

Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

DEC 05 2019

Mr. Kurt E. Johnson
President
MTL Missouri Scott City Terminal
7808 Bangert Lane
Edwardsville, IL 62025

RE: New Source Review Permit - Permit Number:
Project Number: 2019-09-021; Installation Number: 201-0134

Dear Mr. Johnson:

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 and your new source review permit application 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

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,



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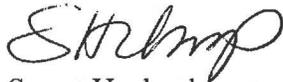
Mr. Kurt E. Johnson
Page Two

whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.ao.mo.gov/ahc.

If you have any questions regarding this permit, please do not hesitate to contact Jared Rhodes, at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



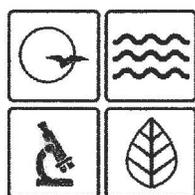
Susan Heckenkamp
New Source Review Unit Chief

SH:JAR

Enclosures

c: Southeast Regional Office
PAMS File: 2019-09-021

Permit Number: **122019-001**



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: **122019-001**

Project Number: 2019-09-021
Installation ID: 201-0134

Parent Company: MTL Missouri Inc.

Parent Company Address: 7808 Bangert Lane, Edwardsville, IL 62025

Installation Name: MTL Missouri Scott City Terminal

Installation Address: 10200 State Highway N, Scott City, MO 63780

Location Information: Scott County, S33 T30N R14E

Application for Authority to Construct was made for:

The installation of a terminal for the transfer of bentonite clay powder and perlite ore from railcars to semi-trailers. This review was conducted in accordance with Section (5), 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.

Director or Designee
Department of Natural Resources

DEC 05 2019

Effective Date

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 Enforcement and Compliance Section of 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 Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's 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 and operate your air contaminant source(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 using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
<http://dnr.mo.gov/regions/>

SITE SPECIFIC 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 to 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 (3)(E). "Conditions required by permitting authority."

1. **Best Management Practices Requirement**
MTL Missouri Scott City Terminal 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. **Annual Emission Limit**
 - A. MTL Missouri Scott City Terminal shall emit less than 15.0 tons of PM₁₀ in any 12-month period from the entire installation which consists of the emission units listed in Table 2 of the tables section of this permit. The SSM emissions as reported to the Air Pollution Control Program's Compliance/Enforcement Section in accordance with the requirements of 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions* shall be included in the limit.
 - B. MTL Missouri Scott City Terminal shall demonstrate compliance with Special Condition 2.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.
3. **Control Device Requirement-Cartridge Type Dust Collector**
 - A. MTL Missouri Scott City Terminal shall control emissions from the emission units listed in Table 1 using associated dust collectors.

Table 1: Equipment and Associated Control Device

Emission Units	Control Units	Control Device Description
EU-01 EU-02 EU-03 EU-04 EU-05 EU-13	EP-04	Donaldson Company, Inc. Model DF2-4 Dust Collector – DC01
EU-06 EU-07 EU-08 EU-09 EU-10 EU-14	EP-05	Donaldson Company, Inc. Model DF2-4 Dust Collector – DC02
EU-11	EP-06	Donaldson Company, Inc. Model CPV-1 Dust Collector – DC03
	EP-07	Donaldson Company, Inc. Model CPV-1 Dust Collector – DC04
EU-12	EP-08	PEBCO Dustless Loading Spout Model SCDLS-22-6-EV Dust Collector – SP03

SITE SPECIFIC SPECIAL CONDITIONS:

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

- B. The dust collectors shall be operated and maintained in accordance with the manufacturer's specifications. The dust collectors 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 dust collectors shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
 - D. MTL Missouri Scott City Terminal shall monitor and record the operating pressure drop across the dust collectors at least once every 24 hours when the associated equipment is in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
 - E. MTL Missouri Scott City Terminal shall maintain a copy of the dust collectors manufacturer's performance warranty on site.
 - F. MTL Missouri Scott City Terminal shall maintain an operating and maintenance log for the dust collectors 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.
4. Capture Device Requirements
- A. MTL Missouri Scott City Terminal shall totally enclose the material transfer transition point between the perlite belt conveyor (EP-02) and the perlite stacker conveyor (EP-03) and vent the total enclosure to dust collector – DC03 (EP-06).
 - B. MTL Missouri Scott City Terminal shall totally enclose the material transfer transition point between the perlite stacker conveyor (EP-03) and the perlite dustless loading spout (EU-12) and vent the total enclosure to dust collector – DC04 (EP-07).
 - C. A total enclosure is an enclosure that, with the exception of openings for material entry and exit, completely surrounds the emissions from an emission unit.
 - D. MTL Missouri Scott City Terminal is able to unload bentonite clay from two gravity hopper railcars at the same time. To accomplish this MTL Missouri Scott City Terminal has two transfer systems, one for each set of tracks. Each system

