

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT**

Air, Energy and Mining Division
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901

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		PM, SO ₂ , NO _x , THC, O ₂ , Hg, Inlet Temp to PMCD
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		MAQP #2005-16
New Source Performance Standards (NSPS)	X		40 CFR 60 Subpart F; Subpart Y; Subpart OOO
National Emission Standards for Hazardous Air Pollutants (NESHAPS) Part 61	X		Subpart M
Maximum Achievable Control Technology (MACT)	X		40 CFR 63 Subpart LLL; Subpart ZZZZ; Subpart CCCCC
Major New Source Review (NSR)		X	
Prevention of Significant Deterioration (PSD)	X		
Risk Management Plan Required (RMP)		X	
Acid Rain Title IV		X	

Compliance Assurance Monitoring Plan (CAM)	X		Appendix F in #OP2005-12
Montana Regional Haze Federal Implementation Plan (FIP)	X		40 CFR 52.1396
State Implementation Plan (SIP)	X		General SIP

Table of Contents

SECTION I. GENERAL INFORMATION	4
A. PURPOSE	4
B. FACILITY LOCATION	4
C. FACILITY PERMITTING HISTORY	4
D. CURRENT PERMITTING ACTION	12
E. TAKING AND DAMAGING ANALYSIS	13
F. COMPLIANCE DESIGNATION	14
SECTION II. SUMMARY OF EMISSION UNITS.....	15
SECTION III. PERMIT CONDITIONS	17
A. EMISSION LIMITS AND STANDARDS	17
B. MONITORING REQUIREMENTS.....	17
C. TEST METHODS AND PROCEDURES.....	18
D. REPORTING REQUIREMENTS.....	18
E. RECORDKEEPING REQUIREMENTS.....	18
F. PUBLIC NOTICE.....	18
G. DRAFT PERMIT COMMENTS.....	18
SECTION IV. NON-APPLICABLE REQUIREMENTS ANALYSIS.....	20
SECTION V. FUTURE PERMIT CONSIDERATIONS	23
A. MACT/NESHAP STANDARDS	23
B. NSPS STANDARDS.....	23
C. RISK MANAGEMENT PLAN	23
D. COMPLIANCE ASSURANCE MONITORING (CAM) PLAN	24
F. PSD AND TITLE V GREENHOUSE GAS TAILORING RULE.....	24

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 applications submitted by Ash Grove Cement Company (Ash Grove) on April 23, 2003, March 29, 2010, March 15, 2016, December 6, 2021, a significant modification request on June 5, 2018, an administrative amendment request on June 28, 2019, and numerous de minimis notifications. Additional information and dates information was received relative to this permit is also described in the permitting history below.

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 modify 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 were dedicated to providing dust control to auxiliary equipment (DA-9 East), while the three remaining compartments were dedicated to controlling emissions from the mill sweep function (DA-9 West). The existing 9200 cfm booster fan was utilized as the DA-9 East discharge fan while an existing 14,300 cfm fan was 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 was known as the turbulator project. The project consisted of a 5-ton/hr turbulator 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 were decreased.

Ash Grove Cement Company modified the petroleum coke feed system. This project involved 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 separate the aggregated coke into individual coke nodules. There was no 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 was 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 controlled by a new dust collector. The new dust collector was called DA-19 and is a W.W. Sly model with a BHA pulse jet conversion. DA-19 operates at 2500 cfm. This project resulted in a slight increase in emissions of approximately 0.18 ton/yr. As of June 17, 1997, BE-6 had 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 modification resulted 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 Montana Department of Environmental Quality (DEQ) 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. DEQ 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 (dscfm) 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. DEQ 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 at that time. 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, DEQ 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 did not change, removal of the limit does 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 was significantly lower at 400 ton/hr than when originally permitted at 300 ton/hr. **MAQP #2005-09** replaced MAQP #2005-08.

On October 19, 2010, DEQ received a letter from Ash Grove notifying DEQ of two proposed de minimis changes at the plant: replacement of the existing electrostatic precipitator (ESP) on the cement kiln with a pulse-jet baghouse, and installation of a used oil-fired heater in the maintenance shop in the main office. Both changes could be accomplished under the provisions of ARM 17.8.745(1) because the projects will not cause or contribute to a violation of any ambient air quality standards and the potential emissions of the projects are less than the five tons per year de minimis threshold.

