## 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:	0320105008	Project Number: 2010-02-050 Installation ID: PORT-0637
Parent Company:	Everett Quarries Compar	ny, Inc.
Parent Company Add	ress: P.O. Box 276, Plattsburg	, MO 64477
Installation Name:	Everett Quarries Plant 3	
Installation Address:	660 SE Quarry Drive, Kin	gston, MO 64650
Location Information:	Caldwell County, S27, T5	66N, R28W
The installation of repla		0637. This review was conducted in CSR 10-6.060, <i>Construction Permits</i>
Standard Cond	itions (on reverse) are applicat	ole to this permit.
Standard Cond permit.	itions (on reverse) and Special	Conditions are applicable to this
MAR 7/5 2010 EFFECTIVE DATE	, ,	OR DESIGNEE  ENT. OF NATURAL BESOURCES

#### 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 devises shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Departments' 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 of Natural Resources 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 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 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 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.

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Permit No.	
Project No.	2010-02-050

### **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."

## 1. Superseding Condition

The conditions of this permit supersede all special conditions found in the previously issued construction permit 092009-002 from the Air Pollution Control Program.

## 2. Equipment Identification Requirement

Everett Quarries Plant 3 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. These identification numbers must be submitted to the Air Pollution Control Program no later than 15 days after start-up of the portable rock crushing plant.

## 3. Relocation of Portable Rock Crushing Plant

- A. Everett Quarries Plant 3 shall not be operated at any location longer than 24 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.
  - If the portable rock crushing plant is moving to a site previously permitted, and if the circumstances at the site have not 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 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, 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.

## 4. Record Keeping Requirement

Everett Quarries Plant 3 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.

### 5. Reporting Requirement

Everett Quarries Plant 3 shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedances of the limitations imposed by this permit.

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Project No.	2010-02-050

### 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-0637 Site ID Number: 025-0003 Site Name: Everett Quarries 6

Site Address: 660 SE Quarry Drive Kingston, MO 64650

Site County: Caldwell S27, T56N, R28W

### 1. Superseding Condition

- A. The conditions of this permit supersede all special conditions found in the previously issued construction permit 092009-002 from the Air Pollution Control Program.
- B. Everett Quarries Company, Inc. is still required to relocate PORT-0637 from Everett Quarries 6 in Caldwell County (S27, T56N, R28W) within two years of the original permit date (permit # 092009-002)
- 2. Best Management Practices Requirement
  Everett Quarries Plant 3 shall control fugitive emissions from all of the haul roads and vehicular activity areas at this site by performing Best Management Practices as defined in Attachment AA.
- 3. Ambient Air Impact Limitation
  - A. Everett Quarries Plant 3 shall not cause an exceedance of the National Ambient Air Quality Standard (NAAQS) for particulate matter less than ten microns in aerodynamic diameter (PM<sub>10</sub>) of 150.0 μg/m<sup>3</sup> 24-hour average in ambient air.
  - B. Everett Quarries Plant 3 shall demonstrate compliance with special condition 3.A using Attachment A for same owner concurrent operation and Attachment B for same and separate concurrent operation or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form. Everett Quarries Plant 3 shall account for the impacts from other sources of PM<sub>10</sub> as instructed in Attachment A and B.
  - C. Everett Quarries Plant 3 is exempt from the requirements of special condition 3.B when the only plants operated at the site belong to a separate owner and when no other plants are operating at this site.

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Permit No.	
Project No.	2010-02-050

