STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number:	032015-009	Project Number: 2014-08-032 Installation Number:187-0006
Parent Company:	Fred Weber, Inc.	
Parent Company A	ddress: 2320 Creve Coeur	Mill Road, Maryland Heights, MO 63043
Installation Name:	Iron Mountain Trap	Rock
Installation Addres	s: 1325 Highway NN,	Iron Mountain, MO 63650
Location Informatic	on: St. Francois Count	y, S31, T35N, R4E

Application for Authority to Construct was made for:

The installation of a new stationary rock crushing plant. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

_____;

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

MAR 1 0 2015

EFFECTIVE DATE

PERMIT BOOK

DIRECTOR OR DESIGNEE DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources' regional office responsible for the area within which you are located within 15 days after the actual start up of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct <u>and</u> operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

Page No.	3
Permit No.	
Project No.	2014-08-032

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Iron Mountain Trap Rock St. Francois County, S31, T35N, R4E

- 1. Best Management Practices Requirement Iron Mountain Trap Rock shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing BMPs as defined in Attachment AA.
- 2. Emission Limitation NAAQS
 - A. Iron Mountain Trap Rock shall maintain a daily record of material processed to demonstrate that the daily impact on ambient air quality from the entire installation (see Table 3) does not exceed the 24-hour NAAQS of 150.0 μ g/m³ for PM₁₀ at or beyond the property boundary.
 - B. Attachment A or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 2.A.
 - C. Iron Mountain Trap Rock shall account for the impacts from other sources of PM₁₀ as instructed in the attachments.
- 3. Emission Limitation PM_{2.5}
 - A. Iron Mountain Trap Rock shall emit less than 10.0 tons per year PM_{2.5} in any 12 month period from the entire installation.
 - B. Iron Mountain Trap Rock shall demonstrate compliance with Special Condition 3.A. using Attachment B or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

Page No.	4
Permit No.	
Project No.	2014-08-032

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- 4. Control Device Requirement Baghouse
 - A. Iron Mountain Trap Rock shall control emissions from the following equipment using baghouses as specified in the permit application.
 - 1) #6 Residual Oil-Fired Granule Dryer, EP-7
 - 2) Fine Screen, EP-8
 - 3) Conveyors, EP-4
 - B. The baghouse shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
 - C. Replacement filters for the baghouse shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
 - D. Iron Mountain Trap Rock shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
 - E. Iron Mountain Trap Rock shall maintain a copy of the baghouse manufacturer's performance warranty on site.
 - F. Iron Mountain Trap Rock shall maintain an operating and maintenance log for the baghouse which shall include the following:
 - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
- Combustion Fuel Limitations
 The residual waste oil-fired dryer (EP-7) is the only permitted combustion
 equipment of this application. The only fuels permitted for use with this dryer are
 waste-oil fuels containing 0.5 percent (%) sulfur, or less, by weight.
- 6. Concurrent Operations Iron Mountain Trap Rock is currently prohibited from concurrently operating with

Page No.	5
Permit No.	
Project No.	2014-08-032

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

separate owner plants.

- 7. Record Keeping and Reporting Requirements
 - A. Iron Mountain Trap Rock shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request.
 - B. Iron Mountain Trap Rock shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE SECTION (6) REVIEW Project Number: 2014-08-032 Installation ID Number: 187-0006 Permit Number:

Iron Mountain Trap Rock 1325 Highway NN Iron Mountain, MO 63650 Complete: October 23, 2014

Parent Company: Fred Weber, Inc. 2320 Creve Coeur Mill Road Maryland Heights, MO 63043

St. Francois County, S31, T35N, R4E

REVIEW SUMMARY

Iron Mountain Trap Rock has applied for authority to construct

. The construction will include a secondary crusher, conveyors/stackers, and a #6 residual waste oil-fired granule dryer. The remaining power will be supplied by electric power lines near the facility.