On December 16, 2013, DEQ received a permit application from Ash Grove for a modification to MAQP #2005-09. Ash Grove requested a production increase to the existing facility, achieved through modernization of the existing plant including a conversion from a "wet" process to a "dry" process for the manufacture of Portland cement. Additional information was received after December 16, 2013, up until May 19, 2014, at which time DEQ determined the application "complete". The permit action includes information to process the MAQP application for both New Source Review and Prevention of Significant Deterioration (PSD) requirements. This permit action included language for the existing facility up to the time where the new equipment begins operation and also all of the conditions that become effective after the modernization project is completed. **MAQP #2005-10** replaced MAQP #2005-09.

On September 30, 2014, DEQ received a request from Ash Grove for a modification to MAQP #2005-10. Additional information regarding the modification request was received throughout the incompleteness period up until October 16, 2015, at which time the application was considered complete. The modification request asked for clarification and changes related to the solid fuel mill stack CEMS and CPMS requirements. **MAQP #2005-11** replaced MAQP #2005-10.

On March 2, 2016, DEQ received a request from Ash Grove for a modification to MAQP #2005-11. When MAQP #2005-10 was issued for the modernization project, it required that the Best Available Control Technology (BACT) be reviewed and modified as appropriate no later than 18 months prior to commencement of construction. As Ash Grove did not commence construction within 18 months of the issuance of MAQP #2005-10, Ash Grove submitted a new BACT analysis which provides an additional 18-month period from the final date of issuance of MAQP #2005-12 for commencement of construction. MAQP #2005-11 was issued after the BACT analysis which was part of MAQP #2005-10 but MAQP #2005-11 did not address revalidation of the BACT analysis. **MAQP #2005-12** replaced MAQP #2005-11.

On September 15, 2017, DEQ received a request from Ash Grove for a modification to MAQP #2005-12. When MAQP #2005-12 was issued it required Best Available Control Technology (BACT) be reviewed and modified as appropriate no later than 18 months prior to commencement of construction for the replacement kiln project. As Ash Grove will not commence construction within 18 months of the issuance of MAQP #2005-12, Ash Grove submitted a new BACT analysis which will provide an additional 18 month period from the final date of issuance of MAQP #2005-13 for commencement of construction. Additionally, references to the Federal Implementation Plan and Regional Haze Best Available Retrofit Technology (BART) limits have been removed from this MAQP as they are already included in the Title V Operating permit. **MAQP #2005-13** replaced MAQP #2005-12.

On June 5, 2018, DEQ received a request from Ash Grove for a modification to MAQP #2005-13. DEQ issued an incompleteness letter on June 15, 2018. The response to the incompleteness letter was received on June 29, 2018. A revised incompleteness response was also received on July 9, 2018. Ash Grove had a permit condition limiting post-consumer glass usage to 250 tons per year (tpy). With this request, Ash Grove requested an increase to 800 tpy. The incineration of glass which contains label residue was considered to be incineration as defined in MCA 75-2-103(12), and as such required a human health risk assessment. A human health risk assessment was conducted in 1997 when Ash Grove first proposed using glass as a raw material. Ash Grove provided a revised health risk assessment for glass usage at the higher rate. The MAQP also contained conditions for a possible future kiln, and the 250 tpy glass limit for the future new kiln was also increased to 800 tpy. A request was also received as part of the July 9, 2018 correspondence, to update the MAQP based on the procedures in Appendix A of the Consent Decree for *United States v. Ash Grove Cement Co.*, Case No. 2:13-cv-02299-JTM-DJW, doc. 27 (D. Kan. 8/14/13), as amended by doc. 28 on 10/16/15. (Consent Decree). Ash Grove requested the emission limit for NOx for the kiln be lowered from 8.0 lb/ton to 7.5 lb/ton. **MAQP #2005-14** replaced MAQP #2005-13.

On April 19, 2019, DEQ received a request from Ash Grove for a modification to MAQP #2005-14. When MAQP #2005-13 was issued it required Best Available Control Technology (BACT) be reviewed and modified as appropriate no later than 18 months prior to commencement of construction for the replacement kiln project. Ash Grove did not commence construction within 18 months of the issuance of MAQP #2005-13. Ash Grove submitted a new BACT analysis which provided an additional 18-month period from the final date of issuance of MAQP #2005-15 for commencement of construction. **MAQP #2005-15** replaced MAQP #2005-14.