SITE SPECIFIC SPECIAL CONDITIONS:

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

transfers bentonite clay from gravity hopper railcars to semitrailers. Both of these transfer systems shall be totally enclosed from railcar to semitrailer, including a seal to the railcar and a seal to the semitrailer. These transfer systems consist of emission units EU-01 through EU-10 as listed in Table 2.

5. Record Keeping Requirement

MTL Missouri Scott City Terminal shall maintain all records required by this permit for not less than five years and make them available to any Missouri Department of Natural Resources' personnel upon request.

6. Reporting Requirement

MTL Missouri Scott City Terminal shall report to the Air Pollution Control Program, Compliance / Enforcement Section by mail to P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, no later than 10 days after any exceedances of the limitations imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2019-09-021
Installation ID Number: 201-0134

Permit Number: 122019-001

Installation Address

MTL Missouri Scott City Terminal
10200 State Highway N
Scott City, MO 63780
Scott County, S33 T30N R14E

Parent Company:

MTL Missouri Inc.
7808 Bangert Lane
Edwardsville, IL 62025

PROJECT DESCRIPTION

MTL Missouri Inc. proposes to construct an installation in Scott County, Missouri to transfer ground bentonite clay and perlite ore from railcars to semi-trailers. The proposed installation is designed to transfer ground bentonite clay from covered gravity hopper railcars and pressure differential railcars into pneumatic semi-trailers and to transfer perlite ore from gravity hopper railcars into hopper semi-trailers using environmental traps. The general layout of the design will consist of two railroad tracks running through a 120 ft x 120 ft steel building (the "Process Building") open on the east and west ends where the materials will be transferred from railcars to semi-trailers. The site will have 2950 ft of service roads running on each side of the building and to the adjoining State Highway N. A 75 ft by 120 ft section in the middle of the building will be paved with concrete. The remainder of the area will be covered with compacted limestone rock.

This installation is designed to provide complete redundancy. Two identical rail tracks, transfer systems, and truck scales are located in the Process Building. Each bentonite clay transfer system has a 208 tons per hour MHDR and can handle either covered gravity hopper railcars or pressure differential railcars, but not both at the same time.

When unloading bentonite clay from gravity hopper railcars the railcar is positioned over a receiving pit then a connector is sealed to the railcar. The bentonite clay then drops through the connector to the receiving pit, then travels through a sealed screw conveyor, up through a sealed double leg high-speed bucket elevator, and drops through a sealed loadout spout into a pneumatic semi-trailer. A separate dust control system controls particulate emissions for each of the redundant transfer systems with two 5 in inside diameter pickup points on the bucket elevator and a single 5.75 in inside diameter pickup point on the loadout spout. Each dust control system returns collected bentonite clay to its bentonite clay transfer system at the connection point between the screw conveyor and the bucket elevator.

When unloading pressure differential railcars the bentonite clay is pneumatically conveyed from the pressure differential railcar to the pneumatic semi-trailer. The

pressure differential railcar unloading will use the same dust collection system as the gravity hopper railcar unloading making simultaneous unloading impossible on the same transfer system.

The perlite ore transfer system has a 156 tons per hour MHDR and will not have any redundancy. Perlite unloading will occur from the same two tracks as the bentonite clay unloading so perlite and bentonite clay cannot be unloaded simultaneously from the same track. Perlite is unloaded from gravity hopper railcars to an undertrack belt conveyor. Perlite transfers from the undertrack conveyor to a stacker conveyor then is conveyed up to a sealed loading spout where it drops into hopper semi-trailers. Particulate emissions from each conveyor transfer point and the loading spout are controlled by separate self-contained dust collectors. Each dust collector returns collected perlite to the product stream.

The applicant will use one of the methods described in Attachment AA, "Best Management Practices," to control emissions from haul roads and vehicular activity areas.

This installation is located in Scott County, an attainment/unclassifiable area for all criteria pollutants.

This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

No permits have been issued to MTL Missouri Scott City Terminal from the Air Pollution Control Program.