- HAP emissions below screen modeling action levels are expected from the dryer emission unit (EP-7).
- New Source Performance Standards Subpart OOO, Nonmetallic Mineral Processing Plants, applies to the installation.
- New Source Performance Standards Subpart UUU, Standards of Performance for Calciners and Dryers in Mineral Industries, applies to this installation.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- Fabric filters (baghouses) are used for the conveyors/stackers (EP-4), #6 residual waste oil-fired granule dryer (EP-7), and screening unit (EP-8) to control the particulate matter emissions from this equipment.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM_{2.5} have been conditioned below de minimis levels; limiting PM_{2.5} emissions indirectly limits all other pollutants, except for particulate matter and PM₁₀, under the de minimis levels. Particulate matter emissions are above the de minimis threshold, but under the major source threshold.

- This installation is located in St. Francois County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was performed to determine the ambient impact of PM₁₀.
- Emissions testing is required only where noted by applicable NSPS standards; additional emissions testing is not required for the equipment in this construction permit.
- The existing operating permit must be modified accordingly for this installation to remain in compliance. An operating permit application is currently under review by the Missouri Air Pollution Control Program; inclusion of the emissions calculations from the application in construction permit (project #2014-08-032) in the installation-wide potential emission calculations will be accounted for once the final draft of this permit has been issued. It is Iron Mountain Trap Rock's responsibility to submit the new information using proper submittal forms to the Missouri Air Pollution Control Program, Operating Permits Unit once the permit has been issued.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Iron Mountain Trap Rock primarily processes trap rock in order to produce a high quality product and fulfill sale orders for purchasing customers. There is currently one existing plant at this site—a stationary rock crushing plant. The addition of another rock crushing plant will allow for Iron Mountain Trap Rock to increase production of specifically formulated final products in order to meet the dynamic demands of their customers. This permit applies to a new stationary secondary rock crushing plant that will be owned and operated by Iron Mountain Trap Rock and located at the same site, ID: 187-0006. Currently, there is an intermediate operating permit associated with this installation and a basic operating permit application is under review by Missouri Air Pollution Control Program.

Table 1 summarizes the New Source Review permits that have been issued to Iron Mountain Trap Rock from the Missouri Air Pollution Control Program.

Permit Number	Description
0498-010	Portable to Stationary
0299-003	Add Equipment
072001-014	Add Equipment
012006-008	Add Equipment & BMPs

Table 1: Permit History

102006-007	Add Equipment
102006-007A	Amend Emissions Calculations
082008-012	New Portable Ballast Plant
072009-019	Add Conveyors
102006-007B	Amend Emissions Calculations
082008-012A	Extend 2-Year Limit
082011-005	Portable to Stationary (Rock Crushing Plant)
082014-006	Temporary Ballast Plant Modification

PROJECT DESCRIPTION

The operation will involve unloading rock fragments with a moisture content of at least by weight into a designated bin and conveying the rock to a rock crusher. There will not be a reoccurring testing requirement (included in this permit) to demonstrate moisture content by weight because the most recent series of tests occurred at this site within the past year; Missouri Air Pollution Control Program still reserves the right to require moisture content testing at any time, provided reasonable notice is given to Iron Mountain Trap Rock. Rock is dried, crushed, screened, and conveyed to storage silos, and then shipped out when an order is placed. There are baghouses in place to reduce emissions from the granule dryer, fine materials screen (fine screen), and associated conveyors. The haul roads and vehicular activity areas undergo documented watering BMPs to reduce particulate matter emissions from these fugitive sources.

EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained from the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 11.19.1, *Crushed Stone Processing and Pulverized Mineral Processing*, Section 11.19.2, *Sand & Gravel Processing*, and Section 1.3 *Fuel Oil Combustion*. The control efficiencies for the baghouses were determined to be 99%, based on AP-42, Appendix B.2., *Generalized Particle Size Distributions*, and Section 11.19.1, *Crushed Stone Processing and Pulverized Mineral Processing*.

