

## 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:

052018-004

Project Number: 2018-05-001

Installation ID: PORT-0778

Parent Company:

Richard J. Mertens, Inc.

Parent Company Address: P.O. Box 448, Warrenton, MO 63383

Installation Name:

Richard J. Mertens, Inc.

Installation Address:

104 Big Spring Quarry Road, New Florence, MO 63363

Location Information:

Montgomery County, S16/17, T47N, R5W

Application for Authority to Construct was made for:

Portable generic rock crusher plant. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.

Standard Conditions (on I	reverse) are applicable to this permit.	
Standard Conditions (on this permit.)	reverse) and Special Conditions are applicable to	,
Prepared SV	Director or Designee  Department of Natural Resources	
Kathy Kolb New Source Review Unit	Department of Natural Resources	

MAY 1 6 2018

**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 sources(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 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 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/

Project No. 2018-05-001 Permit No. 05 2 0 1 8 - 0 0 4

## GENERAL 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."

Generic Plant Designation and Maximum Combined Hourly Design Rate
Richard J. Mertens, Inc. has been designated to be a Generic Plant Operation. The
combined MHDR each of the following generic equipment types shall not exceed the
rates and numbers listed in Table 1.

Table 1: Generic Equipment

, ,	MHDR	Maximum Number of
Equipment Type	· · · · · · · · · · · · · · · · · · ·	Units
Primary Unit(s) (Primary Crusher)	500 tons per hour	1
Feeder/Grizzly	500 tons per hour	1
Crusher(s) including primary crusher	1,000 tons per hour	2
Conveyor(s), Stacker(s)	2,500 tons per hour	15
Screen(s)	1,000 tons per hour	2

- 2. Generic Plant Equipment Identification Requirement
  - A. Richard J. Mertens, Inc. shall submit the following information to the Air Pollution Control Program's Permitting Section and the St. Louis Regional Office (SLRO) within 15 days of actual startup.
    - A master list of all equipment that will be permitted for use with the generic plant. This master list shall include at minimum the following information for each piece of equipment:
      - a) Manufacturer's name
      - b) Model number
      - c) Serial number
      - d) Actual MHDR
      - e) Date of manufacture
      - f) Any other additional information that is necessary to uniquely identify the equipment.
    - 2) A list of the core equipment that will always be utilized with the generic plant. The core equipment associated with the generic plant shall include at least one primary unit that controls the rate of the process flow (e.g., a primary crusher or primary screen).
    - 3) A determination of the applicability of 40 CFR Part 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" for each piece of equipment indicating whether each piece of equipment is subject to Subpart OOO and justification for this determination.
    - 4) Richard J. Mertens, Inc. shall notify the Air Pollution Control Program's Permitting Section and the SLRO when new equipment is added to the

Project No. 2018-05-001

Permit No. 05 2 0 1 8 - 0 0 4

## **GENERAL SPECIAL CONDITIONS:**

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

master list and when core equipment is changed within 30 days of the change.

- B. Richard J. Mertens, Inc. shall maintain a list of the specific equipment currently being utilized with the generic plant. Any arrangement of the generic plant's equipment must be such that the core equipment is not bypassed in the process flow.
- Equipment Identification Requirement
  Richard J. Mertens, Inc. shall maintain easily read permanent markings on each
  component of the plant. These markings shall be the equipment's serial number or a
  company assigned identification number that uniquely identifies the individual
  component.
- 4. Relocation of Portable Rock Crushing Plant
  - A. Richard J. Mertens, Inc. shall not be operated at any location longer than 24 consecutive months except if the Site Specific Special Conditions of this portable plant, PORT-0778, contain a nonroad engine requirement limiting the portable plant at the site specific location to 12 consecutive months.
  - B. A complete "Portable Source Relocation Request" application must be submitted to the Air Pollution Control Program prior to any relocation of this portable rock crushing plant.
    - 1) If the portable rock crushing plant is moving to a site previously permitted, and if the circumstances at the site have not changed, then the application must be received by the Air Pollution Control Program at least seven days prior to the relocation.
    - 2) If the portable rock crushing plant is moving to a new site, or if circumstances at the site have changed (e.g. the site was only permitted for solitary operation and now another plant is located at the site), then the application must be received by the Air Pollution Control Program at least 21 days prior to the relocation. The application must include written notification of any concurrently operating plants.
- 5. Record Keeping Requirement
  Richard J. Mertens, Inc. shall maintain all records required by this permit for not less
  than five years and shall make them available to any Missouri Department of Natural
  Resources' personnel upon request.
- 6. Reporting Requirement
  Richard J. Mertens, Inc. shall report to the Air Pollution Control Program's
  Compliance/Enforcement Section by mail at P.O. Box 176, Jefferson City, MO 65102 or
  by e-mail at AirComplianceReporting@dnr.mo.gov, no later than 10 days after any
  exceedances of the limitations imposed by this permit.

## 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 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."

PORT ID Number: PORT-0778 Site Name: Big Spring Quarry

Site Address: 104 Big Spring Quarry Road, New Florence, MO 63363

Site County: Montgomery S16/17, T47N, R5W

Best Management Practices Requirement
Richard J. Mertens, Inc. 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. Richard J. Mertens, Inc. shall emit less than 15.0 tons of PM<sub>10</sub> in any 12-month period from the entire installation which consists of the equipment listed in Table 1. 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. Richard J. Mertens, Inc. 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.
- Primary Equipment Requirement
   Richard J. Mertens, Inc. shall process all rock through the primary crusher (EU-02).
   Bypassing the primary crusher is prohibited.
- 4. Nonroad Engine Requirement Richard J. Mertens, Inc.'s engine shall not remain at one location within this site longer than 12 consecutive months in order for the engine to meet the definition of a nonroad engine as stated in 40 CFR 89.2. These engines shall be moved with its associated equipment at least once every 12 consecutive months at this site.
- Record Keeping Requirement
  Richard J. Mertens, Inc. 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.