TABLES

The table below contains all the emission units listed in MTL Missouri Scott City Terminal's Application for Authority to Construct and their associated emission unit designations.

Table 2: Installation Emission Unit/Point List

Emission Unit Emission Point	Description
EU-01	Rail Articulating Boot Seal (Bentonite System 1) – BT01
EU-02	Screw Conveyor (Bentonite System 1) – SC01
EU-03	Bucket Elevator (Bentonite System 1) – BE01
EU-04	Dustless Loading Spout (Bentonite System 1) – SP01
EU-05	Material Transfer Transition Points (Bentonite System 1)
EU-06	Rail Articulating Boot Seal (Bentonite System 2) – BT02
EU-07	Screw Conveyor (Bentonite System 2) – SC02
EU-08	Bucket Elevator (Bentonite System 2) – BE02
EU-09	Dustless Loading Spout (Bentonite System 2) – SP02
EU-10	Material Transfer Transition Points (Bentonite System 2)
EU-11	Material Transfer Transition Points (Perlite Ore System)
EU-12	Dustless Loading Spout (Perlite Ore System) – SP03
EU-13	Pneumatic Conveying System (Bentonite System 1) – BL01
EU-14	Pneumatic Conveying System (Bentonite System 2) – BL02
EP-01	Transfer Point of Railcar to Belt Conveyor (Perlite Ore System)
EP-02	Perlite Belt Conveyor (Perlite Ore System) – BC01
EP-03	Stacker Conveyor (Perlite Ore System) – STC01
EP-04	Donaldson Company, Inc. Model DF2-4 Dust Collector – DC01
EP-05	Donaldson Company, Inc. Model DF2-4 Dust Collector – DC02
EP-06	Donaldson Company, Inc. Model CPV-1 Dust Collector – DC03
EP-07	Donaldson Company, Inc. Model CPV-1 Dust Collector – DC04
EP-08	PEBCO Dustless Loading Spout Model SCDLS-22-6-EV Dust Collector – SP03
EP-09	Haul Road

Note: EU-01 through EU-14 use the emission unit notation because they are enclosed and their emissions are ducted to a baghouse, which acts as the emissions point. EP-01 through EP-03 are not enclosed and thus are emission points.

The table below summarizes the emissions of this project. The potential emissions of the process equipment, which excluded emissions from haul roads, were used to determine permit type applicability. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). The conditioned potential emissions include emissions from sources that will limit their production to ensure compliance with the annual emission limit.

Table 3: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	^a Existing Potential Emissions	^a Existing Actual Emissions (EIQ)	Potential Emissions of the Application	Conditioned Potential Emissions
PM	25.0	0	0	144.5	52.1
PM ₁₀	15.0	0	0	42.0	<15.0
PM _{2.5}	10.0	0	0	12.6	4.3
SO _x	40.0	0	0	0	0
NO _x	40.0	0	0	0	0
VOC	40.0	0	0	0	0
CO	100.0	0	0	0	0
HAPs	10.0/25.0	0	0	0	0

^aExisting potential and actual emissions are zero since this is a new installation

EMISSIONS CALCULATIONS

Emissions for the project were calculated as described below and using emission factors found in the United States EPA document AP-42 *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition (AP-42).

Emissions from perlite ore transfer system:

- Since concrete batch plants have mineral conveying similar to perlite ore the emission factors from AP-42 Section 11.12 "Concrete Batching," June 2006, were used for this project.
- The emission factor for aggregate delivery to ground storage was used for railcar unloading
- The emission factor for aggregate transfer to conveyor was used for conveyors
- The emission factor for aggregate transfer to elevated storage was used for the bucket elevators
- Since transfer/transition points are enclosed on the perlite ore transfer system a 50% capture efficiency and 95% control efficiency was applied

Emissions from bentonite clay transfer systems:

- The bentonite clay transfer systems are completely enclosed so the 2,000 CFM MHDR and 0.002 gr/CFM manufacturer specifications were used to calculate emissions from the baghouse on each bentonite clay transfer system.

The installation's design only allows for one type of unloading at a time on each track so the worst case potential emissions of the process equipment happens when perlite ore is unloaded at MHDR on one track while bentonite clay powder is unloaded from gravity hopper railcars at MHDR on the other track.

Emissions from haul roads and vehicular activity areas:

- Calculated using the predictive equation from AP-42 Section 13.2.2 "Unpaved Roads," November 2006.
- A 90% control efficiency for PM and PM₁₀ and a 74% control efficiency for PM_{2.5} were applied to the emission calculations for the use of BMPs.