On April 27, 2020, the Consent Decree for *United States v. Ash Grove Cement Co.*, Case No. 2:13-cv-02299-JTM-DJW, doc. 27 (D. Kan. 8/14/13), as amended by doc. 28 on 10/16/15), was officially terminated since Ash Grove had met all requirements.

On August 10, 2021, DEQ received a request from Ash Grove for a modification to MAQP #2005-15. The purpose of the application was to review and update the BACT analysis as appropriate for the plant modernization project. When MAQP #2005-10 was issued on September 16, 2014, authorizing a plant modernization project, the authorization to commence construction of the project expired after 18 months. If construction has not commenced prior to expiration of the 18-month window, DEQ requires that BACT be reviewed and modified as appropriate to renew the construction authority. Since Ash Grove did not commence construction within 18 months of the issuance of MAQP #2005-10, Ash Grove submitted a new BACT analysis via a permit modification application on March 2, 2016. The revision of the permit provided an additional 18-month period from the final date of issuance of MAQP #2005-12 for commencement of construction. The conclusions and limitations of BACT remained the same in MAQP #2005-12 as in MAQP #2005-10. This process to review and modify the BACT analysis as appropriate occurred again via applications received September 15, 2017, and April 19, 2019. The MAQP modification application received August 10, 2021, again reviewed and renewed the BACT analysis and allows for an additional 18 months to commence construction beginning upon issuance of the final permit. **MAQP #2005-16** replaced MAQP #2005-15.

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. DEQ 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, DEQ received a letter from Ash Grove Cement Company requesting a de minimis change to OP2005-01 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 DEQ 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, DEQ 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.

On September 19, 2007, DEQ 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 reduced 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. DEQ 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 was rolled into **Permit #OP2005-06**.

On March 29, 2010, DEQ received a complete Title V Operating permit renewal application from Ash Grove for the Montana City facility. There were 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 was previously submitted to DEQ. In addition, Ash Grove requested some minor changes to language in the Title V Operating Permit. Title V Operating **Permit #OP2005-06** replaced Title V Operating Permit #OP2005-04.

De Minimis requests were also received on May 15, 2012, and August 28, 2012, and these were each approved by DEQ. Once the equipment associated with the May 15, 2012, request is operating, Ash Grove Cement Company will have one year to submit an update to the Title V Operating Permit. A request was also received by DEQ on September 14, 2012, requesting an extension to the applicable Portland Cement NESHAP particulate limit and related monitoring.

On August 30, 2012, Ash Grove requested a minor change to the CAM Plan for the Clinker Cooler Stack Baghouse. They requested a change from a differential pressure operating range of 2 to 10 inches of water column, to 1 to 10 inches of water column based on the most recent historical data. The basis for the change was based upon the start-up history of the system prior to the filter bags having any dust cake to create adequate pressure drop to meet the low end of the permitted operating range. Without the change, compliance issues would likely occur associated with these normal start-up occurrences. The transducer accuracy was also changed from +/- 1 inch of water column to +/- 0.1 inch of water column. This will ensure the delta pressure can effectively be monitored below 1 inch of water column. Appendix H was modified to reflect the CAM Plan changes for the Clinker Cooler Stack Baghouse. Title V Operating Permit **#OP2005-07** replaced Title V Operating Permit #OP2005-06.

On November 30, 2012, DEQ received an application to modify Title V Operating Permit #OP2005-07. The application included the following modifications:

- Replace the existing electrostatic precipitator (ESP) on the cement kiln (EU006) with a jet pulse baghouse.

- Add a Lime Unloading System with lime silo and associated dust collector in support of a proposed Semi-Dry SO₂ scrubbing system
- Modify the Cement Kiln Dust (CKD) Load out system and associated dust collectors
- Revise the Pollution Control Device Inspection and Maintenance Plan to identify the additional dust collectors being installed with this project
- Install a used-oil-fired heater in the maintenance shop in the main office (insignificant emitting unit)

It was determined that the above modifications satisfy the definition of de minimis under Administrative Rules of Montana (ARM) 17.8.745 and would not require a Montana air quality permit, and therefore, in accordance with ARM 17.8.1224(1), could be made without modifying the facility's Title V operating permit. However, the previous version of the operating permit (#OP2005-07) included a CAM plan that identified the ESP as the control equipment on the kiln. Updating the CAM plan to replace the ESP with the proposed jet pulse baghouse, qualifies as a significant modification to the operating permit in accordance with ARM 17.8.1227(1). This permitting action modified #OP2005-07 to update the kiln CAM plan and add the above listed changes in emitting units.