Table 2 provides an emissions summary for this project. Existing potential emissions were taken from construction permit 082011-005. Existing actual emissions were taken from the installation's 2013 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). Conditioned potential emissions of the application are the calculated emissions that are limited by the annual $PM_{2.5}$ de minimis limits, solely pertaining to this construction permit. $PM_{2.5}$ emissions needed to be limited because the potential to emit for this application was higher than the de minimis threshold; in choosing a voluntary limit, the remaining pollutants (less PM and PM_{10}) were limited under the respective modeling limits and NAAQS modeling was not required.

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2013 EIQ)	Potential Emissions of the Application	Conditioned Potential Emissions of Application
PM	25.0	69.17	N/D	48.06	34.16
PM ₁₀	15.0	25.31	11.1927	22.77	16.18
PM _{2.5}	10.0	11.97	3.2683	14.07	<10.00
SOx	40.0	4.62	N/A	45.84	32.59
NOx	40.0	70.19	N/A	32.12	22.83
VOC	40.0	5.73	N/A	0.66	0.47
СО	100.0	15.12	N/A	2.92	2.08
GHG (mass)	0.0 / 100.0 / 250.0	N/D	N/A	96.70	87.03
HAPs	10.0/25.0	0.06	N/A	0.35	0.25

Table '	.	Emissions	Summary	, (tone	norv	(Dar)	
I able	∠.	ETHISSIONS	Summary	y 1	IONS	perv	year)	1

N/A = Not Applicable; N/D = Not Determined

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of $PM_{2.5}$ have been conditioned below de minimis levels; limiting $PM_{2.5}$ emissions indirectly limits all other pollutants, except for particulate matter and PM_{10} , under the de minimis levels. Particulate matter emissions are above the de minimis threshold, but under the major source threshold.

APPLICABLE REQUIREMENTS

Iron Mountain Trap Rock shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110
- Operating Permits, 10 CSR 10-6.065; an application for a basic operating permit has been received and is currently under review by Missouri Department of Natural Resources—Air Pollution Control Program, Operating Permits Unit.
- Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, 10 CSR 10-6.170

- Restriction of Emission of Visible Air Contaminants, 10 CSR 10-6.220
- Restriction of Emission of Odors, 10 CSR 10-6.165

AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of the pollutants listed in Table 3. The Air Pollution Control Program requires an AAQIA of PM₁₀ for all asphalt, concrete and rock-crushing plants regardless of the level of PM₁₀ emissions if a permit is required. An AAQIA is required for other pollutants if their emissions exceed their respective de minimis or screening model action level (SMAL). The AAQIA was performed using the Air Pollution Control Program's generic nomographs and when appropriate the EPA modeling software AERSCREEN. For each pollutant that was modeled, the maximum concentration that occurs at or beyond the site boundary was compared to the NAAQS or RAL for the pollutant. If during continuous operation the modeled concentration of a pollutant is greater than the applicable NAAQS or RAL, the plant's production is limited to ensure compliance with the standard.

Iron Mountain Trap Rock is responsible for balancing and documenting production between *all* operational plants and emission units in order to stay in compliance with the installation-wide 24-hour NAAQS limit of 150.0 micrograms per cubic meter for PM_{10} . Haul road and vehicular activity area BMPs allow for the fugitive emissions from all sources to be estimated as a flat background concentration of 20.0 micrograms per cubic meter; this leaves a remaining allowable portion of 130.0 micrograms per cubic meter to be divided among the rest of the installation as production needs dictate.

Table 3 illustrates the limited impact of this plant on same owner or solitary operating scenarios. Background ambient air quality impact for a concurrently operational separate owner plant scenario is significantly higher due to previous permit limitations allowing an allotted emission concentration of 86.53 micrograms per cubic meter for separate owner plants located at site 187-0006. As of this permit application, project #2014-08-032, concurrent operations with separate owner plants are not permitted. If separate owner plants seek to relocate to this site owned by Iron Mountain Trap Rock, the operating permit and all necessary construction permits shall be reviewed and amended prior to concurrent operations; furthermore, the ambient air quality impact for *all* plants shall be tracked on a sheet that has been approved by Missouri Air Pollution Control Program.