The worst case potential emissions of the application happens when bentonite clay is unloaded at MHDR on both tracks.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned to de minimis levels. Potential emissions of all other criteria pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

MTL Missouri Scott City Terminal 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.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110.
- *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

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400 does not apply since equipment has emission controls.

OTHER DETERMINATIONS

- NSPS OOO does not apply since this installation does not have any crushing or grinding equipment.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 9 September 2019, received 10 September 2019, designating MTL Missouri Inc. as the owner and operator of the installation.

Attachment A: PM₁₀ Annual Emissions Tracking Sheet

MTL Missouri Scott City Terminal 201-0134

Project Number: 2019-09-021

Permit Number: **122019-001**

Site Name: MTL Missouri Scott City Terminal
 Site Address: 10200 State Highway N, Scott City, MO 63780
 Site County: Scott County, S33 T30N R14E

This sheet covers the period from _____ to _____ (Copy as needed)
 (Month, Day Year) (Month, Day Year)

Month & Product Type	Production (tons)	Composite Emission Factor (lb/ton)	Monthly Emissions ¹ (lbs)	SSM Emissions ² (tons)	Monthly Emissions ³ (tons)	Total Emissions ⁴ (tons)	12-Month Total Emissions ⁵ (tons)
July Bentonite	80,000	0.022	1760	0.0	0.9	1.2	1.2 + 11 previous months
July Perlite	20,000	0.025	500	0.0	0.3		
Bentonite		0.022					
Perlite		0.025					
Bentonite		0.022					
Perlite		0.025					
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- ¹ Multiply the monthly throughput by the emission factor. The composite PM₁₀ emission factor is 0.022 lb/ton when handling Bentonite and 0.025 lb/ton when handling Perlite. Both emission factors include PM₁₀ emissions from haul roads.
- ² Write the startup, shutdown and malfunction emissions (SSM) in tons reported to the Air Pollution Control Program's Enforcement/Compliance Section according to the provisions of 10 CSR 10-6.050 for the month
- ³ Divide the monthly emissions (lbs) by 2000 and add the SSM Emissions.
- ⁴ Add the bentonite and perlite emissions to determine the total monthly emissions (tons)
- ⁵ Add the total monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. A total of less than 15.0 tons of PM₁₀ per 12 consecutive months 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 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 emissions 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, volume of water application and total surface area of active haul roads or the amount of precipitation that day. The operators shall also record the rationale 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.

APPENDIX A

Abbreviations and Acronyms

%	percent	MMBtu	Million British thermal units
°F	degrees Fahrenheit	MMCF	million cubic feet
acfm	actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	NAAQS	National Ambient Air Quality Standards
BMPs	Best Management Practices	NESHAPs ..	National Emissions Standards for Hazardous Air Pollutants
Btu	British thermal unit	NO_x	nitrogen oxides
CAM	Compliance Assurance Monitoring	NSPS	New Source Performance Standards
CAS	Chemical Abstracts Service	NSR	New Source Review
CEMS	Continuous Emission Monitor System	PM	particulate matter
CFR	Code of Federal Regulations	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CO	carbon monoxide	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
CO₂	carbon dioxide	ppm	parts per million
CO_{2e}	carbon dioxide equivalent	PSD	Prevention of Significant Deterioration
COMS	Continuous Opacity Monitoring System	PTE	potential to emit
CSR	Code of State Regulations	RACT	Reasonable Available Control Technology
dscf	dry standard cubic feet	RAL	Risk Assessment Level
EIQ	Emission Inventory Questionnaire	SCC	Source Classification Code
EP	Emission Point	scfm	standard cubic feet per minute
EPA	Environmental Protection Agency	SDS	Safety Data Sheet
EU	Emission Unit	SIC	Standard Industrial Classification
fps	feet per second	SIP	State Implementation Plan
ft	feet	SMAL	Screening Model Action Levels
GACT	Generally Available Control Technology	SO_x	sulfur oxides
GHG	Greenhouse Gas	SO₂	sulfur dioxide
gpm	gallons per minute	SSM	startup, shutdown, & malfunction
gr	grains	tph	tons per hour
GWP	Global Warming Potential	tpy	tons per year
HAP	Hazardous Air Pollutant	VMT	vehicle miles traveled
hr	hour	VOC	Volatile Organic Compound
hp	horsepower		
lb	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		