In addition, the revised Portland Cement MACT Standard and the Regional Haze Federal Implementation Plan (FIP) were recently promulgated. In response, Ash Grove requested that the associated applicable requirements be updated in Title V Operating permit OP#2005-08. Title V Operating Permit **#OP2005-08** replaced Title V Operating Permit #OP2005-07.

On March 15, 2016, DEQ received an application to renew Title V Operating Permit #OP2005-08. The application did not ask to include the future replacement kiln and therefore only conditions from the Montana Air Quality Permit associated with existing equipment are included. If the new kiln and associated equipment are constructed in the future, the Operating Permit will be updated at that time. Ash Grove also asked to provide "streamlining" in several instances where very similar requirements were replaced by the most stringent condition to avoid nearly identical permit conditions. Ash Grove also requested the removal of two CAM plans as these two units were no longer subject to the CAM rules due to the use of Continuous Parametric Monitoring Systems. Title V Operating Permit **#OP2005-09** replaced #OP2005-08.

On June 5, 2018, DEQ received a request from Ash Grove for a modification to MAQP #2005-13 and #OP2005-09. This permitting action provided for the same increase in recycled glass usage as identified and included in MAQP #2005-14. This action modifies the condition to allow up to 800 tons of recycled glass in the kiln. The health risk assessment required by the use of recycled glass, is contained in MAQP #2005-14 and therefore, was not added to the Title V Operating Permit. Title V Operating Permit **#OP2005-10** replaced #OP2005-09.

On June 28, 2019, DEQ received a request from Ash Grove for an administrative amendment to change the responsible official. This permitting action identified Chris Hines as replacing Richard Johnson. This action also corrected the quantity of recycled glass in condition Section III.G.6 in the associated table, correcting this from 250 to 800 tons of recycled glass per rolling 12-month period. Title V Operating Permit **#OP2005-11** replaced #OP2005-10.

De Minimis Requests:

Ash Grove has also submitted a number of requests which are identified as “De Minimis” under the Administrative Rules of Montana (ARM) 17.8.745. Since the March 29, 2010, renewal application was received De Minimis requests were submitted on October 18, 2010 (two were received), November 11, 2010, May 14, 2012 (supplement to October 18 submittal), August 24, 2012, July 3, 2013, August 7, 2013, December 30, 2013, January 14, 2014 (two were received), September 26, 2014, February 25, 2015, December 29, 2017 (two actions), February 21, 2019, September 11, 2019, and March 10, 2020 (two actions). A De Minimis request was also received on March 9, 2021.

D. Current Permitting Action

On December 6, 2021, DEQ received a Title V operating permit renewal application from Ash Grove for the Montana City facility and additional information on April 7, 2022. There were several permit actions and de minimis actions since the previous operating permit renewal that was issued on June 20, 2017, as Operating Permit #OP2005-09.

Several MAQP application requests were submitted to update the BACT on the future replacement kiln. The current operating permit renewal application asked not to include the future replacement modernization kiln and therefore only conditions from the Montana Air Quality Permit associated with existing equipment are included. If the new kiln and associated equipment are constructed in the future, the operating permit will be updated at that time.

There were several de minimis actions since the previous operating permit renewal was issued. Only the following de minimis action requires a change to the operating permit:

- On December 29, 2017, and January 4, 2018, Ash Grove submitted a notification of two de minimis projects to DEQ. On January 5, 2018, DEQ determined that both projects were de minimis. One project was for the installation of a retractable truck loading spout with an integral pulse-jet dust collector, which controls previously uncontrolled fugitive emissions during truck loading was a de minimis action for the insignificant emission unit IEU10 representing the Product Loadout 2 (PLO2). PLO2 is made up of conveyor belt BC-0, and baghouses DA-19 and DA-20 which control truck end and the bin end of the conveyor, respectively. A new retractable loading spout (DCL) with an integral pulse jet dust collector was installed as part of the project. It should be noted that the retractable loading spout (DCL) and the integral pulse jet dust collector of PLO2 became affected 40 CFR 60 Subpart F facilities at the time of the de minimis action. PLO2 can no longer be considered an insignificant source; therefore, this permit renewal includes the applicable requirements to PLO2 as EU18. Also, note that monitoring opacity for this baghouse in §60.64(b)(3) relies on requirements in §63.1350(f) which relies on a monthly Method 22 and allows a decreased frequency if visible emissions are not observed.