### SITE SPECIFIC SPECIAL CONDITIONS:

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

- 4. Annual Emission Limit
  - A. Everett Quarries Plant 3 shall emit less than 40.0 tons of  $NO_x$  in any 12-month period from the entire installation.
  - B. Everett Quarries Plant 3 shall demonstrate compliance with special condition 4.A using Attachment C or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.
- 5. Moisture Content Testing Requirement
  - A. Everett Quarries Plant 3 shall verify that the moisture content of the processes rock is greater than or equal to 1.5% weight.
  - B. Testing shall be conducted according to the method prescribed by the American Society for Testing Materials (ASTM) D-2216, C-566 or another method approved by the Director.
  - C. The initial test shall be conducted not later than 45 days after the start of operation. A second test shall be performed the calendar year following the initial test during the months of July or August.
  - D. The test samples shall be taken from rock that has been processed by the plant or from each source of aggregate (e.g. quarry).
  - E. The written analytical report shall include the raw data and moisture content of each sample, the test date and the original signature of the individual performing the test. The report shall be filed on-site or at the Everett Quarries Plant 3 main office within 30 days of completion of the required test.
  - F. If the moisture content of either of the two tests is less than the moisture content in special condition 5.A, another test may be performed within 15 days of the noncompliant test. If the results of that test also exceed the limit, Everett Quarries Plant 3 shall either:
    - 1.) Apply for a new permit to account for the revised information, or
    - 2.) Submit a plan for the installation of wet spray devices to the Air Pollution Control Program Compliance Assistance section within 10 days of the second noncompliant test. The wet spray devices shall be installed and operational within 40 days of the second noncompliant test.
  - G. In lieu of testing, Everett Quarries Plant 3 may obtain test results that demonstrate compliance with the moisture content in special condition 5.A from the supplier of the aggregate.

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Project No.	2010-02-050

## SITE SPECIFIC SPECIAL CONDITIONS:

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

- 6. Minimum Distance to Property Boundary Requirement
  The primary emission point, which is the primary rock crusher (EU06), shall be located at least 1050 feet from the nearest property boundary.
- 7. Standard of Performance for New Stationary Sources (NSPS) Requirement Everett Quarries Plant 3 shall comply with all appropriate monitoring, testing, reporting, and record keeping requirements of 40 CPR Part 60, Subpart OOO---Standards of Performance for Nonmetallic Mineral Processing Plants

## REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE

SECTION (6) REVIEW
Project Number: 2010-02-050
Installation ID Number: PORT-0637
Permit Number:

Complete: February 18, 2010

Everett Quarries Plant 3 660 SE Quarry Drive Kingston, MO 64650

Parent Company: Everett Quarries Company, Inc. P.O. Box 276 Plattsburg, MO 64477

Caldwell County, S27, T56N, R28W

#### PROJECT DESCRIPTION

Everett Quarries Plant 3 is a portable rock crushing plant (PORT-0637) that is currently permitted to operate at Everett Quarries 6. PORT-0637 has requested to replace the current equipment with new rock crushing equipment. Most equipment qualifies for like-kind replacement. PORT-0637 was previously powered by two 300 Horsepower (HP) diesel generators. The replacing generators are 400 HP and 125 HP. Because the 400 HP is larger than the existing 300 HP engine it is not eligible for a like-kind replacement and triggers the need for a permit. There is also a new Norberg screen and belt conveyor being added to the plant as well. The new equipment has a maximum hourly design rate (MHDR) of 400 tons of rock crushed per hour. The rock crushed by PORT-0637 has an inherent moisture content of 1.5% which helps control the particulate matter less then ten microns in aerodynamic diameter (PM<sub>10</sub>) emissions. Currently there are no other plants located at this site. The new, replaced, and existing equipment is listed in Table 2 in the Tables section of the permit.

Everett Quarries Company, Inc. is still required to relocate PORT-0637 from Everett Quarries 6 in Caldwell County (S27, T56N, R28W) within two years of the original permit date (permit # 092009-002)

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. This installation is located in Caldwell 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.

#### **TABLES**

The following permits have been issued to Everett Quarries Plant 3 from the Air Program.