Project No. 2018-05-001

Permit No. 052018 - 004

## SITE SPECIFIC SPECIAL CONDITIONS:

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

6. Reporting Requirement

Richard J. Mertens, Inc. shall report to the Air Pollution Control Program's 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 (6) REVIEW

Project Number: 2018-05-001 Installation ID Number: PORT-0778

Permit Number: 0 5 2 0 1 8 - 0 0 4

Richard J. Mertens, Inc.: 104 Big Spring Quarry Road New Florence, MO 63363 Complete: May 1, 2018

Parent Company: Richard J. Mertens, Inc. P.O. Box 448 Warrenton, MO 63383

Montgomery County, S16/17, T47N, R5W

## PROJECT DESCRIPTION

Richard J. Mertens, Inc. is applying for a generic portable crushing plant with a MHDR of 500 tons per hour. The generic portable plant will consist of a primary and secondary crusher, two screens, grizzly, and 15 associated conveyors. It will be located at Big Spring Quarry near New Florence, Missouri in Montgomery County.

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

The diesel engine that will be used with this portable plant meets the definition of non-road engine as defined in 40 CFR 89.2 (1)(i). Therefore, the emissions of the engine were not included. Although a portable plant is allowed to operate at a site for 24 consecutive months, the diesel engine is only allowed to operate at this site for 12 consecutive months in order for the diesel engine to be classified as a non-road engine. This installation is located in Montgomery County, an attainment 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 for PORT-0778 have been issued to Richard J. Mertens, Inc. from the Air Pollution Control Program.

## **TABLES**

The table below summarizes the emissions of this project. The potential emissions of the process equipment, which excluded emissions from haul roads and wind erosion, are not site specific and should not vary from site to site. There are no existing actual emissions because this is a new portable plant. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). Conditioned potential emissions account for the voluntary PM<sub>10</sub> annual emission limit to avoid dispersion modeling requirements found in 10 CSR-6.060 Section (6).

Table 2: Emissions Summary (tons per year) for EE Quarry in Richmond, MO

Table 2. Ellinoolet				11. 1 (101111101101)	
		<sup>a</sup> Potential		h	
		Emissions	Existing	⁵Potential	·
		from	Actual	Emissions of	Conditioned
	De Minimis	Process	Emissions	the	Potential
Air Pollutant	Level/SMAL	Equipment		Application	Emissions
PM	25.0	112.57	N/A	286.59	38.17
PM <sub>10</sub>	15.0	41.17	N/A	112.64	<15.0
PM <sub>2.5</sub>	10.0	7.03	N/A	19.78	2.63
SO <sub>X</sub>	40.0	N/A	N/A	N/A	N/A
NO <sub>X</sub>	40.0	N/A	N/A	N/A	N/A
VOC	40.0	N/A	N/A	N/A	N/A
CO	100.0	N/A	N/A	N/A	N/A
GHG (CO₂e)	75,000	N/A	N/A	N/A	N/A
GHG (mass)	0.0 / 100.0 / 250.0	N/A	N/A	N/A	N/A
Total HAPs	25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable:

### **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 the rock-crushing equipment:

- Calculated using emission factors from AP-42 Section 11.19.2 "Crushed Stone Processing and Pulverized Mineral Processing," August 2004.
- The uncontrolled emission factors were used because the inherent moisture content of the crushed rock is less than 1.5 % by weight.

Emissions from aggregate handling:

- Calculated using emission factors from AP-42 Section 11.19.2 "Crushed Stone Processing and Pulverized Mineral Processing," August 2004.
- The uncontrolled emission factors were used because the inherent moisture content of the crushed rock is less than 1.5% by weight.

<sup>&</sup>lt;sup>a</sup>Excludes site specific haul road and storage pile emissions

blncludes site specific haul road and storage pile emissions

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 PM<sub>10</sub> and a 74% control efficiency for PM<sub>2.5</sub> were applied to the emission calculations for the use of BMPs.

## Emissions from storage piles:

- Load-in and load-out of storage piles were calculated using the predictive equation from AP-42 Section 13.2.4.
- The moisture content of the aggregate is 0.7% by weight.
- Emissions from wind erosion of storage piles were calculated using an equation found in the Air Pollution Control Program's Emissions Inventory Questionnaire Form 2.8 "Storage Pile Worksheet."

### 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<sub>10</sub> are conditioned below de minimis levels. Potential emissions of PM are above de minimis levels but remain below major levels.

### APPLICABLE REQUIREMENTS

Richard J. Mertens, Inc. 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.
- Operating Permits, 10 CSR 10-6.065 does not apply because this is a portable plant.
- Start-Up, Shutdown, and Malfunction Conditions, 10 CSR 10-6.050
- 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

- 40 CFR 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" applies to the equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPS) or National Emission Standards for Hazardous Air Pollutants for Source Categories (MACTS) apply to the proposed equipment.

## 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*, 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 May 1, 2018, received May 1, 2018, designating Richard J. Mertens, Inc. as the owner and operator of the installation.

## Attachment A: PM<sub>10</sub> 12-Month Rolling Total Emissions Tracking Sheet

Richard J. Mertens, Inc. PORT-0778 Project Number: 2018-05-001

Permit Number: 05 2 0 1 8 - 0 0 4

Site Name: Big Spring Quarry

Site Address: 104 Big Spring Quarry Road, New Florence, MO 63363

Site County: Montgomery

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

		(Month, Day Yea	r) (Month, [	Day Year)		
				Startup,		·
1.00				Shutdown		
****		PM <sub>10</sub>		and		
		Composite		Malfunction		12-Month
		Emission	Monthly	PM <sub>10</sub>	Monthly	Rolling Total
	Production	Factor	PM <sub>10</sub> Emissions <sup>1</sup>	Emissions <sup>2</sup>	PM <sub>10</sub> Emissions <sup>3</sup>	Emissions⁴
Month	(tons)	(lb/ton)	(lbs)	(lbs)	(tons)	(tons)
						2.57 + 11
Example	100,000	0.0514	5140	0.0	2.57	previous
Lxample	700,000	0.0014	0140	0.0	2.07	months at this
						site
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				
		0.0514				

Multiply the monthly production by the PM<sub>10</sub> composite emission factor.