Table 3: Ambient Air Quality Impact Analysis

Pollutant	^a NAAQS (µg/m ³)	Averaging Time	⁵ Maximum Modeled Impact (µq/m ³)	Limited Impact (µg/m ³)	Background (µɑ/m³)	^c Daily Limit (tons/day)
^d PM ₁₀ (solitary/same)	150.0	24-hour	177.64	130.0	20.0	

N/A = Not Applicable

^aNational Ambient Air Quality Standards (NAAQS).

^bModeled impact at maximum capacity with controls.

^cIndirect limit based on compliance with NAAQS.

^dSolitary operation or operation with other plants that are owned by Iron Mountain Trap Rock.

ALLOWABLE OPERATING SCENARIOS

- Iron Mountain Trap Rock is *not* permitted to concurrently operate with separate owner plants.
- Prior to concurrent operations with separate owner plants, Iron Mountain Trap Rock must seek approval from Missouri Air Pollution Control Program.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with Ambient Air Impact Limitation (NAAQS) special conditions.

Jordan Hindman New Source Review Unit

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated August 11, 2014, received August 18, 2014, designating Fred Weber, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, Compilation of Air Pollutant Emission Factors, Fifth Edition.

Attachment A – Daily Ambient Air Quality Impact (NAAQS) Tracking Sheet

to

Iron Mountain Trap Rock Installation ID: 187-0006 St. Francois County, T35N, R04E, S31 Project Number: 2014-08-032 Permit Number: This sheet covers the period from

		(month, year)	(mo	onth, year)				
	Iron Mountain Trap Rock 187-0006 Main Plant			Iron Mountain Trap Rock 187-0006 NEW Secondary Crushing Plant (Project: 2014-08-032)				
Date	Daily Production (tons)	Impact Factor ³ (µg/m ³ ton)	Impact ¹ (µg/m ³)	Daily Production (tons)	Impact Factor (µg/m³ton)	Impact ² (µg/m ³)	Back-ground (µg/m³)	Total Impact ² (µg/m ³)
Ex/am/ple1	1000	0.00222	2.22	1000	0.0701	70.01	20.00	92.23
		0.00222			0.0701		20.00	
		0.00222			0.0701		20.00	
		0.00222			0.0701		20.00	
		0.00222			0.0701		20.00	
		0.00222			0.0701		20.00	
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		0.00222			0.0701		20.00	
		0.00222			0.0701		20.00	
		0.00222			0.0701		20.00	
		0.00222			0.0701		20.00	
		0.00222			0.0701		20.00	

¹Calculate the impact for 187-0006 by multiplying daily production of the main plant, and secondary crushing plant by the respective impact factor. ²Calculate the total impact by summing the necessary impact and background concentrations. A site-wide total of 150 µg/m³, or less, is necessary for compliance. ³Impact Factors were taken from the existing data determined for, and used in, permit 082011-005.

Attachment B – Annual PM_{2.5} Emissions Tracking Sheet

Iron Mountain Trap Rock Installation ID: 187-0006 St. Francois County, T35N, R04E, S31 Project Number: 2014-08-032 Permit Number:

This sheet covers the period from	mtotototot	(Cop Month_Day Year)	y as needed)		
Month	Production (tons)	Emission Factor (lb/ton)	Monthly Emissions ¹ (lbs)	Monthly Emissions ² (tons)	12-Month Total Emissions ³ (tons)
Example	60,000	0.0321	1926	0.96	< 40.00
,	· · · ·	0.0321			
		0.0321			
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¹Multiply the monthly production by the emission factor. ²Divide the monthly emissions (lbs) by 2000. ³Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. A total of less than 10.0 of PM_{2.5} is necessary for compliance.

Attachment AA: Best Management Practices

Haul roads and vehicular activity areas shall be maintained in accordance with at least one of the following options when the portable plant is operating.