The second de minimis project was for the modification of the CKD handling system which removed the incline screws, installed a new CKD surge bin and pneumatic transport to the SO₂ scrubber, replace the dilute phase pneumatic transport with a dense phase transport system and remove the existing cyclones between the kiln and the scrubber.

- On March 1, 2019, DEQ determined that replacement of the secondary hammer mill crusher, an insignificant source, with an impact crusher controlled by the same existing baghouse, DA-3, was a de minimis change. The secondary impact crusher is not an insignificant source since it is a 40 CFR Part 60, Subpart OOO affected source. This change is reflected in this permit. Subpart OOO in §60.670(d) exempts this replaced impact crusher from the standards for particulate matter, monitoring of operations, and testing. The only Subpart OOO reporting requirement is notification of the actual date of initial startup.

All other physical or operational changes to the facility or processes that have occurred have been addressed in the permitting process. All of the equipment and control device information required for the operating permit renewal process was previously submitted to DEQ. In addition, Ash Grove requested some minor changes to language in the operating permit. The application included a new Pollution Control Device Inspection and Maintenance Plan in Appendix D of the application and is included as Appendix E of #OP2005-12. Title V Operating Permit **#OP2005-12** replaces Title V Operating Permit #OP2005-11.

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, DEQ is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 2-10-105, Montana Code Annotated (MCA), DEQ 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, DEQ determined there are no taking or damaging implications associated with this permit action.

F. Compliance Designation

Ash Grove was last inspected on August 19, 2021, and was found to be in compliance at that time with all applicable rules and regulations. Ash Grove has since submitted notifications of several deviations from #OP2005-11 conditions; however, none of these deviations resulted in enforcement action.

Section II. Summary of Emission Units

A. Facility Process Description

The production of portland cement begins at the quarry. For Ash Grove, approximately 85 to 99 percent of the raw materials used in the cement process are combined high and low-grade limestone quarried from Clark's Gulch quarry. Limestone rock and other raw materials are blasted and loaded onto trucks and transported to the crusher or to stockpiles. The raw materials are conveyed from the primary and secondary crushers and delivered by bucket elevator to the storage bins. From the storage bins, the raw materials are conveyed to the ball mill where the ore is ground with water to form 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 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 is summarized in the following table.

Emissions Unit ID Name		Description
IEU01	CCP	Coal/Coke Preparation
IEU02	CDA	Clinker Drag Conveyor A
IEU03	CDB	Clinker Drag Conveyor B
IEU04	CSA	Transfer to/from Cement Storage Silos A
IEU05	CSB	Transfer to/from Cement Storage Silos B
IEU07	DT	Dust Return System
IEU08	EC	Clinker Bucket Conveyor
IEU09	LS/416.BF3	Lime Silo

Emissions Unit ID Name		Description
IEU11	PST	Petroleum Storage Tanks
IEU12	QA	Quarry Activities
IEU13	RT	Raw Material Transfer
IEU14	SC	Slag/Silica/Clinker Conveyors
IEU15	SLA	Storage Loadout A
IEU16	SLM	Specialty Bin
IEU17	SLN	Storage Loadout at New Silos
IEU18	TFS	Transfer from Silos
IEU19	TSC	Transfer/Secondary Crushing
IEU20	VE	Vehicle Emissions
IEU21	OFH	Used-oil-fired Heater

Section III. 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. DEQ does not intend for the facility-wide conditions to supersede the applicable requirements listed below for each emission unit or group of emission units.

Permit limits and monitoring requirements were added in Operating Permit #OP2005-09 which came from the Consent Decree in *United States v. Ash Grove Cement Co.*, Case No. 2:13-cv-02299-JTM-DJW, doc. 27 (D. Kan. 8/14/13), as amended by doc. 28 on 10/16/15.) (Consent Decree). Additionally, some “streamlining” was performed where very similar conditions from the Portland Cement MACT, Regional Haze and the Consent Decree overlapped. These limits were associated with particulate matter (PM), sulfur dioxide (SO₂) and oxides of nitrogen (NO_x). The descriptions of the streamlining changes were outlined within #OP2005-09 in Section IV.C.