<sup>&</sup>lt;sup>2</sup>As reported to the Air Pollution Control Program's Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050 for the month.

<sup>&</sup>lt;sup>3</sup>Add the monthly PM<sub>10</sub> emissions plus the SSM emissions from the same time period and divide by 2000 and <sup>4</sup>Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. A total of less than 15.0 tons of PM<sub>10</sub> per consecutive 12 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 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 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 years, and the operator shall make these records available to Department of Natural Resources' personnel upon request.

## **APPENDIX A**

## **Abbreviations and Acronyms**

Appreviations ar	ia Acronyms
% percent	MMBtu Million British thermal units
°Fdegrees 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
BMPs Best Management Practices	Standards
Btu British thermal unit	NESHAPsNational Emissions Standards for
CAM Compliance Assurance Monitoring	Hazardous Air Pollutants
CAS Chemical Abstracts Service	NO <sub>x</sub> nitrogen oxides
CEMS Continuous Emission Monitor System	NSPS New Source Performance Standards
CFR Code of Federal Regulations	NSR New Source Review
CO carbon monoxide	PM particulate matter
CO <sub>2</sub> carbon dioxide	PM <sub>2.5</sub> particulate matter less than 2.5
CO₂e carbon dioxide equivalent	microns in aerodynamic diameter <b>PM</b> <sub>10</sub> particulate matter less than 10
COMS Continuous Opacity Monitoring System	microns in aerodynamic diameter
CSR Code of State Regulations	ppm parts per million
dscf dry standard cubic feet	PSD Prevention of Significant  Deterioration
EIQ Emission Inventory Questionnaire	PTE potential to emit
EP Emission Point	RACT Reasonable Available Control
EPA Environmental Protection Agency	Technology
EU Emission Unit	RAL Risk Assessment Level
fps feet per second	SCC Source Classification Code
ft feet	scfm standard cubic feet per minute
GACT Generally Available Control	SDS Safety Data Sheet
Technology	SIC Standard Industrial Classification
GHG Greenhouse Gas	SIP State Implementation Plan
gpm gallons per minute	SMAL Screening Model Action Levels
grgrains	SO <sub>x</sub> sulfur oxides
GWP Global Warming Potential	SO₂ sulfur dioxide
HAP Hazardous Air Pollutant	SSM startup, shutdown, & malfunction
hrhour	tph tons per hour
hphorsepower	tpy tons per year
lbpound	VMT vehicle miles traveled
lbs/hr pounds per hour	VOC Volatile Organic Compound
MACT Maximum Achievable Control Technology	
μg/m³ micrograms per cubic meter	
m/s meters per second	
Mgal 1,000 gallons	
B-81	

MW ..... megawatt

MHDR..... maximum hourly design rate

NOTICE: This spreadsheet is for your use only and should be used with caution. MoDNR does not guarantee the accuracy of the information it contains. This spreadsheet is subject to continual revision and updating. It is your responsibility to be aware of the most current, accurate and complete information available. MoDNR is not responsible for errors or omissions in this spreadsheet. Submittal of the information contained in this spreadsheet (workbook) does not relieve the responsible official of the certification statement signed on the first page of the application.

#### For Single Plant Operation

Hours per day

🚅 Days per year

Hours per year

Pb

HAPs

CO2

N<sub>2</sub>O

CH₄

GHG<sub>mass</sub>

CO<sub>2</sub>eq

24.0

48.6 1166.6

#### For Multiple Plant Operation

Hours per day	24.0
Days per year	48.6
Hours per vear	1166.6

0.01

10

100

100

100

100

100,000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

0.0000

Pollutant
PM10

Justification for
Limit
De Minimis

Pollutant	Potential Emissions of 3 Process Equipment (tons/yr)	Pofential Emissions Including fugitives (fons/yr)	Allowable Emissions for 1167 hours per- year (tons/yr)	Deminimis Thresholds	Plant-wide Composite Emission Factor (lb/ton)
PM	112.57	286.59	38.17	25	0.1309
PM <sub>10</sub>	41.17	112.64	15.00	15	0.0514
PM <sub>2.5</sub>	7.03	19.78	2.63	10	0.0090
SO <sub>2</sub>	-	-		40	0.0000
NO <sub>2</sub>	-	-		40	0.0000
VOC	-	•	Wild April 201	40	0.0000
CO	-	1		100	0.0000
CH <sub>2</sub> O				2.00	0.0000

with an incide

Limit Ho	٠.				-
LIIIII III	J	JI.	s þ	Jei	
Ye	18	ır			
	1				

Limit Hours per Year w/ 24 hr day

		Total Control of the	3 ALL 14 CO. 15 ALL 15
i			
TRANSPORTED OF A SEPTEMBER AND A SEPTEMBER OF A SEP	CHARLES AND ADDRESS OF THE PROPERTY OF THE PRO	CHPAND DEGLES WASHINGTON COLUMN	
	mum hourly design	rate (fonc fire)	500

