March 25, 1997, June 13, 1997, June 26, 1997, and January 30, 1998. Permit #**OP2005-00** was effective October 24, 1998.

On October 6, 1998, Ash Grove Cement Company requested a significant modification to the operating permit to add the requirements for new equipment permitted in Permit #2005-06. The Department incorporated the requirements for the new equipment (a high efficiency air separator) into the operating permit. Permit #**OP2005-01** was issued July 10, 1999, and replaced Permit #OP2005-00.

On August 30, 2001, the Department received a letter from Ash Grove Cement Company requesting a de minimis change to Permit #2005-07 resulting from a modification of the existing Fuel Transfer (FT) Emitting Unit (EU). Ash Grove Cement Company also requested removal of any reference to the Gundlach Lump Breaker (FT-5). Documentation submitted to the Department by Ash Grove Cement Company indicated that the potential fugitive emissions of the proposed project would be less than the 15 tons per year de minimis threshold and would not violate any permit condition or cause or contribute to a violation of air quality standards. In addition, because the Gundlach Lump Breaker was never installed, the Department removed reference to the Gundlach Lump Breaker from the operating permit. Permit #**OP2005-02** replaced Permit #OP2005-01.

On April 23, 2003, Ash Grove Cement Company submitted an operating permit renewal application. The permit action included that information and updated the permit. Permit #**OP2005-03** replaced Permit #OP2005-02.

On January 17, 2006, the Ash Grove Cement Company requested a minor change to the CAM Plan for the Clinker Cooler Stack Baghouse. They requested to change the definition of an excursion as a daily average differential pressure of below 3 inches of water pressure to below 2. This permit action made these changes to the permit as well as addressed minor comments received from Ash Grove Cement Company. Permit #**OP2005-04** replaced Permit #OP2005-03.

D. Current Permitting Action

On March 29, 2010, the Department received a complete Title V Operating permit renewal application from Ash Grove for the Montana City facility. There have been no physical changes to the facility or processes at the facility that have not been covered by previous submittals. All of the equipment and control device information required for the operating permit renewal process has been previously submitted to the Department. In addition, Ash Grove requested some minor changes to language in the Title V Operating Permit.

On September 14, 2007, The Department received a request for an administrative amendment to Permit #OP2005-04, and MAQP 2005-07, for the replacement of the existing reverse-air type Dust Collector DA-2 to a pulse-jet cleaning style. The proposed dust collector will reduce particulate matter emissions by half. The project was part of a Supplemental Environmental Project (SEP) required by Administrative Order on Consent Docket Number AQ-07-10. The Department determined the change could be accomplished under the provisions of ARM 17.8.745(1) because the project did not cause or contribute to a violation of any ambient air quality standard and the potential emissions of the project were less than the 15 tons per year de minimis threshold. **Permit #OP2005-05** was not issued prior to the renewal application being submitted; therefore, Permit action #OP2005-05 is rolled into **Permit #2005-06**. Title V Operating Permit #OP2005-06 replaces Title V Operating Permit #OP2005-04.

E. Taking and Damaging Analysis

House Bill (HB) 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department of Environmental Quality is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 2-10-105, Montana Code Annotated (MCA), the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

F. Compliance Designation

Ash Grove Cement Company was last inspected on August 23, 2010, and was found to be in compliance with all applicable rules and regulations.

Section II. Summary of Emission Units

A. Facility Process Description

The production of Portland cement begins at the quarry. For Ash Grove Cement Company, approximately 85 to 99 percent of the raw materials used in the cement process are combined high and low-grade limestone quarried from Clark's Gulch quarry. Limestone rock and other raw materials are blasted and loaded onto trucks and transported to the crusher or to stockpiles. The raw materials are conveyed from the primary and secondary crushers and delivered by bucket elevator to the storage bins. From the storage bins, the raw materials are conveyed to the ball mill where the ore is ground with water to form a slurry and sent to storage tanks. In the tanks, the slurry is blended thoroughly before entering the kiln. Slurry is pumped to the uphill end of the kiln and heated, evaporating water from the slurry forming clinker.

The Ash Grove Cement Company plant uses a combination of natural gas, coal and/or coke, heavy oils and pitch as fuel sources for the clinker production. When the clinker leaves the kiln, it is cooled, transported by drag chains, pan conveyor and bucket elevator to the clinker bins or outside storage. From there, clinker and gypsum go to the finish ball mill, where it is ground together with gypsum to produce Portland cement. The final cement product is conveyed to storage silos where it is loaded into railroad cars, bulk trucks, or bagged and loaded onto trucks.