B. Monitoring Requirements

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 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, DEQ 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 DEQ 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. DEQ 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 DEQ 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.

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 *Helena Independent Record* newspaper on or before April 29, 2022. DEQ provided a 30-day public comment period on the draft operating permit from April 29, 2022, to May 31, 2022. ARM 17.8.1232 requires DEQ to keep a record of both comments and issues raised during the public participation process. The comments and issues received by May 31, 2022, will be summarized along with DEQ's responses, in the following table. All comments received during the public comment period will be promptly forwarded to Ash Grove so they may have an opportunity to respond to these comments as well.

Summary of Public Comments

Person/Group Commenting	Comment	DEQ Response

G. Draft Permit Comments

Summary of Permittee Comments

Permit Reference	Permittee Comment	DEQ Response
Ash Grove Cement	Regarding the recently issued draft operating permit, it is Ash Grove's opinion that the emitting	DEQ agrees and has included the Dust Loadout as an NSPS affected source in the proposed

	<p>unit currently identified as IEU06 – Dust Loadout is an affected source under 40 Code of Federal Regulation Part 60, Subpart F – Standards of Performance of Portland Cement Plants, and as such should not be categorized as an insignificant emissions unit within the Title V Operating Permit.</p>	<p>permit.</p>
--	---	----------------

Summary of EPA Comments

Permit Reference	EPA Comment	DEQ Response

Section IV. Non-Applicable Requirements Analysis

The permittee provided a Non-Applicable Requirements analysis in the December 6, 2021, Title V renewal application. DEQ granted a shield for all non-applicable requirements on a facility wide basis that DEQ agreed was non-applicable. The discussion below lists the requirements that the permittee identified as non-applicable and the reason(s) that DEQ did not provide a shield for the requirement.

Table 4. Regulations Not Identified as Non-Applicable By DEQ.

Reason	Rule Citation
<p>These rules do not have specific requirements for major sources because they are requirements for EPA or state and local authorities. These rules can be used as authority to impose specific requirements on a major source.</p>	<p>ARM 17.8.130 40 CFR 50 ARM 17.8.142 40 CFR 51 ARM 17.8.150 40 CFR 53 ARM 17.8.151 40 CFR 54 ARM 17.8.152 40 CFR 56 ARM 17.8.510 40 CFR 58 ARM 17.8.808 40 CFR 60, Subpart B, Ba ARM 17.8.825 40 CFR 65 ARM 17.8.826 40 CFR 66 ARM 17.8.1108 40 CFR 67 ARM 17.8.1109 40 CFR 70 ARM 17.8.1210 40 CFR 71 ARM 17.8.1211 40 CFR 81 ARM 17.8.1212 ARM 17.8.1213 ARM 17.8.1214 ARM 17.8.1215 ARM 17.8.1225 ARM 17.8.1228 ARM 17.8.1231 ARM 17.8.1301 <i>et seq.</i> ARM 17.8.1401 <i>et seq.</i></p>
<p>These regulations may not be applicable to the source at this time; however, these regulations may become applicable during the life of the permit.</p>	<p>ARM 17.8.120 ARM 17.8.818 ARM 17.8.121 ARM 17.8.819 ARM 17.8.131 ARM 17.8.820 ARM 17.8.140 ARM 17.8.821 ARM 17.8.141 ARM 17.8.822 ARM 17.8.316 ARM 17.8.823 ARM 17.8.506 ARM 17.8.824 ARM 17.8.511 ARM 17.8.827 ARM 17.8.514 ARM 17.8.828 ARM 17.8.515 ARM 17.8.905 ARM 17.8.610 ARM 17.8.906 ARM 17.8.611 ARM 17.8.1005 ARM 17.8.612 ARM 17.8.1006 ARM 17.8.613 ARM 17.8.1007</p>