12,000.0	Tons of product per day
583,290.7	Tors of product perivear

Emission int Number	mission Unit Number	Description	scc	Maximum Hourly	Units of Measure	Control Device Number	Control Type	Capture Efficiency (%)	Control Efficiency (%)	Pollutant	Emission Factor	Emission Factor (lbs/UoM)	Emission Rete (lb/hr)	Poterrial Emissions (tons/yr)	Allowable Emission (tons-yr)
						7	4.00	N/A N/A	N/A N/A	PM <sub>10</sub>	1.554	VMT			
3-4	.	Road #3	sama and same and a same and a	1	VMT per hour	1	antini ya marani	N/A N/A	N/A N/A N/A	PM: PM: PM:s		VMT VMT	t at a	10000	
1		Road #4			VMT per hour	45 J.C.		N/A N/A N/A	N/A N/A N/A	PM PM <sub>10</sub> PM <sub>2.5</sub>	na produce de la companya de la comp	VMT VMT			
		Road #5			VMT per hour		e es estillar	N/A N/A N/A	N/A N/A N/A	PM PM <sub>10</sub> PM <sub>25</sub>	A. A.A.	VMT VMT	1		·. ·
. 4		Road #6		1777	VMT per hour			N/A N/A	N/A N/A	PM PM	77 A	VMT	100		
		<u> </u>		L	1		1	N/A	N/A	PM <sub>2.6</sub>	<u> </u>	VMT Emission Factor			
quipment	Unit ID	Description of Unit	Equipment Description/SCC	Heat Rate	MoM per hour			100%	N/A	IPM .		(lbs/UoM) mgsš			
.		ÇONINGENÎN FI			mgal		4. 1 1 1 1 1 1 1 2 2	100%	N/A	PM <sub>10</sub>	40.50 00 4.55	mgal			
					mmscf	1		100%	N/A N/A	PM <sub>2</sub> s SO <sub>2</sub>	de la la	mgal			
								100%	N/A N/A	NO <sub>2</sub> VOC		mgal mgal			
- 1			en andere en					100%	N/A N/A	CH <sub>2</sub> O		mgal mgal			ĺ
	- 4	1.			1			100%	N/A N/A	Pb HAPs		mgal	100		
								100%	N/A	CO <sub>2</sub>		mgel	1		1
	- 1				1 - 2-1-1		50000 000	100%	N/A N/A	N,O GHG	de contra	mgal mgal	1	1	
		Combustion #2	<u> </u>	<u> </u>	mmBtu	-		100%	N/A N/A	CH <sub>4</sub>		moal	-		1
		Compussion #2			mgal	1		100%	N/A	PM <sub>10</sub> -	i .	rngal rngal			1
				-	mmscf	ł		100%	N/A N/A	PM <sub>2</sub> s SO <sub>2</sub>		mgal mgal			
ĺ				1		l .		100%	N/A	NO <sub>2</sub> VOC	1	mgal			Į.
[					1 .			100%	N/A N/A	co		mgal mgal mgal mgal mgal mgal			į.
[			the state of the s	1	1			100%	N/A	CH <sub>2</sub> O		mgal mgal	1		1
1		and the second second		100		1		100%	N/A N/A	HAPs CO <sub>2</sub>		mgal mgal	1		
		and the second	the state of the s			1	1000	100%	N/A N/A	N <sub>2</sub> O GHG <sub>mass</sub>	1 to	mgal mgal		:	1.1
-					1. (	10.00		100%	. N/A	CH.		mgat mgat	20.0	:	
- 1		Combustion #3			mmBtu mgal	-		100%	N/A N/A	PM PM <sub>10</sub>		mget mget mget		l	1
1					mmscf	1		100%	N/A N/A	PM <sub>25</sub>	1	mgai		1	
				1			7 75 4	100%	N/A	SO <sub>2</sub> NO <sub>2</sub>	later district	moel			1
				1				100%	N/A N/A	VOC CO		mgai mgai	+		1 .
	1.5			1				100%	N/A N/A	CH <sub>2</sub> O		moal	1		
-		5.0			1 :		111	100%	N/A:	HAPs		mgal mgal mgal mgal mgal mgal mgal mgal			
				-				100%	N/A N/A	CO,		mgal mgal	-		
			. ,			<u> </u>		100%	N/A N/A	GHG		mgal mgal		l	
Equipment	Emission Unit	]	-									Emission Factor			
Status E	Number EP-01	Description of Unit	Equipment/SCC Description  Truck Unloading - Fragmented Stone EF 30502031	MHTP 500.00	Units	Equip Type	Control Type  No Control	100%	0.00%	IPM	0.0000	(lbs/UoM)	1.60E-0	7.01E-0	2 9.
						Fugitive Fugitive		100%	0.00%	PM <sub>10</sub> PM <sub>23</sub>	0.0000	16 Tons 08 Tons	8,00€-0	3.50E-0	2 4
	EP-02	primary crusher	Crusher-Primary, (Diameter 3-12") 30502001	500.00	Tons	Process Process	No Control	100% 100% 100%	0.00% 0.00% 0.00%	PM PM <sub>10</sub> PM <sub>75</sub>	0.00 0.00 0.0004444	24 Tons	2.70E+0 1.20E+0 2.22E-0	5.26E+0	0 7
E	EP-03	15 conveyors	Conveyor 30502006	2500.00	Tons	Process Process	No Control	100%	0.00%	PM PM <sub>10</sub>	0.0	03 Tons 11 Tons	7.50E+0 2.75E+0	3.29E+0 1.20E+0	15 4.3
E	EP-04	Secondary Crusher	Screens, (3/16" or Greater) 30502002	500.00	Tons	Process Process	No Control	100% 100% 100%	0.00% 0.00% 0.00%	PM <sub>71</sub> PM PM <sub>10</sub>	0.000310 0.0 0.00	25 Tons	7.77E-0 1,25E+0 4.35E+0	5.48E+0	7.
E	EP-05	2 Primary screening units	Conveyor 30502006	1000.00	Tons	Process	No Control	100%	0.00%	PM <sub>15</sub>	0.0005878	38 Tons	2.945-0	1.29E+0	1.
	EF-00	a rimes / screening units	Contractor Secretaria	1000.00	1 Otta	PIUCESS	Luc Contact	100%	0.00%	IL.M	. 0.0	03 Tons	3.00E+0 1.10E+0	1.31E+0 4.82E+0	11 1.3

NOTICE: This spreadsheet is for your use only and should be used with caution. MoDNR does not guarantee the accuracy of the information it contains. This spreadsheet is subject to continual revision and updating. It is your responsibility to be aware of the most current, accurate and complete information available. MoDNR is not responsible for errors or omissions in this spreadsheet. Submittal of the information contained in this spreadsheet (workbook) does not relieve the responsible official of the certification statement signed on the first page of the application.