- 1. Pavement
 - A. The operator shall pave the area with materials such as asphalt, concrete or other materials approved by the Air Pollution Control Program. The pavement will be applied in accordance with industry standards to achieve control of fugitive emissions¹ while the plant is operating.
 - B. Maintenance and repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall periodically wash or otherwise clean all of the paved portions of the haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating.
- 2. Application of Chemical Dust Suppressants
 - A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
 - B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the manufacturer's recommendation (if available) and in sufficient quantities to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator shall keep these records with the plant for not less than five (5) years and make these records available to Department of Natural Resources' personnel upon request.
- 3. Application of Water-Documented Daily
 - A. The operator shall apply water to unpaved areas. Water shall be applied at a rate of 100 gallons per day per 1,000 square feet of unpaved or untreated surface area while the plant is operating.
 - B. Precipitation may be substituted for watering if the precipitation is greater than one quarter of one inch and is sufficient to control fugitive emissions.
 - C. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
 - D. The operator shall record the date and volume of water application or the amount of precipitation that day. The operators shall also record the rational for not watering (e.g. freezing conditions or not operating).
 - E. The operator shall keep these records with the plant for not less than five (5) years, and the operator shall make these records available to Department of Natural Resources' personnel upon request

¹For purposes of this document, Control of Fugitive Emissions means to control particulate matter that is not collected by a capture system and visible emissions to the extent necessary to prevent violations of the air pollution law or regulation. (Note: control of visible emission is not the only factor to consider in protection of ambient air quality.)

APPENDIX A

Abbreviations and Acronyms

% percent °F degrees Fahrenheit acfm actual cubic feet per minute **BACT** Best Available Control Technology **BMPs** Best Management Practices Btu..... British thermal unit CAM Compliance Assurance Monitoring CAS...... Chemical Abstracts Service **CEMS** Continuous Emission Monitor System CFR Code of Federal Regulations CO carbon monoxide CO₂..... carbon dioxide CO2e..... carbon dioxide equivalent COMS..... Continuous Opacity Monitoring System CSR...... Code of State Regulations dscf dry standard cubic feet EIQ Emission Inventory Questionnaire **EP**..... Emission Point EPA Environmental Protection Agency EU..... Emission Unit fps feet per second ft feet GACT Generally Available Control Technology GHG Greenhouse Gas gpm...... gallons per minute gr..... grains GWP...... Global Warming Potential HAP...... Hazardous Air Pollutant hr hour hp horsepower Ib pound lbs/hr..... pounds per hour **MACT** Maximum Achievable Control Technology µg/m³..... micrograms per cubic meter

m/s meters per second Mgal 1,000 gallons MW megawatt MHDR maximum hourly design rate MMBtu.... Million British thermal units **MMCF**..... million cubic feet MSDS Material Safety Data Sheet NAAQS... National Ambient Air Quality Standards **NESHAPs** National Emissions Standards for Hazardous Air Pollutants NO_x..... nitrogen oxides **NSPS**..... New Source Performance Standards NSR New Source Review PM particulate matter **PM**_{2.5}..... particulate matter less than 2.5 microns in aerodynamic diameter PM₁₀..... particulate matter less than 10 microns in aerodynamic diameter **ppm**..... parts per million **PSD**..... Prevention of Significant Deterioration PTE..... potential to emit **RACT**..... Reasonable Available Control Technology RAL Risk Assessment Level SCC Source Classification Code scfm standard cubic feet per minute SDS Safety Data Sheet SIC...... Standard Industrial Classification **SIP**...... State Implementation Plan **SMAL** Screening Model Action Levels SO_x..... sulfur oxides SO₂..... sulfur dioxide tph tons per hour tpy tons per year VMT vehicle miles traveled **VOC**...... Volatile Organic Compound

Ms. Lina Klein Environmental Director Iron Mountain Trap Rock 2320 Creve Coeur Mill Road Maryland Heights, MO 63043

RE: New Source Review Permit - Project Number: 2014-08-032

Dear Ms. Klein:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application, and your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, Truman State Office Building, P.O. Box 1557, Jefferson City, MO 65102, www.oa.mo.gov/ahc.

If you have any questions regarding this permit, please do not hesitate to contact Jordan Hindman, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp New Source Review Unit Chief

SH:jhl

Enclosures

c: Southeast Regional Office PAMS File: 2014-08-032 Permit Number: