



Jeremiah W. (Jay) Nixon, Governor · Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

DEC 27 2010

Mr. Jo W. Strack
Owner
Strack Excavating, LLC
5120 State Highway 74
Cape Girardeau, MO 63701

RE: New Source Review Permit - Project Number: 2010-07-057

Dear Mr. Strack:

Enclosed with this letter is your air permit to construct a rock crushing facility in Jackson, MO. This permit was issued in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required, and contains special conditions to ensure compliance with this rule. 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 future 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.

As you are aware, this proposed plant requires additional permits from the Department's Land Reclamation Program and Water Protection Program. These permits are required prior to certain activity at the site. Specifically, the Land Reclamation Permit is required prior to any activity anywhere on the mine plan area and a Water Pollution Control Permit is required prior to any land clearing activity.

If you have any questions regarding this permit, please do not hesitate to contact Chia-Wei Young, 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

A handwritten signature in black ink that reads "Kendall B. Hale".

Kendall B. Hale
New Source Review Unit Chief

KBH:cwyl

Enclosures

c: Southeast Regional Office
PAMS File: 2010-07-057

Permit Number: 122010-013

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: 122010-013

Project Number: 2010-07-057
Installation ID: 031-0124

Parent Company: Strack Excavating, LLC

Parent Company Address: 5120 State Highway 74, Cape Girardeau, MO 63701

Installation Name: Strack Excavating, LLC

Installation Address: 5154 US Hwy 61, Jackson, MO 63755

Location Information: Cape Girardeau County (S20, T32N, R13E)

Application for Authority to Construct was made for:

The installation of a new rock crushing plant. 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.

DEC 27 2010

EFFECTIVE DATE

A handwritten signature in black ink, appearing to read "James C. Kwan".

DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

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

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

You must notify the Departments' 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 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 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 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.	122010-013
Project No.	2010-07-057

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."

1. Best Management Practices Requirement
Strack Excavating, LLC 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.
2. Ambient Air Impact Limitation
 - A. Strack Excavating, LLC shall not cause an exceedance of the National Ambient Air Quality Standard (NAAQS) for particulate matter less than ten microns in aerodynamic diameter (PM₁₀) of 150.0 µg/m³ 24-hour average in ambient air.
 - B. Strack Excavating, LLC 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. Annual Emission Limit
 - A. Strack Excavating, LLC shall emit less than 15.0 tons of PM₁₀ in any 12-month period from the entire installation.
 - B. Strack Excavating, LLC shall demonstrate compliance with special condition 3.A. using Attachment B or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.
4. Annual Emission Limit
 - A. Strack Excavating, LLC shall emit less than 40.0 tons of NO_x in any 12-month period from the entire installation.
 - B. Strack Excavating, LLC 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. Strack Excavating, LLC shall verify that the moisture content of the processed rock is equal to or greater than 1.5% by weight.

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Permit No.	122010-013
Project No.	2010-07-057

SITE SPECIFIC SPECIAL CONDITIONS:

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

- 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 no later than 45 days after the start of operations. 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 and must not have been sprayed by any water spray devices.
 - 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 Strack Excavating, LLC's 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 must be performed within 15 days of the noncompliant test. If the results of that test also indicate a moisture content less than 1.5 wt. %, Strack Excavating, LLC 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/Enforcement 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.
6. Requirements on Fuel Sulfur Content
Strack Excavating, LLC shall ensure that all fuel combusted in the diesel generator contain no more than 0.5 percent (%) sulfur by weight through one of the following methods:
- A. Strack Excavating, LLC shall obtain records indicating the sulfur content of each shipment of fuel from the supplier.
 - B. Strack Excavating, LLC shall test each shipment of diesel fuel for sulfur content using Society of Testing and Materials (ASTM) Method D (2622-98), *Sulfur in Petroleum Products by X-Ray Fluorescence Spectrometry*.
7. Minimum Distance to Property Boundary Requirement
The primary emission point shall be located at least 200 feet from the nearest property boundary.
8. Concurrent Operation Restriction
Strack Excavating, LLC is prohibited from operating whenever other plants are located at the site.

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Permit No.	122010-013
Project No.	2010-07-057

SITE SPECIFIC SPECIAL CONDITIONS:

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

9. Primary Equipment Requirement
Strack Excavating, LLC shall process all rock through the primary crusher (EP-01).
Bypassing the primary crusher is prohibited.

10. Record Keeping Requirement
Strack Excavating, LLC 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.

11. Reporting Requirement
Strack Excavating, LLC shall report to the Air Pollution Control Program Compliance/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.

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

Project Number: 2010-07-057
Installation ID Number: 031-0124
Permit Number: 122010-013

Strack Excavating, LLC
5154 US Hwy 61
Jackson, MO 63755

Complete: July 29, 2010

Parent Company:
Strack Excavating, LLC
5120 State Highway 74
Cape Girardeau, MO 63701

Cape Girardeau County (S20, T32N, R13E)

PROJECT DESCRIPTION

Strack Excavating, LLC proposes to install a new rock crushing plant with a maximum hourly design rate (MHDR) of 650 tons per hour (tph). The plant will be powered by an Onan generator with a 900 Kilowatt (KW) Cummins KTA38-G3 diesel engine. 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 will be located in Cape Girardeau 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. No permits have been issued to this installation from the Air Pollution Control Program.

Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines," of the New Source Performance Standards (NSPS) applies to diesel engines that are ordered from the manufacturer after July 11, 2005 that is manufactured after April 1, 2006. The facility bought its diesel engine used and was not able to provide an initial order date. However, it is known that this diesel engine was manufactured in 1998. Therefore, Subpart IIII of the NSPS does not apply to the diesel engine.

TABLES

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). PM₁₀ conditioned potential emissions are based on a 15.0 tons per year limit to avoid increment analysis. PM_{2.5} conditioned potential emissions are reduced based on the PM₁₀ conditioned potential emissions. NO_x emissions are based on a 40.0 tons per year limit to avoid screening analysis. Other combustion emissions are proportionally reduced based on NO_x conditioned potential.

Table 1: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/ SMAL	Existing Potential Emissions	Existing Actual Emissions (EIQ)	Potential Emissions of the Application	Conditioned Potential Emissions
PM _{2.5}	10.0	N/A	N/A	37.86	4.37
PM ₁₀	15.0	N/A	N/A	110.25	<15.0
SO _x	40.0	N/A	N/A	21.54	6.31
NO _x	40.0	N/A	N/A	136.49	<40.0
VOC	40.0	N/A	N/A	3.49	1.02
CO	100.0	N/A	N/A	36.25	10.63
Total HAPs	25.0	N/A	N/A	0.07	0.02

N/A = Not Applicable

Table 2: Ambient Air Quality Impact Analysis

Pollutant	¹ NAAQS (µg/m ³)	Averaging Time	² Maximum Modeled Impact (µg/m ³)	Limited Impact (µg/m ³)	Background (µg/m ³)	³ Daily Limit (tons/day)
⁴ PM ₁₀	150.0	24-hour	462.56	130.0	20.0	6,469

¹National Ambient Air Quality Standards (NAAQS)

²Modeled impact at maximum capacity with controls

³Indirect limit based on compliance with NAAQS.

⁴Solitary operations only.

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).

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% by weight. Emissions from the diesel generators were calculated using emission factors from AP-42, Section 3.4, "Large Stationary Diesel and All Stationary Dual-fuel Engines," October, 1996. The engine is assumed to have 35 percent (%) efficiency. 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 emissions 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, "Aggregate Handling and Storage Piles," November, 2006. The moisture content of the aggregate is 1.5% by weight. Emissions from wind erosion of storage piles were calculated using an equation from EPA document "Air/Superfund National Technical Guidance Study Series: Volume III – Estimation of Air Emissions from Cleanup Activities at Superfund Sites," January, 1989, which calculates total suspended particulates (TSP), and applying the PM₁₀ and PM_{2.5} particle size distribution found in AP-42, Chapter 13.2.5, "Industrial Wind Erosion," November, 2006.

In the permit application, Strack Excavating, LLC claimed that the moisture content of the aggregate to be greater than 1.5% by weight. However, the company also plans to add water sprays on the equipment to reduce visible emissions to maintain compliance with opacity limits in CFR 40 Part 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants." Only one of these control measure is required to use the controlled emission factors. Therefore, as a requirement of this permit, the facility is only required to test the moisture content of the aggregate to ensure that it is greater than

1.5% by weight. There are no permit requirements for water sprays. The aggregate samples for the tests should be rocks that have not been sprayed by the spray devices. The company can still install water sprays on the equipment to reduce visible emissions for Subpart OOO of the NSPS, but that is not included as part of this permit.

AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of the pollutants listed in Table 2. The Air Pollution Control Program requires an AAQIA of PM₁₀ for all asphalt, concrete and rock-crushing plants regardless of the level of PM₁₀ emissions if a permit is required. An AAQIA is required for other pollutants if their emissions exceed their respective de minimis. The AAQIA was performed using the Air Pollution Control Program's generic nomographs and when appropriate the EPA modeling software SCREEN3. 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) for the pollutant. If during continuous operation the modeled concentration of a pollutant is greater than the applicable NAAQS, the plant's production is limited to ensure compliance with the standard.

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 µg/m³ of PM₁₀ in accordance with the Air Pollution Control Program's BMPs interim policy.

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 all pollutants are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

Strack Excavating, LLC 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

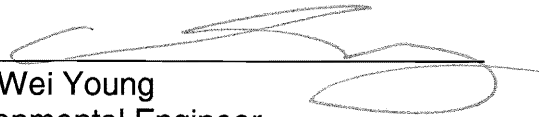
- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110. The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required by April 1, if submitting a hardcopy and by May 1, if submitting online at www.dnr.mo.gov/moeis/main/login, for the previous year's emissions. Payments are due June 1.
- A Basic Operating Permit application is required for this installation within 30 days of equipment startup.
- *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) applies to the equipment.
- Subpart ZZZZ, "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines," of the National Emission Standards for Hazardous Air Pollutants for Source Categories (a.k.a. Maximum Achievable Control Technology)" apply to the diesel engine.
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260

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*, I recommend this permit be granted with special conditions.


Chia-Wei Young
Environmental Engineer

12.22.10
Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated July 26, 2010, received July 29, 2010, designating Strack Excavating, LLC as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southeast Regional Office Site Survey, dated August 3, 2010.

Attachment AA: Best Management Practices

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

1. Pavement
 - A. The operator shall pave the area with materials such as asphalt, concrete or other materials approved by the Air Pollution Control Program. The pavement will be applied in accordance with industry standards to achieve control of fugitive emissions¹ while the plant is operating.
 - B. Maintenance and repair of the road surface will be conducted as necessary to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall periodically wash or otherwise clean all of the paved portions of the haul roads as necessary to achieve control of fugitive emissions from these areas while the plant is operating.

2. Application of Chemical Dust Suppressants
 - A. The operator shall apply a chemical dust suppressant (such as magnesium chloride, calcium chloride, lignosulfonates, etc.) to unpaved areas.
 - B. The quantities of the chemical dust suppressant shall be applied and maintained in accordance with the manufacturer's recommendation (if available) and in sufficient quantities to achieve control of fugitive emissions from these areas while the plant is operating.
 - C. The operator shall record the time, date and the amount of material applied for each application of the chemical dust suppressant agent on the above areas. The operator shall keep these records with the plant for not less than five (5) years and make these records available to Department of Natural Resources personnel upon request.

3. Application of Water-Documented Daily
 - A. The operator shall apply water to unpaved areas. Water shall be applied at a rate of 100 gallons per day per 1,000 square feet of unpaved or untreated surface area while the plant is operating.
 - B. Precipitation may be substituted for watering if the precipitation is greater than one quarter of one inch and is sufficient to control fugitive emissions.
 - C. Watering may also be suspended when the ground is frozen, during periods of freezing conditions when watering would be inadvisable for traffic safety reasons, or when there will be no traffic on the roads.
 - D. The operator shall record the date, 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

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

Attachment BB: Emission Calculations
 Strack Excavating, LLC
 2010-07-057

Description	¹ MHDR	MHDR Units	² PM ₁₀ EF	EF Units	Control Eff. %	Emissions (lb/hr)	³ Modeling Rate (lb/hr)
Drilling	650.0000	tons	0.000000	Lbs/ton	0.00	0.0000	0.0000
Blasting	650.0000	Tons	0.000000	Lbs/ton	0.00	0.0000	0.0000
Shot Rock Truck Load In	650.0000	Tons	0.000016	Lbs/ton	0.00	0.0104	0.0043
Shot Rock Truck Hauling to Plant	7.3864	VMT	3.264013	Lbs/VMT	90.00	2.4109	0.9998
Shot Rock Pile Load In	650.0000	Tons	0.004125	Lbs/ton	0.00	2.6815	1.1120
Shot Rock Pile Vehicular Activity	650.0000	Tons	0.006487	Lbs/ton	0.00	4.2163	1.7485
Shot Rock Pile Wind Erosion	0.6000	Acres	0.089166	Lbs/Acre.hr	0.00	0.0535	0.0222
Shot Rock Pile Load Out	650.0000	Tons	0.004125	Lbs/ton	0.00	2.6815	1.1120
Pan Feeder	650.0000	Tons	0.000016	Lbs/ton	0.00	0.0104	0.0043
Primary Crusher	650.0000	Tons	0.002400	Lbs/ton	75.00	0.3900	0.1617
Conveyor from Primary Crusher to Screen/Bins	650.0000	Tons	0.001100	Lbs/ton	95.80	0.0300	0.0125
Primary Screen	650.0000	Tons	0.008700	Lbs/ton	91.50	0.4807	0.1993
Conveyors from Primary Screen to Crusher/Bins	650.0000	Tons	0.001100	Lbs/ton	95.80	0.0300	0.0125
Secondary Crusher	400.0000	Tons	0.002400	Lbs/ton	75.00	0.2400	0.0995
Conveyor from Crusher to Screen	400.0000	Tons	0.001100	Lbs/ton	95.80	0.0185	0.0077
Screen	400.0000	Tons	0.008700	Lbs/ton	91.50	0.2958	0.1227
Conveyors from Screen to Bins/Return Conveyor	400.0000	Tons	0.001100	Lbs/ton	95.80	0.0185	0.0077
Loadout Bins (6) into Trucks	650.0000	Tons	0.004125	Lbs/ton	0.00	2.6815	1.1120
Product Storage Pile Load In	650.0000	Tons	0.004125	Lbs/ton	0.00	2.6815	1.1120
Product Storage Pile Vehicular Activity	650.0000	Tons	0.020188	Lbs/ton	90.00	1.3123	0.5442
Product Storage Pile Wind Erosion	6.0000	Acres	0.089166	Lbs/Acre.hr	0.00	0.5350	0.2219
Product Storage Pile Load Out	650.0000	Tons	0.004125	Lbs/ton	0.00	2.6815	1.1120
Product Haul Road	4.7348	VMT	2.437349	Lbs/VMT	90.00	1.1540	0.4786
Diesel Generator	0.0711	Mgal	7.850000	Lbs/Mgal	0.00	0.5580	0.2314

¹Maximum Hourly Design Rate (MHDR)

²Emission Factor (EF)

³The Modeling Rate is the emission rate scaled to the daily hours of operation at MHDR allowed by the permit.