**Table 1: Permit History** 

Permit Number	Description
092009-002	New Portable Rock Crushing Plant

Table 2: New, Replaced, and Existing Equipment

Emission Unit ID	Description	New, Replaced, Existing	MHDR	MHDR Units
EU01	Wet Drilling	Existing	400	tons per hour
EU02	Truck Loading – Fragmented Stone	Existing	400	tons per hour
EU03	Haul Road #1	Existing	24	VMT
EU04	Truck Unloading – Fragmented Stone	Existing	400	tons per hour
N/A	Grizzly Feeder - Terex	Replaced	<del>500</del>	tons per hour
EU05	Grizzly Feeder - Norberg	New	400	tons per hour
N/A	Primary Crusher - Terex	Replaced	<del>500</del>	tons per hour
EU06	Primary Crusher - Norberg	New	400	tons per hour
N/A	Front and Side Discharge Conveyors - Terex	Replaced	<del>500</del>	tons per hour
EU07 & EU08	Front and Side Discharge Conveyors - Norberg	New	400	tons per hour
N/A	Grizzly Feeder - Power Screen	Replaced	<del>500</del>	tons per hour
EU9	Grizzly Feeder - McCloskey	New	400	tons per hour
N/A	Screen Power Screen	Replaced	<del>500</del>	tons per hour
EU10	Screens - McCloskey	New	400	tons per hour
N/A	Conveyor - Power Screen	Replaced	<del>500</del>	tons per hour
EU11	Conveyor - McCloskey	New	400	tons per hour
N/A	Conveyor - Power Screen	Replaced	<del>500</del>	tons per hour
EU12	Conveyor - McCloskey	New	400	tons per hour
N/A	Front and 3 Side Discharge Conveyors- Power Screen	Replaced	500	tons per hour
EU13 – EU16	Front and 3 Side Discharge Conveyors- McCloskey	New	400	tons per hour
N/A	Return Conveyors - Power Screen	Replaced	<del>500</del>	tons per hour
EU17 & EU18	Return Conveyors – Norberg and Unknown	New	400	tons per hour
EU19	Truck Loading – Conveyor	Existing	500	tons per hour
EU20	Haul Road #2	Existing	18.46	VMT
EU21	Storage Pile (Load In- Out/Vehicular Activity) Storage Pile (Wind Erosion)	Existing	400 1	tons per hour acres
EU22	Haul Road #3	Existing	16	VMT
N/A	Diesel Engine powered Generator	Replaced	300	Horsepower
EU23	Diesel Engine powered Generator - Caterpillar	New	400	Horsepower

Continued:	Table 2			
N/A	Diesel Engine powered Generator	Replaced	300	Horsepower
EU24	Diesel Engine powered Generator	New	125	Horsepower
EU25	Screen - Norberg	New	400	tons per hour
EU26	Return Conveyor - Norberg	New	400	ton per hour

The table below summarizes the emissions of this project. 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 are based on a voluntary  $NO_x$  limit of 40.0 tons per year to avoid the air quality requirements of Section (6) in Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Table 3: Emissions Summary (tons per year)

rable of Emissions cammary (tons per year)								
		<sup>1</sup> Existing		<sup>2</sup> Potential	Conditioned			
	De Minimis	Potential	Existing Actual	Emissions of	Potential			
Air Pollutant	Level/ SMAL	Emissions	Emissions	the Application	Emissions			
PM <sub>10</sub>	15.0	<50.0	N/A	88.01	48.13			
SO <sub>X</sub>	40.0	1.89	N/A	4.85	2.63			
$NO_X$	40.0	28.78	N/A	73.69	<40.00			
VOC	40.0	2.35	N/A	6.02	3.27			
CO	100.0	6.20	N/A	15.87	8.62			
<sup>3</sup> Lead	0.01	0.00	N/A	0.00	0.00			
<sup>3</sup> Formaldehyde	2.0	N/A	N/A	N/A	N/A			
Total HAPs	25.0	0.03	N/A	0.07	0.04			

N/A = Not Applicable

**Table 4: Ambient Air Quality Impact Analysis** 

	<sup>1</sup> NAAQS/ RAL	Averaging	<sup>2</sup> Maximum Modeled Impact	<sup>3</sup> Limited Impact	Background	<sup>4</sup> Daily Limit
Pollutant	(µg/m³)	Time	(µg/m³)	(µg/m³)	(µg/m³)	(tons/day)
<sup>5</sup> PM <sub>10</sub> (same)	150.0	24-hour	50.6	130.0	20.0	N/A
<sup>6</sup> PM <sub>10</sub> (separate)	150.0	24-hour	N/A	100.0	50.0	N/A

<sup>&</sup>lt;sup>1</sup>National Ambient Air Quality Standards (NAAQS) and Risk Assessment Level (RAL)

#### **EMISSIONS CALCULATIONS**

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

<sup>&</sup>lt;sup>1</sup>The Existing Potential Emissions were taken from permit # 092009-002

<sup>&</sup>lt;sup>2</sup>Includes site specific haul road and storage pile emissions

<sup>&</sup>lt;sup>3</sup>Screening Model Action Level (SMAL)

<sup>&</sup>lt;sup>2</sup>Modeled impact of PORT-0637 at maximum capacity with controls

<sup>&</sup>lt;sup>3</sup>Limited Impact of all plants owned by Everett Quarries Company, Inc. during same owner operation.