#### For Single Plant Operation

#### For Multiple Plant Operation

Hours per day Days per year

Pollutant	Justification for
ronutant	Limit
PM10	De Minimis

Hours per day	24.0
Days per year	48.6
Hours per year	1166.6

2 50	29 17	25	0.4300
g	1:167 hours per	Trirestolds	Emission
s	year		Factor
:)	(tons/yr)		(lb/ton)
al	Allowable	Deminimis	Plant-wide
ns/*	Emissions for		Composite
	Hours per year	1166.6	

24.0

48.6

	Limit Hours per Year	
,	Limit Hours per Year w/ 24 hr day	

Pollutant	Potential Emissions of a Process Equipment (tons/yr)	Potential Emissions Including fugitives (tonstyr)	Allowable Emissions for 3 1:167 hours per year (tons/yr)	Deminimis Thresholds	Plant-wide Composite Emission Factor (lb/ton)
PM	112.57	286.59	38.17	25	0.1309
PM <sub>10</sub>	41.17	112.64	15.00	15	0.0514
PM <sub>2.5</sub>	7.03	19.78	2.63	10	0.0090
SO <sub>2</sub>	-	-		40	0.0000
NO <sub>2</sub>	-	-		40	0.0000
VOC	-	-	PART A STATE OF	40	0.0000
co	-	-		100	0.0000
CH <sub>2</sub> O		-	\$ 1596 No. 10219-	2.00	0.0000
Pb			The office of	0.01	0.0000
HAPs	-	-	3 7 Marie (* 3 m	10	0.0000
CO <sub>2</sub>	<u> </u>	-	animatei.	100	0.0000
N <sub>2</sub> O	-	-		100	0.0000
CH₄	-	-		100	0.0000
GHG <sub>mass</sub>	· -	-		100	0.0000
CO₂eq		-		100,000	0.0000

Maximum hourly design rate (tens/hi) 500

Tone of productive day	12 000 0
CONTRACTOR OF THE PROPERTY OF	12,000.0
Torrell to the state of the sta	583 290 7
	000,280.7