Reason	Rule Citation
	ARM.17.8.614 ARM 17.8.1222 ARM 17.8.615 ARM 17.8.1223 ARM 17.8.740 <i>et seq.</i> ARM 17.8.1224 ARM 17.8.804 ARM 17.8.1226 ARM 17.8.805 ARM 17.8.1227 ARM 17.8.809
This federal regulation has specific procedural requirements that may become relevant during the permit term.	40 CFR 61, Subpart M
This rule contains requirements for regulatory authorities and not major sources; this rule can be used to impose specific requirements on a major facility.	40 CFR 62
Rules that are always applicable to a major source and may contain specific requirement for compliance.	ARM 17.8.204 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 40 CFR 60, Appendix A-D, F 40 CFR 61, Appendix A-E 40 CFR 63, Appendix A
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 17.8.101 ARM 17.8.902 ARM 17.8.102 ARM 17.8.904 ARM 17.8.103 ARM 17.8.1001 ARM 17.8.201 ARM 17.8.1002 ARM 17.8.202 ARM 17.8.1004 ARM 17.8.301 ARM 17.8.1101 ARM 17.8.302 ARM 17.8.1102 ARM 17.8.330 ARM 17.8.1103 ARM 17.8.401 ARM 17.8.1201 ARM 17.8.402 ARM 17.8.1202 ARM 17.8.403 ARM 17.8.1203 ARM 17.8.501 ARM 17.8.1234 ARM 17.8.601 40 CFR 52 ARM 17.8.602 40 CFR 61, Subpart A

Reason	Rule Citation	
	ARM 17.8.801 ARM 17.8.802 ARM 17.8.806 ARM 17.8.807 ARM 17.8.901	40 CFR 63, Subpart A 40 CFR 63, Subpart B 40 CFR 63, Subpart C 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 16.8.1414	ARM 16.8.1419 ARM 16.8.1904 ARM 17.8.701 - 734 ARM 17.8.1601
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 69 40 CFR 79 40 CFR 80	

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT/NESHAP Standards

Ash Grove is subject to 40 CFR 63, Subpart LLL-*National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry* (PC MACT). Ash Grove requested DEQ's concurrence to classify the Ash Grove -Montana City Plant as an "area source". In a letter dated February 25, 2002, DEQ concurred that the Ash Grove - Montana City Plant is an area source under the PC MACT. Currently, 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. The compliance date for the revised PC MACT was September 9, 2015. Ash Grove is now subject to mercury, total hydrocarbon (THC), organic air toxics, and dioxin and furan emission limits and the Particulate Matter Control Device (PMCD) inlet temperature operating limit to control dioxin and furan emissions. Additionally, the clinker cooler at Ash Grove must meet the appropriate particulate matter emission limits and operating limits as identified in Subpart LLL.

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, DEQ is unaware of any other current or proposed MACT or NESHAP standards that are applicable to this facility.

B. 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 fuel transfer (FT), fuel conveyors (FC), and coal/coke preparation (CCP) are subject to 40 CFR 60, Subpart Y, *Standards of Performance for Coal Preparation Plants*.

Emitting unit conveyor/primary crusher (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, DEQ is unaware of any additional proposed or pending NSPS standards that are applicable to this facility.

C. Risk Management Plan

Currently, Ash Grove 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.

D. 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 pollutants that are greater than major source thresholds.

The Kiln Stack Pulse Jet Baghouse and the Clinker Cooler Stack Baghouse CAM Plans were previously removed because they are exempt from needing a CAM plan since they each are monitored with a PM Continuous Parametric Monitoring System. The Finish Mill is the only emitting unit that meets all the applicability criteria in ARM 17.8.150: The CAM Plan for the Transfer to/from Finish Mill is located in Appendix F of Ash Grove's Title V Operating Permit.

F. 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.

The Supreme Court of the United States (SCOTUS), in its *Utility Air Regulatory Group v. EPA* decision on June 23, 2014, ruled that the Clean Air Act neither compels nor permits EPA to require a source to obtain a PSD or Title V permit on the sole basis of its potential emissions of GHG. SCOTUS also ruled that EPA lacked the authority to tailor the Clean Air Act's unambiguous numerical thresholds of 100 or 250 TPY to accommodate a CO₂e threshold of 100,000 TPY. SCOTUS upheld that EPA reasonably interpreted the Clean Air Act to require sources that would need PSD permits based on their emission of conventional pollutants to comply with BACT for GHG. As such, the Tailoring Rule has been rendered invalid and sources cannot become subject to PSD or Title V regulations based on GHG emissions alone. Sources that must undergo PSD permitting due to pollutant emissions other than GHG may still be required to comply with BACT for GHG emissions.