<sup>&</sup>lt;sup>4</sup>Indirect limit based on compliance with NAAQS.

<sup>&</sup>lt;sup>5</sup>Solitary operation or operation with other plants that are owned by Everett Quarries Company, Inc.

<sup>&</sup>lt;sup>6</sup>Operation with other plants that are not owned by Everett Quarries Company, Inc.

Emissions from the rock-crushing equipment were calculated using emission factors from AP-42 Section 11.19.2 "Crushed Stone Processing and Pulverized Mineral Processing," August 2004. The controlled emission factors were used because the inherent moisture content of the crushed rock is greater than 1.5% weight.

Emissions from the diesel generators were calculated using emission factors from AP-42 Section 3.3 "Gasoline and Diesel Industrial Engines," October 1996.

Emissions from haul roads and vehicular activity areas were calculated using the predictive equation from AP-42 Section 13.2.2 "Unpaved Roads," November 2006. A 90% control efficiency is applied to the emission calculations for the use of BMPs. Emissions from 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 1.5% 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."

#### AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of the pollutants listed in Table 4. The Air Pollution Control Program requires an AAQIA of PM<sub>10</sub> for all asphalt, concrete and rock-crushing plants regardless of the level of PM<sub>10</sub> 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. For each pollutant that was modeled, the maximum concentration that occurs at or beyond the site boundary was compared to the National Ambient Air Quality Standard (NAAQS) or Risk Assessment Level (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. In cases where the plant is providing material for a highway project, the ambient impact is evaluated in accordance with a memorandum issued by the Air Pollution Control Program titled "Permitting Asphalt/Concrete Plants for Temporary Highway Projects," dated April 10, 2000. This memorandum states that air quality should be analyzed at the nearest residence or location where the public could reasonably expected to be found instead of all ambient air. This practice generally allows for a less restrictive daily production level while protecting the public.

This plant uses BMPs to control emissions from haul roads and vehicular activity areas, so emissions from these sources were not included in the AAQIA. Instead they were addressed as a background concentration of 20  $\mu g/m^3$  of PM<sub>10</sub> in accordance with the Air Pollution Control Program's BMPs interim policy.

#### **OPERATING SCENARIOS**

The plant is permitted to operate with other plants located at the site as long as the NAAQS is not exceeded. The following scenarios explain how Everett Quarries Plant 3 shall demonstrate compliance with the NAAQS.

- When plants that are owned by Everett Quarries Company, Inc., which are referred to as same owner plants, are located at the site, Everett Quarries Company, Inc. must calculate the daily impact of each plant and limit the total impact of all plants below the NAAQS.
- When plants that are not owned by Everett Quarries Company, Inc., which are referred to as separate owner plants, are located at the site, Everett Quarries Company, Inc. must account for the impacts of these plants as a background concentration and add it to the total impact of all plants owned by Everett Quarries Company, Inc. that are operating at the site. This total is limited below the NAAQS. Everett Quarries Company, Inc. will limit the total impact of all plants they own and operate at the site to 100.0 μg/m³ when any plants they do not own are located at the site. Everett Quarries Plant 3 is not permitted to operate with any plant that is not owned by Everett Quarries Company, Inc. that has a separate owner background greater than 30 μg/m³.

#### 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 above de minimis levels.

#### APPLICABLE REQUIREMENTS

Everett Quarries Plant 3 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. The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- 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 10-3.090

### 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.
- Restriction of Emission of Sulfur Compounds, 10 CSR 10-6.260

#### 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 special conditions.

Gerad Fox	Date	
Environmental Engineer		

### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated February 16, 2010, received February 18, 2010, designating Everett Quarries Company, 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: Ambient Impact Tracking Sheet for Same Owner Operation**