B. Emission Units and Pollution Control Device Identification

Section II of the operating permit contains a summary table of emission units and the corresponding pollution control device or practice.

C. Categorically Insignificant Sources/Activities

The Administrative Rules of Montana (ARM) 17.8.1201(22)(a) defines an insignificant emissions unit as one that emits less than 5 tons per year of any regulated pollutant, has the potential to emit less than 500 pounds per year of lead or any hazardous air pollutant, and is not regulated by any applicable requirement other than a generally applicable requirement. The list of insignificant emitting units at the Ash Grove facility are summarized in the following table.

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

Section III. Explanation of Operating Permit Conditions

A. Emission Limits and Standards

Applicable requirements for significant emission units are listed after each emission unit. At the time of permit issuance, the requirements listed underneath each emission unit or group of emission units are believed to be the applicable requirements. The Department does not intend for the facility-wide conditions to supersede the applicable requirements listed below each emission unit or group of emission units.

The following conditions or compliance demonstrations in this operating permit were derived from Ash Grove Cement Company's Preconstruction Permit: Cement Kiln (Kiln) - Section III.G.1, 2, 4, 7, and 16; Convey/Primary Crushing (CPC) - Section III.D.2, 3, and 4; Transfer to/from Finish Mill (TFM) - Section III.N.2, and 3; Product Separator and Cement Coolers (PSC) - Section III.H.2 and 3; and Air Separator (AS) - Section III.B.1, 2, 3, 6, and 7. The authority for these conditions or compliance demonstrations is ARM 17.8.749 or ARM 17.8.752.

B. Monitoring Requirements

The Administrative Rules of Montana (ARM) 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required by any applicable requirement to be contained in the operating permit. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting and compliance certification, sufficient to assure compliance, do not require the permit to impose the same level of rigor for all emission units. Furthermore, they do not require extensive testing or monitoring to assure compliance with the applicable requirements for emission units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirements for an insignificant emission unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo (i.e., no monitoring) will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

The permittee can rely on the results of periodic monitoring to certify compliance. However, compliance with the monitoring requirements in the operating permit does not prohibit the use of other approved methods for determining compliance with an applicable emission limit or requirement. Furthermore, Ash Grove Cement Company will not be shielded from any enforcement action, even if the required monitoring methods listed in the permit indicates compliance with the applicable requirement, if an approved method demonstrates noncompliance. The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards.

C. Test Methods and Procedures

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm its compliance status. The Department

determined the frequency of emission testing for particulate and opacity based on the potential to emit of each emission unit as well as the requirements applicable to each emission unit.

D. Reporting Requirements

Reporting requirements are included in the permit for each emission unit and Section V of the operating permit, "General Conditions", explains the reporting requirements. However, the permittee is required to submit semi-annual and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

The air separator emission unit (AS) is subject to the requirements of 40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants and the notification and recordkeeping requirements of 40 CFR 60.7. Permit #2005-06 Section II.A.12 and Section II.D contain requirements for Ash Grove Cement Company to provide written notification of construction and start-up dates for the air separator. If the permittee complies with the requirements in Permit #2005-07 in Section II.D. 5, 6, and 7 (Section III.U.4, 5, and 6 of #OP2005-02) the notification requirements of 40 CFR 60.7(a) should be satisfied (40 CFR 60.7(f)).

E. Recordkeeping Requirements

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least five years following the date of the generation of the record.

F. Public Notice

In accordance with ARM 17.8.1232, a public notice was published in the *Independent Record* newspaper on or before May 6, 2011. The Department provided a 30-day public comment period on the draft operating permit from May 6, 2011 through June 6, 2011. ARM 17.8.1232 requires the Department to keep a record of both comments and issues raised during the public participation process.

Summary of Public Comments

Person/Group Commenting	Comment	Department Response
No public comments were submitted		

G. Draft Permit Comments

Summary of Permittee Comments

Permit Reference	Permittee Comment	Department Response
Sections III.B.4 and C.5	<p>The language in these sections is unnecessary for sources controlled by baghouses because Ash Grove is required to perform daily visual checks for visible emissions from all baghouses in accordance with the Pollution Control Device Inspection and Maintenance Plan included in Appendix E of the permit. Also, Method 5 testing is required once during each permit term.</p> <p>Ash Grove believes this section unnecessarily complicates the permit and requests these sections, along with the corresponding recordkeeping sections, be removed.</p>	<p>The Department will leave the language as stated in the previous version of Ash Grove’s Title V Operating Permit. Sections III.B.4, III.B.6, III.C.5., and III.C.7 will cover the compliance demonstrations for visible emissions at the Air Separator and the Clinker Cooler</p>
Sections III.C.14.d, G.26.e, and N.14.c	<p>Ash Grove is unclear what is meant by “A summary of any reporting required by 40 CFR Part 64...” For clarification, Ash Grove suggests that a separate reporting requirement be included to submit any reports required by Part 64 and the CAM plans.</p>	<p>The Department will change the language clarifying that Ash Grove is required to submit reporting requirements required by Part 64 (which is CAM)</p>

Section III.E.3	<p>Ash Grove requests the language be modified as follows:</p> <ul style="list-style-type: none"> • Include an allowance to shut down and repair the operating equipment in lieu of performing a Method 9 opacity reading. Ash Grove requests the following language: “If visible emissions are observed during the visual survey, Ash Grove must <u>either</u> conduct a Method 9 source test <u>or shut down the equipment for repairs</u>. The Method 9 source test <u>or source shutdown</u> must begin within one hour of any observation of visible emissions”. • Also, Ash Grove is unclear about compliance with this requirement. The second paragraph seems to indicate that if the visual survey is missed during one single reporting period, the facility must then go to the Method 9 option (“If the visual surveys are not performed once per calendar week...then Ash Grove shall perform the Method 9 source tests...”.) A missed visual survey should be considered a deviation, not prevent the facility from using that compliance option. Ash Grove requests that this paragraph be removed as the initial paragraph provides the requirement to perform either the visual surveys or Method 9 readings. 	The language was modified as appropriate.
Section III.E.8.a., F.7.a., H.11.a., K.5., L.9., M.9.b, N.14.b, and O.9 b.	Ash Grove requests that the language in these sections be changed to be consistent with other sections (e.g. Section III.B.12.a), which only require reporting of source testing performed during the reporting period.	The Department changed the language to be consistent throughout the permit.

Section III.F.3	Ash Grove believes that continued compliance with the opacity limit for the Fuel Transfer equipment has been adequately demonstrated since the initial Title V permit was issued. Ash Grove requests the requirement to perform semi-annual Method 9 readings be changed to be consistent with the requirements for the Fuel Conveyors (FC) in Section III.E.3 (as modified by our comments above) because these sources are similar, typically operate together and process the same material	The language was modified as appropriate.
Section III.G.21 and N.11	There appears to be a typographic error in this requirement. Ash Grove recommends using the language in Section III.C.12	The language was amended as appropriate.
Section III.G.26.b	It appears there is a typographic error in the sections referenced here. Ash Grove believes the reference should be changed from “Section III.G.7 and Section III.G.9” to “Section III.G.8”	The Department corrected the error.
Section III.G.26.c	It appears there is a typographic error in the sections referenced here. Ash Grove believes the reference to Section III.G.16 should be changed to Section III.G.19	The Department corrected the error
Section III.G.26.d	This requirement is redundant in that it requires a semi-annual summary of the semi-annual report required by Section III.G.23. Ash Grove requests this section be removed.	The Department has removed this requirement as it is already required in III.G.23

Section III.I.3	<p>This visible survey language is unrealistic when applied to plant roads. According to the visual survey requirement, if ANY visible emissions are noted during the weekly check, a Method 9 test must be performed. To require a Method 9 test for any visible emissions from the miles of roads on Ash Grove’s property is unreasonable. Even a road whose fugitive emissions are well controlled with water and/or chemical dust suppressants may exhibit minor visible emissions at the road surface</p> <p>In addition, Ash Grove is unclear how we would comply with the visual survey requirement. For instance, because a Method 9 is performed at a stationary point, how many Method 9 tests must be performed to comply with this requirement if visible emissions are noted on one mile of roadway? Alternately, if Ash Grove chooses to comply with the Method 9 option, how many Method 9 tests would be required during each semi-annual period?</p> <p>Ash Grove requests this language be replaced with the language in the current Operating Permit (#OP2005-04) with one exception. The visual road dust survey should be limited to active roads. The following revision to Section III.I.3 of the current permit is suggested:</p> <p>“Once per calendar week during daylight hours, Ash Grove shall visually survey <i>active roads</i> for any sources of excessive emissions.”</p>	The Department modified the language as appropriate
Section III.I.8.a.	Ash Grove is unsure what is meant by “A summary of the visual surveys”. Ash Grove request this language be changed to “A summary of any deviations from the visual survey requirement”	The Department changed the language as appropriate
Section III.K.3	A log of the Method 9 tests is unnecessary. Ash Grove requests the first sentence in this section be removed to be consistent with source test recordkeeping requirements elsewhere in the permit.	The recordkeeping requirement was changed to be consistent with source test recordkeeping requirements throughout the permit
Section III.K.5	As identified above, the log required by Section III.K.3 is unnecessary. Ash Grove requests this section be changed to be consistent with Section III.B.12.a	The reporting requirement was changed to be consistent with source test reporting requirements throughout the permit.

Appendix E	<p>This appendix requires Ash Grove to submit a Pollution Control Device Inspection and Maintenance Plan to the Department. The appendix also specifies exactly what needs to be included and the frequency of each of the checks. Ash Grove believes that Department guidance as to the plan content should not be part of the Operating Permit. To allow Ash Grove, and the Department, more operational flexibility in the content of the plan, Ash Grove requests that Appendix E be removed from the permit and replaced with a condition requiring Ash Grove submit a pollution control device inspection and maintenance plan for the Department's approval. The information in Appendix E can be used as guidance for developing and approving the plan but shouldn't be a part of the permit.</p>	<p>Since the Department agreed to leave the former visual survey language in Sections III.B.4 and III.C.5, based on the requirements to conduct visual surveys in Appendix E, the Department determined that Appendix E would remain in the permit instead of on file as guidance.</p>
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Summary of EPA Comments

Permit Reference	EPA Comment	Department Response
	No comments were submitted	

Reason	Rule Citation	
Rules that are always applicable to a major source and may contain specific requirement for compliance.	ARM 17.8.204 ARM 17.8.205 ARM 17.8.206 ARM 17.8.326	
These regulations are applicable requirements to specific emissions units; therefore, a facility wide shield will not be granted.	ARM 17.8.324 40 CFR 60, Subpart A 40 CFR 60, Subpart F 40 CFR 60, Subpart Y 40 CFR 60, Subpart OOO	
These rules include either a statement of purpose, applicability statement, regulatory definitions, or a statement of incorporation by reference. Therefore, facility wide permit shields will not be granted for these rules.	ARM 17.8.201 ARM 17.8.302 ARM 17.8.301 ARM 17.8.330 ARM 17.8.401 ARM 17.8.402 ARM 17.8.403 ARM 17.8.601 ARM 17.8.605 ARM 17.8.806 ARM 17.8.807 ARM 17.8.901 ARM 17.8.902 ARM 17.8.904	ARM 17.8.1103 ARM 17.8.1101 ARM 17.8.1001 ARM 17.8.1002 ARM 17.8.1004 40 CFR 52 40 CFR 61, Subpart A 40 CFR 63, Subpart A 40 CFR 63, Subpart B 40 CFR 63, Subpart D 40 CFR 63, Subpart E
Repealed Regulations	ARM 16.8.301 ARM 16.8.401 <i>et seq.</i> ARM 16.8.805 ARM 16.8.1104	ARM 16.8.1414 ARM 16.8.1419 ARM 17.8.1601 ARM 16.8.1904
Shields will not be granted for regulations that do not have specific requirements for major sources. These regulations contain requirements for state and local authorities.	MCA 75-2-101 <i>et seq.</i> MCA 75-2-201 <i>et seq.</i> MCA 75-2-301 <i>et seq.</i> MCA 75-2-401 <i>et seq.</i> MCA 75-2-501 <i>et seq.</i>	42 U.S.C. Section 7412 42 U.S.C. Section 7651-7651o 42 U.S.C. Section 7414(a)(3) 42 U.S.C. Section 7429 42 U.S.C. Section 7511b(e) 42 U.S.C. Section 7511b(f) 42 U.S.C. Section 7671-7671q 42 U.S.C. Section 7661c(e)
These regulations are not applicable to the permittee pursuant to ARM 17.8.1201(10); a facility wide shield will not be granted.	40 CFR 55 40 CFR 79 40 CFR 69 40 CFR 80	

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards

Ash Grove Cement Company is subject to 40 CFR 63, Subpart LLL-*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*. The compliance date for an owner or operator of an existing affected source was June 14, 2002. Ash Grove Cement Company requested the Department's concurrence to classify the Ash Grove -Montana City Plant as an "area source". In a letter dated February 25, 2002, the Department concurred that the Ash Grove -Montana City Plant was an area source under Subpart LLL. As identified in Subpart LLL, the kiln is subject to the dioxin and furan emission limits and the Particulate Matter Control Device (PMCD) inlet temperature-operating limit to control dioxin and furan emissions.

40 CFR 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines*, pertains to this facility because the facility contains a 105 hp stationary Diesel Engine (auxiliary kiln drive).

This facility dispenses gasoline into motor vehicles, and is an area source; therefore, the facility is subject to 40 CFR 63, Subpart CCCCC, *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities*. This facility dispenses less than 10,000 gallons of gasoline a month.

As of issuance of this permit, the Department is unaware of any other current or proposed MACT standards that are applicable to this facility.

B. NESHAP Standards

As of the issuance of this permit, the Department is unaware of any proposed or pending NESHAP standards, in addition to those that are listed, that are applicable to this facility.

C. NSPS Standards

The air separator, bucket elevator (BE-6) and belt conveyor (BC-0) are subject to the requirements of 40 CFR 60, Subpart F - *Standards of Performance for Portland Cement Plants*.

Emitting units FT, FC, and CCP are subject to 40 CFR 60, Subpart Y, *Standards of Performance for Coal Preparation Plants*.

Emitting unit CPC contains sources belt conveyor (FB-1) and primary crusher (AC-1) and therefore are subject to 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants*.

As of the issuance of this permit, the Department is unaware of any additional proposed or pending NSPS standards that are applicable to this facility.

D. Risk Management Plan

Currently, Ash Grove Cement Company does not exceed the minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 for any facility process. Consequently, this facility is not required to submit a Risk Management Plan. If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply 3 years after the date on which a regulated substance is first listed under 40 CFR 68.130 or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.

E. Compliance Assurance Monitoring (CAM) Plan

An emitting unit located at a Title V facility that meets the following criteria listed in ARM 17.8.1503 is subject to Subchapter 15 and must develop a CAM Plan for that unit:

- The emitting unit is subject to an emission limitation or standard for the applicable regulated air pollutant (other than emission limits or standards proposed after November 15, 1990, since these regulations contain specific monitoring requirements);
- The emitting unit uses a control device to achieve compliance with such limit; and
- The emitting unit has potential pre-control device emission of the applicable regulated air pollutant that are greater than major source thresholds/

Ash Grove currently has three emitting units that meet all the applicability criteria in ARM 17.8.150: The Kiln Stack Electrostatic Precipitator, the Finish Mill House Baghouse, and the Clinker Cooler Stack Baghouse. The CAM Plans for these units are located in Appendixes F, G, and H, respectively in Ash Groves Title V Operating Permit.

F. Prevention of Significant Deterioration (PSD) and Title V Greenhouse Gas Tailoring Rule

On May 7, 2010, EPA published the “light duty vehicle rule” (Docket # EPA-HQ-OAR- 2009-0472, 75 FR 25324) controlling greenhouse gas (GHG) emissions from mobile sources, whereby GHG became a pollutant subject to regulation under the Federal and Montana Clean Air Act(s). On June 3, 2010, EPA promulgated the GHG “Tailoring Rule” (Docket # EPA-HQ-OAR-2009-0517, 75 FR 31514) which modified 40 CFR Parts 51, 52, 70, and 71 to specify which facilities are subject to GHG permitting requirements and when such facilities become subject to regulation for GHG under the PSD and Title V programs.

Under the Tailoring Rule, any PSD action (either a new major stationary source or a major modification at a major stationary source) taken for a pollutant or pollutants other than GHG that would become final on or after January 2, 2011, would be subject to PSD permitting requirements for GHG if the GHG increases associated with that action were at or above 75,000 TPY of carbon dioxide equivalent (CO₂e) and greater than 0 TPY on a mass basis. Similarly, if such action were taken, any resulting requirements would be subject to inclusion in the Title V Operating Permit. Facilities which hold Title V permits due to criteria pollutant emissions over 100 TPY would need to incorporate any GHG applicable requirements into their operating permits for any Title V action that would have a final decision occurring on or after January 2, 2011.

Starting on July 1, 2011, PSD permitting requirements would be triggered for modifications that were determined to be major under PSD based on GHG emissions alone, even if no other pollutant triggered a major modification. In addition, sources that have not been considered PSD major sources based on criteria pollutant emissions would become PSD major sources if their facility-wide potential emissions equaled or exceeded 100,000 TPY of CO₂e and 100 or 250 TPY of GHG on a mass basis depending on their listed status in ARM 17.8.801(22). With respect to Title V, sources not currently holding a Title V permit that have potential facility-wide emissions equal to or exceeding 100,000 TPY of CO₂e and 100 TPY of GHG on a mass basis would be required to obtain a Title V Operating Permit.

Ash Grove’s potential emissions exceed the GHG major source threshold of 100,000 TPY of CO₂e for both Title V and PSD under the Tailoring Rule.