1	- 1	T			Ι							r			
Emission 1 Point Number	Emission Unit Number	Description	scc	Maximum Hourly	Units of Measure	Control Device Number	Control Type	Cepture Efficiency (%)	Control Efficiency (%)	Pollutant	Emission Factor	Emission Factor (lbs/UoM)	Emission Rate (lb/hr)	Potential Emissions (tons/yr)	Allowable Emissions (tons/yr)
		EngSet #1			bhp gailons per hour MMBtu/hour			N/A N/A	N/A N/A	PM PM <sub>10</sub>		mm8tu mm8tu			
		Model Year			MMBtu/hour xW-hr			N/A N/A	N/A N/A	PM <sub>2</sub> ; SO <sub>2</sub>		mmBtu Gallon			
							*	N/A N/A N/A	N/A N/A N/A	NO2		mm8tu mm8tu mm8tu			
					-			N/A N/A	N/A	CH <sub>2</sub> O HAPs		mm8tu			
							1	N/A N/A	N/A N/A	CO <sub>2</sub> N <sub>2</sub> O		mmBtu mmBtu mmBtu mmBtu			·
								N/A N/A	N/A N/A	GHG <sub>ran</sub>		mm8tu			
	- 1	EngSet#2 Model Year			php gallons per hour MMBtu/hour			N/A N/A N/A	N/A N/A N/A	PM PM <sub>10</sub> · PM <sub>2.5</sub>		mmBtu mmBtu mmBtu			
		MUGEI 160			kW-hr		40	N/A N/A	N/A N/A	SO <sub>2</sub>		Gallon mmBtu			
	- 1						4	N/A N/A	N/A N/A	CO VOC		mmBtu mmBtu			İ
,		I						N/A N/A N/A	N/A N/A N/A	CH <sub>2</sub> O HAPs CO <sub>2</sub>		mmBtu mmBtu mmBtu			
								N/A N/A	N/A N/A	N <sub>2</sub> O GHG,,		mmBtu mmBtu			
		EngSet #3			bhp		-	N/A N/A N/A	N/A N/A	CH <sub>a</sub> PM PM <sub>10</sub>		mmBtu mmBtu			
		Model Year			gations per hour MMBtu/hour			N/A	N/A N/A	PM <sub>2.5</sub>		mm8tu mm9tu			
					KW-hr			N/A N/A N/A	N/A N/A N/A	SO <sub>2</sub> NO <sub>2</sub> CO		Gallon mmBtu mmBtu			
								N/A N/A	N/A N/A	VOC CH-O		mmBtu mmBtu			-
								N/A N/A	N/A N/A	HAPs CO <sub>2</sub>		mmBtu mmBtu			
								N/A N/A	N/A N/A	N <sub>2</sub> O GHQ <sub>mass</sub>		mmBtu mmBtu			· ·
		Pile #1 Load in		500.00	tons per hour			N/A N/A	N/A N/A	CH₄ PM	0.0254	mm8tu	1.27E+01	55.52	7 30
				H 15 15				N/A N/A N/A	N/A N/A	PM <sub>10</sub>	0.0120	ton	6.00E+00 9.08E-01	26.26 3.98	7.39 3.50 0.53
		Load out		500.00	tons per hour			N/A	N/A N/A	PM	0.0254	ton I ton	1.27E+01 6.00E+00	55.52 26.26	3.50
		Vehicular Activity		2.53	VMT per hour		Unpayed, Documented Watering	N/A N/A N/A	N/A 90% 90%	PM <sub>2</sub> s PM PM <sub>10</sub>	0.0018 11,6174 3,3038	I VMT	9.08E-01 2.93E+00 8.34E-01	3.98 12.85 3.65	0.53 1.71 0.49
- :	- :	Wind Erosion		3.00	ares			N/A N/A	74% N/A	PM <sub>2.5</sub>	0.3304	VMT	2,17E-01 5,35E-01	0.95	0.13
	. '		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -					N/A N/A	N/A N/A	PM <sub>10</sub>	0.0882	acre-hr	2,67E-01 4,01E-02	2.34 1.17 0.18	0.31 0.16 0.02
		Pile #2 Load in			tons per hour			N/A N/A	N/A N/A	PM PM <sub>10</sub>		ton			
	ļ	Load out			tons per hour			N/A N/A	N/A N/A	PM <sub>25</sub>		ton ton			
144.00		V-VI			1			N/A N/A	N/A N/A	PM <sub>10</sub>		ton			
		Vehicular Activity			VMT per hour		1 1/4	N/A N/A N/A	N/A N/A N/A	PM PM <sub>10</sub> PM <sub>14</sub>		VMT			
7	. 1	Wind Erosion			ares			N/A N/A	N/A N/A	PM PM <sub>10</sub>	Ex. T. J. T.	VMT acre-hr acre-hr			
		Pile #3						N/A	N/A	PM <sub>2.5</sub>		acre-hr			
					tons per hour			N/A N/A N/A	N/A N/A N/A	PM PM <sub>16</sub> PM <sub>25</sub>		ton ton			
		Load out	Harton to a first to harting the last		tons per hour			N/A N/A	N/A N/A	PM PM <sub>10</sub>		ton ton			
		Vehicular Activity	a sub-		VMT per hour			N/A N/A	N/A N/A N/A	PM <sub>25</sub>		VMT		· · · · · · · · · · · · · · · · · · ·	
4 4 5 7.		Wind Erosion			acres	L	<u> </u>	N/A N/A	N/A N/A	PM <sub>10</sub> PM <sub>28</sub>		VMT			- 1
1.55			of the state of th	ta si	,		1.585	N/A N/A	NA NA	PM PM <sub>10</sub> PM <sub>25</sub>		acre-hr acre-hr			
	]	Pile #4 Load in			tons per hour			N/A	NA	PM		ton			
-54		Load out			tons per hour			N/A N/A	N/A N/A	PM <sub>10</sub> PM <sub>25</sub>		ton	in Wilde	-1 -	
40.0	[							N/A N/A N/A	N/A N/A N/A	PM PM <sub>10</sub> PM <sub>2.5</sub>		ton ton	1 1		
- 1		Vehicular Activity	A CONTRACTOR OF THE PROPERTY OF THE		VMT per hour		2.1911.4	N/A N/A	N/A N/A	PM PM <sub>10</sub>		ton VMT VMT			
		Wind Erosion	The second secon	ar da	ares .			N/A N/A	N/A N/A N/A	PM <sub>25</sub> PM PM <sub>10</sub>	1	VMT scre-tv			
		Road #1		10.52	VMT per hour		Unpaved, Documented Watering	N/A N/A N/A	N/A N/A 90%	PM <sub>2.6</sub>		acre-hr acre-hr			*.
			<u>tak este tite over stillende i </u>		177	1000	Superior, Documented Walting	N/A N/A	90% 90% 74%	PM PM <sub>10</sub> PM <sub>21</sub>	10.3529 3.0550 0.3050	S VMT	1.09E+01 3.22E+00	47.71 14.08	6.35 1.88
- 1		Road #2			VMT per hour			N/A	N/A	PM	0.305	VMT	8.38E-01	3.66	0.49