Everett Quarries Plant 3 PORT-0637 Project Number: 2010-02-050

Site Name: Everett Quarries 6

Site Address: 660 SE Quarry Drive, Kingston, MO 64650

Site County: Caldwell, S27, T56N, R28W

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

	(World) (World)								
				Same Owner Plant	Same Owner Plant	Same Owner Plant			
	Everett Quarries Plant 3 PORT-0637		Plant Name:	Plant Name:	Plant Name:				
			Plant ID:	Plant ID:	Plant ID:				
	Project # 201	0-02-050		Permit #:	Permit #:	Permit #:			
	Daily	Impact					Back-	Total	
	Production	Factor	Impact1	Impact <sup>2</sup>	Impact <sup>2</sup>	Impact <sup>2</sup>	ground	Impact <sup>3</sup>	
Date	(tons)	(µg/m³ton)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	Impact <sup>3</sup> (µg/m³)	
Example	8,065	0.00527	42.5	10.2	N/A	N/A	20.0	72.7	
		0.00527					20.0		
		0.00527					20.0		
		0.00527					20.0		
		0.00527					20.0		
		0.00527					20.0		
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		0.00527					20.0		
		0.00527					20.0		

<sup>&</sup>lt;sup>1</sup>Calculate the impact for PORT-0637 by multiplying the daily production by the impact factor.

<sup>&</sup>lt;sup>2</sup>Input the impact for any plants owned by Everett Quarries Company, Inc. that are operating on the site.

<sup>&</sup>lt;sup>3</sup>Calculate the total impact by adding the applicable impacts and background. A total of 150 µg/m<sup>3</sup> or less is necessary for compliance.

## Attachment B: Ambient Impact Tracking Sheet for Same and Separate Owner Operation

Everett Quarries Plant 3 PORT-0637 Project Number: 2010-02-050

Site Name: Everett Quarries 6

Site Address: 660 SE Quarry Drive, Kingston, MO 64650

Site County: Caldwell, S27, T56N, R28W

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

(Month, Day Tear)									
				Same Owner Plant	Same Owner Plant	Seperate Owner Plant			
	Everett Quarries Plant 3			Plant Name:	Plant Name:	Plant Name:			
	PORT-0637			Plant ID:	Plant ID:	Plant ID:			
	Project # 2010-02-050			Permit #:	Permit #:	Permit #:			
	Daily	Impact					Back-	Total	
	Production	Factor	Impact <sup>1</sup>	Impact <sup>2</sup>	Impact <sup>2</sup>	Impact	ground	Impact <sup>3</sup>	
Date	(tons)	(µg/m³ton)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	
Example	8,065	0.00527	<i>4</i> 2.5	10.2	N/A	30	20.0	102.7	
		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		
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		0.00527				30	20.0		
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		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		
		0.00527				30	20.0		

<sup>&</sup>lt;sup>1</sup>Calculate the impact for PORT-0637 by multiplying the daily production by the impact factor.

<sup>&</sup>lt;sup>2</sup>Input the impact for any plants owned by Everett Quarries Company, Inc. that are operating on the site.

<sup>&</sup>lt;sup>3</sup>Calculate the total impact by adding the applicable impacts and background. Include the separate owner plant impact if a plant that is not owned by Everett Quarries Company, Inc. is located at the site. A total of 150 µg/m<sup>3</sup> or less is necessary for compliance.

## Attachment C: NO<sub>x</sub> Annual Emissions Tracking Sheet

Everett Quarries Plant 3 PORT-0637 Project Number: 2010-02-050 Permit Number:

Site Name: Everett Quarries 6

Site Address: 660 SE Quarry Drive, Kingston, MO 64650

Site County: Caldwell, S27, T56N, R28W

This sheet covers the period from \_\_\_\_\_\_ to \_\_\_\_\_ (Copy as needed)

	(N	lonth, Day Year)	(Month, Day Yea	r)	
Month	Fuel Usage <sup>1</sup> (gallons)	Emission Factor (lb/ton)	Monthly Emissions <sup>2</sup> (lbs)	Monthly Emissions <sup>3</sup> (tons)	12-Month Total Emissions <sup>4</sup> (tons)
Example	57,007	0.0421	2,400.0	1.2	14.46
	- ,	0.0421	,		
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		0.0421		·	
		0.0421			

<sup>&</sup>lt;sup>1</sup>Fuel Usage should include the diesel used by both diesel generators.

<sup>&</sup>lt;sup>2</sup>Multiply the fuel usage by the emission factor.