			<u> </u>	" "				l							
Emission Point Number	Emission Unit Number	Description	scc	Maximum Hourty	Units of Measure	Control Device Number	Control Type	Capture Efficiency (%)	Control Efficiency (%)	Poliutant	Emission Factor	Emission Factor (Ibs/UoM)	Emission Rate (lbfw)	Potential Emissions (tons/yr)	Allowable Emissions (tons/yr)
					- Jan 11 jan		a a grafi	N/A N/A	N/A N/A	PM <sub>10</sub>		VMT	!		
		Road #3			VMT per hour	\$4.5°	the his	N/A N/A N/A	N/A N/A	PM PM <sub>16</sub> PM <sub>25</sub>	atan ba	VMT VMT	100	Tarlor de	1.1
		Road #4			VMT per hour			N/A N/A N/A	N/A N/A	PM PM <sub>10</sub>	4 8 17 N 1 8 9	VMT			
	1.	Road #5			VMT per hour			N/A N/A	N/A N/A N/A	PM <sub>2.5</sub> PM PM <sub>10</sub>		VMT VMT VMT			
		Road #6		1000	VMT per hour		To the control of	N/A N/A N/A	N/A N/A N/A	PM <sub>2</sub> , PM <sub>10</sub>		VMT VMT	500 (0.00)		1
		<u> </u>	<u> </u>			4.		N/A	N/A	PM <sub>2.6</sub>	to the	VMT Emission Factor			3.
Equipment	Unit ID	Description of Unit	Equipment Description/SCC	Heat Rate	UoM per hour		<del>,</del>					(lbs/UoM)			
	4.0	Combustion #1		<u> </u>	mmBtu mgal			100%	N/A N/A	PM PM <sub>10</sub>	100	mgal mgal			,
					mmscf			100%	N/A N/A	PM <sub>2</sub> , SO <sub>2</sub>		mgel mgal			
				ļ	l .		1	100%	N/A N/A	NO₂ VOC	,	mgal mgal	l		
			the state of the s			l		100%	N/A N/A	CO CH <sub>2</sub> O		mgal mgal			
				1		l .		100%	N/A	Pb		rngal rngal	1		
				*	1000			100%	N/A	HAPs CO <sub>2</sub>	1	mgal			
							17 A .	100% 100% 100%	N/A N/A N/A	NO GHG <sub>mass</sub> CH <sub>4</sub>		mgal mgal mgai			
		Combustion #2			mmBtu			100%	N/A	PM		mgel			
		]			mgal mmscf	1		100%	N/A N/A	PM <sub>10</sub> · PM <sub>25</sub>		mgel mgel			
	1		The second of th		1 1	1	1.0	100%	N/A	80,		mgal			
	i .		I a control of the co					100% 100%	N/A N/A	NO <sub>2</sub>		mgel mgel mgel mgel			
						1.		100%	N/A	co		mgal			
		1.				1	and the state of t	100%	N/A N/A	CH₂O Pb		mgel mosi	1 1 1 1		
		e atti a la li	1		5 - 5 - 5 -			100%	N/A	HAPs CO <sub>2</sub>	the state of the	mgal mgal mgal mgal	1.5		
	ł		A Company of the Comp	.1				100%	N/A	N <sub>2</sub> O	I was to see to	mgai.		148	
				125				100%	N/A N/A	GHG <sub>ree</sub>		mgal			
		Combustion #3		<u> </u>	mmBtu	ļ., .		100%	N/A	PM	<b>.</b>	mgal mgal	<u> </u>		
		14			mgal mmscf	-	the state of the s	100%	N/A .	PM <sub>10</sub> : PM <sub>25</sub>	and the second	mgal	100		
			↓ Since the first of the property of the		1	1		100%	N/A	80,		mgal mgal			
		1.0				i		100%	N/A N/A	NO <sub>2</sub> VOC		mgal			
	l			I	1	l. '		100%	N/A	co		mgai mgai			
				1	1	1	Programme and the second	100%	N/A N/A	CH <sub>2</sub> O		mgal mgal	1.1		
	100	1 1 1 1 1 1 1 1 1 1 1 1			1			100%	N/A N/A	HAPs CO <sub>2</sub>	100	mgal			
								100% 100% 100%	N/A N/A N/A	N <sub>2</sub> O GHG,		mgal mgal			
Factoria		7		-t	<del></del>			10076	N/A	CH4	ــــــــــــــــــــــــــــــــــــــ	mgal	<del></del>	<u> </u>	1
Equipment Operational	Emission Unit Number	Description of Unit	Equipment/SCC Description	мнтр	Units	Equip Type	Control Type					Emission Factor			
Status	EP-01											(Ibs/LioM)			
-	====	loading into crusher/grizzly	Truck Unloading - Fragmented Stone EF 30502031	500.00	Tons	Fugitive Fugitive	No Control	100%	0.00%	PM PM <sub>10</sub>	0.00003	2 Tons 6 Tons	1.50E-02 8,00€-03	7.01E-02 3.50E-02	9.33E-03 4.87E-03
	EP-02	primary crusher	Crusher-Primary, (Diameter 3-12") 30502001	500.00	Tons	Process Process	No Control	100%	0.00%	PM <sub>25</sub>	0.00000 0.000 0.000	8 Tons	4.00E-03 2.70E+00	1.75E-02 1.18E+01	2.33E-03 1.57E+00
E	EP-03	15 conveyors	Conveyor 30502006	2500.00	Tons	Process Process	No Control	100%	0.00%	PM <sub>28</sub>	0.0004444	4 Tons	1.20E+00 2.22E-01 7.50E+00	9.73E-01 3.29E+01	1.30E-01 4.37E+00
	50.01				<u> </u>	Process		100%	0.00%	PM <sub>10</sub> PM <sub>21</sub>	0.001		2.76E+00 7.77E-01	1.20E+01 3.40E+00	
E	EP-04	Secondary Crusher	Screens, (3/16" or Greater) 30502002	500.00	Yons	Process	No Control	100%	0.00%	PM	0.02	5 Tons	1.25E+01	5.48E+01	7.29E+00
					L	Process	1	100%	0.00%	PM <sub>10</sub> PM <sub>25</sub>	0.006 0.00068783		4.35E+00 2.94E-01	1.91E+01 1.29E+00	2.54E+00 1.71E-01
E	EP-05	2 Primary screening units	Conveyor 30502006	1000,00	Tons	Process Process	No Control	100%	0.00%	PM	0.00	3 Tons	3.00E+00	1.31E+01	1.75E+00
	1	I		1		Process		100%	0.00%	PM <sub>16</sub> PM <sub>24</sub>	0.001	1 Tons 7 Tons	1.10E+00 3.11E-01		

NOTICE: This spreadabast is for your use only and should be used with caution. McDNR does not guarantee the sociatory of the information it contains. This spreadabast is subject to confinus retains and updating. It is your responsibility to be event of the most current, accurate and complete information available. McDNR is not responsible for arrow or orinsions in this spreadabast. Submitted of the information contained in this spreadabast (workbook) does not relates the responsible official of the certification statement signed on the first page of the application.

500](	Is important flat you read all the commin he upper right comer) because they may ritry cells.  Stack Ges Ent Temp.  (P)	disctyou to make changes to the data			
Stack Gas Flow Rate	Stack Gas Exit Temp.				
	를 가까만 되고 말이 끝되면				
	를 가까만 되고 말이 끝되면				
(ACFM)	(°F)				
(ACFW)	(F)				
1					
				-	
Pile#1	Pile #2	Pile #3	Pile #4	1	
3				-	
				4	
				i	
				1	
				1	
100				1	
32.50				]	
				]	
				1	
				4	
				- ·	
Documented vvenering				1	
Road #1	Road #2	Road #3	Road #4	Road #5	Road #8
1000					
. 12					
30					
500					
10.5219					
Unpaved					
Documented Watering				I	<u> </u>
CONTRACTOR OF THE STATE OF THE	and a graph of the graph of	the state of the s			
2.3.2.					
Computation #1		Combustion #2	esc #2	Combustion #1	Desc #3
	auto Data Rossa			COMPOSITION RS	mm Dturbour
	3 3 Crushed imestions 97 1.8 8 Crushed imestions 9.7 1.8 9 Conveyed blacker Leader 1000 32.50 40.00 500.00 2.5233 Unperved Documented Watering 1000 1000 1000 1000 1000 1000 1000 10	3 Crushed limestons 0.7 1.8 Conveyor/Stackar Loader 100 32.50 40.00 500.00 2.5283 Unprived Documented Wetering  Road #1 Road #2 1000 12 12 1000 12 12 1000 10 10 10 10 10 10 10 10 10 10 10 1	3 Crushed imestons 0.7 1.8 0.7	Crushed limestore	Crushel firestons 0.7 1.8 Conveyoribleous Leader 100 32.50 40.00 50.00 50.00 2.5253 Unjavved Documented Welering 1000 1000 Road #1 Road #2 Road #3 Road #4 Road #6 1000 1000 10219 Unjaved Unjaved Unjaved Unjaved 1000 10219 12 30 500 10.5219 Unjaved Documented Welering 1000 102219 Unjaved 1000 102319 Unjaved 1000 1000 1000 1000 1000 1000 1000 10

mgailhour

% weight sulfur

In regards to 40 CFR Part 98

Tank #4

In regards to AP-42 Chapter 1

Tenk #3

mgal/hour

mmsct/hour

% weight sulfur

in regards to 40 CFR Part 98

Tank #2

In regards to AP-42 Chapter 1

Tenk#1

Fuel Type

Tank 10

Annual VOC (pounds Armund VOC (torse)

Fuel Suitur Content (% weight suitur; for oil; grains of suitur/100 out gas vapor for Butane and Propene; not used for Natural gas)

Liquid Storage Tanks

mgal/hour mmsct/hour

% weight sulfur

in regards to 40 CFR Part 98

In regards to AP-42 Chapter 1

Tank #5

			Max Hourly ThroughPut	MHTP				
Equipment Operational Status	Emission Unit Number	Description of Unit	Equipment/BCC Description.	Equip Type	(MHTP)	Unite	Control Type	*COO* Applicable
E	EP-01 EP-02	loading into crusher/gritzzby primary crusher	Truck Unleading - Fragmented Stone EF 30502031 Crusten Primary, (Diarnete 512") 30502001 Conveyor 30500000 Screen, (3116 or Greater) 30502002 Conveyor 30500000000000000000000000000000000000	Fugitive Process	500,0000 500,0000 2500,0000	Tons Tons Tons Tons	Ne Control No Control No Control No Control	
E	EP-03	15 conveyors	Conveyor 30502008	Process	2500,0000	Tons	No Control	+
F	EP-04	15 conveyors Secondary Crusher	Screens, (3/16" or Greater) 30502002	Process	500.0000	lons	No Control	
Ē	EP-03 EP-04 EP-05	2 Primary screening units	Conveyor 30502006	Process	1000.0000	Tons	No Control	+
	L: -00							
								$\overline{}$
								_
						1		_
						+		$\overline{}$
						_		
	L					<del> </del>		+-
						+		+
						+		
						-		+
						+		
			ļ. ·			+		+-
								<del></del>
								-
								-
-	_							
	+							
	+							
	<del>                                     </del>							
	<del>                                     </del>							
	<del>                                     </del>							
	1							
	<del>                                     </del>							
	<del>                                     </del>							
	<del>                                     </del>							
	+							
	1						I	
	1							
						1		
	<del> </del>							
	_							_
	1				1	_		
	+				1	1		
			***				1	
	1							
	1		1		<del></del>			-
	1		<del></del>				1	
	_							
					<del>                                     </del>	_	1	
	+						<del>                                     </del>	_
	-						· · · · · · · · · · · · · · · · · · ·	_
	+					-	<del>                                     </del>	+
								<del></del>
	+		· · · · · · · · · · · · · · · · · · ·			+		+-
	+							<del></del>
	+							
	+							$\overline{}$
	$\leftarrow$					+		
					•			-
	+							
	1							
	1							
								$\overline{}$



# Missouri Department of

dnr.mo.gov

# **NATURAL RESOURCES**

Eric R. Greitens, Governor

Carol S. Comer, Director

## MAY 1 6 2018

Mr. Jack Mertens Vice President Richard J. Mertens, Inc. P.O. Box 448 Warrenton, MO 63383

RE: New Source Review - Permit Number:

Project Number: 2018-05-001; Installation Number: PORT-0778

Dear Mr. Mertens:

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 is necessary for continued compliance. In addition, please note that Richard J. Mertens, Inc. cannot operate with any other plants that have ambient impact limits based on the Air Pollution Control Program's nomographs. Please refer to the permits of any plant that you are operating with to see if their respective permits contain an ambient impact limit. 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: <a href="http://dnr.mo.gov/regions/">http://dnr.mo.gov/regions/</a>. The online CAV request can be found at <a href="http://dnr.mo.gov/cav/compliance.htm">http://dnr.mo.gov/cav/compliance.htm</a>.

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, 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: <a href="https://www.oa.mo.gov/ahc">www.oa.mo.gov/ahc</a>.



Mr. Jack Mertens Page Two

If you have any questions, please do not hesitate to contact Kathy Kolb 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:kkj

**Enclosures** 

c: St. Louis Regional Office

PAMS File: 2018-05-001

Permit Number: 05 2 0 1 8 - 0 0 4