<sup>&</sup>lt;sup>3</sup>Divide the monthly emissions (lbs) by 2000.

<sup>&</sup>lt;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 40.0 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 emissions<sup>1</sup> 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 manufacture'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 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

<sup>&</sup>lt;sup>1</sup>For 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.)

## **Attachment BB: Emission Calculations**

**Everett Quarries Plant 3** 2010-02-050

						Emissions	<sup>3</sup> Modeling
Description	<sup>1</sup> MHDR	MHDR Units	<sup>2</sup> PM <sub>10</sub> EF	EF Units	Control Eff.%	(lb/hr)	Rate (lb/hr)
Wet Drilling	400.0000	Tons	0.000000	Lbs/Ton	N/A	0	0
Truck Loading - Fragmented Stone	400.0000	Tons	0.000016	Lbs/Ton	N/A	0.000020	0.0035
Haul Road #1	24.0000	VMT	2.32	Lbs/VMT	90.00	0.014	3.02
Truck Unloading - Fragmented Stone	400.0000	Tons	0.000016	Lbs/Ton	N/A	0.000016	0.0035
Grizzly Feeder-Norberg	400.0000	Tons	0.000016	Lbs/Ton	N/A	0.000016	0.0035
Primary Crusher-Norberg	400.0000	Tons	0.0024	Lbs/Ton	75.00	0.0006	0.13
Discharge Conveyors (2)-Norberg	400.0000	Tons	0.0011	Lbs/Ton	95.80	0.000046	0.010
screens -Norberg	400.0000	Tons	0.0087	Lbs/Ton	91.50	0.00074	0.16
Grizzly Feeder -McCloskey	400.0000	Tons	0.000016	Lbs/Ton	0.00	0.000016	0.0035
Screens -McCloskey	400.0000	Tons	0.0087	Lbs/Ton	91.50	0.00074	0.16
Conveyor -McCloskey	400.0000	Tons	0.0011	Lbs/Ton	95.80	0.000046	0.010
Conveyor -McCloskey	400.0000	Tons	0.0011	Lbs/Ton	95.80	0.000046	0.010
Discharge Conveyors (4) -McCloskey	400.0000	Tons	0.0011	Lbs/Ton	95.80	0.000046	0.010
Return Conveyors (Norberg+ Not Known)	400.0000	Tons	0.0011	Lbs/Ton	95.80	0.000046	0.010
Truck Loading - Conveyor	400.0000	Tons	0.0011	Lbs/Ton	95.80	0.000046	0.010
Haul Road #2	18.4615	VMT	2.01	Lbs/VMT	90.00	0.0093	2.01
Storage Pile Load In	400.0000	Tons	0.012	Lbs/Ton	N/A	0.012	2.60
Storage Pile Load Out	1.0000	Acres	0.089	Lbs/Acres	N/A	0.00022	0.048
Storage Pile Wind Erosion	1.0000	Acres	0.089	Lbs/Acres	N/A	0.00022	0.048
Storage Pile Vehicular Activity	400.0000	Tons	0.012	Lbs/Ton	90.00	0.0012	0.26
Haul Road #3	16.0000	VMT	2.01	Lbs/VMT	90.00	0.0080	1.74
Diesel Generator	0.0066	Mgal	42.47	Lbs/Mgal	N/A	0.00070	0.15
Diesel Generator	0.0212	Mgal	42.47	Lbs/Mgal	N/A	0.0023	0.49

N/A = Not Applicable

<sup>1</sup>Maximum Hourly Design Rate (MHDR)

<sup>2</sup>Emission Factor (EF)

<sup>3</sup>The Modeling Rate is the emission rate scaled to the daily hours of operation at MHDR allow by the permit.

Mr. Joseph Nasseri Project Engineer Everett Quarries Plant 3 P.O. Box 276 Plattsburg, MO 64477

RE: New Source Review Permit - Project Number: 2010-02-050

Dear Mr. Nasseri:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, 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 with 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 have any questions regarding this permit, please do not hesitate to contact Gerad Fox, at the Departments' 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

Kendall B. Hale New Source Review Unit Chief

KBH:gfl

Enclosures

c: Kansas City Regional Office PAMS File: 2010-02-050

Permit Number: