

Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Michael L. Parson, Governor

Carol S. Comer, Director

MAR 05 2019

Mr. Shaun Davis
Owner
Davis Concrete Contractors
411 West Grant
Clever, MO 65631

RE: New Source Review Permit
Project Number: 2018-08-053; Installation Number: 043-0045

Dear Mr. Davis:

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 Davis Concrete Contractors 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: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed



Recycled paper

Mr. Shaun Davis
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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: www.aa.mo.gov/ahc.

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



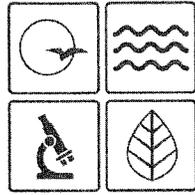
Susan Heckenkamp
New Source Review Unit Chief

SH:kkj

Enclosures

c: Southwest Regional Office
PAMS File: 2018-08-053

Permit Number: 032019-004



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: 032019-004

Project Number: 2018-08-053
Installation ID: 043-0045

Parent Company: Davis Concrete Construction

Parent Company Address: 411 West Grant, Clever, MO 65631

Installation Name: Davis Concrete Contractors

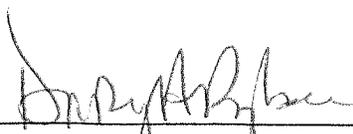
Installation Address: 411 West Grant, Clever, MO 65631

Location Information: Christian County, S20 T27N R23W

Application for Authority to Construct was made for a new stationary concrete plant. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

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



Director or Designee
Department of Natural Resources

MAR 05 2019

Effective Date

STANDARD CONDITIONS:

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

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

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

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

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

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

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

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

The regional office information can be found at the following website:

<http://dnr.mo.gov/regions/>

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."

Site ID Number: 043-0045

Site Name: Davis Concrete Contractors

Site Address: 411 West Grant, Clever, MO 65631

Site County: Christian S20 T27N R23W

1. Annual Emission Limit

- A. Davis Concrete Contractors shall emit less than 15.0 tons of PM₁₀ 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. Davis Concrete Contractors shall demonstrate compliance with Special Condition 1.A using Attachment A or another equivalent form that has been approved by the Air Pollution Control Program, including an electronic form.

2. Undocumented Watering Requirement

Davis Concrete Contractors shall apply a water spray on all haul roads and vehicular activity areas whenever conditions exist that would allow visible emissions from these sources to leave the property.

3. Control Device Requirement-Baghouse

- A. Davis Concrete Contractors shall control emissions from the following equipment listed below using baghouses as specified in the permit application.
- 1) Cement Silo (EU-3)
 - 2) Supplement Silo (EU-4)
- B. The baghouse shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that Department of Natural Resources' employees may easily observe them.
- C. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to

SPECIAL CONDITIONS:

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

occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

D. Davis Concrete Contractors shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours when the associated equipment is in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

E. Davis Concrete Contractors shall maintain a copy of the baghouse manufacturer's performance warranty on site.

F. Davis Concrete Contractors shall maintain an operating and maintenance log for the baghouses which shall include the following:

- 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
- 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

4. Record Keeping Requirement

Davis Concrete Contractors 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.

5. Reporting Requirement

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

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2018-08-053
Installation ID Number: 043-0045

Permit Number:

032019-004

Davis Concrete Contractors:
411 West Grant
Clever, MO 65631

Complete: September 11, 2018

Parent Company:
Davis Concrete Construction
411 West Grant
Clever, MO 65631

Christian County, S20 T27N R23W

PROJECT DESCRIPTION

Davis Concrete Contractors is constructing a refurbished concrete plant in Clever, Missouri located in Christian County. The plant is a Ross-Belgrade concrete plant with a MHDR of 100 tons per hour. The silos emissions will be controlled by a baghouse. The local utility will supply electricity to the plant.

The applicant is using undocumented watering to control particulate matter emissions from haul roads and vehicular activity areas.

This installation is located in Christian 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 have been issued to Davis Concrete Contractors from the Air Pollution Control Program.

TABLES

Table 1: Concrete Plant Equipment List

Emission Point	Description	MHDR
EU-1	Aggregate Transfer	46.35 tph
EU-2	Sand Transfer	35.49 tph
EU-3	Cement Unloading to Silo	12.20 tph
EU-4	Supplement Unloading	1.81 tph
EU-5	Weigh Hopper	81.83 tph
EU-6	Truck Loading (Cement and Supplement loading per AP-42)	14.02 tph
EU-7a	Aggregate Storage Pile-Load in	46.35 tph
EU-7b	Aggregate Storage Pile-Load out	46.35 tph
EU-7c	Aggregate Storage Pile-Vehicular Activity	0.44 VMT
EU-7d	Aggregate Storage Pile-Wind Erosion	0.22 acre
EU-8a	Sand Storage Pile-Load in	35.49 tph
EU-8b	Sand Storage Pile-Load out	35.49 tph
EU-8c	Sand Storage Pile-Vehicular Activity	0.34 VMT
EU-8d	Sand Storage Pile-Wind Erosion	0.20 acres
EU-9	Haul #1	0.66 VMT/hr
EU-10	Haul #2	1.38 VMT/hr

The table below summarizes the emissions of this project. The potential emissions of the process equipment exclude emissions from haul roads and wind erosion. There are no existing actual emissions because this is a new installation. 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 a voluntary annual PM₁₀ emission limit of 15.0 tons per year in order to avoid refined modeling.

Table 2: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	^a Potential Emissions of Process Equipment	Existing Actual Emissions	^b Potential Emissions of the Application	Conditioned Potential Emissions
PM	25.0	67.06	N/A	138.43	48.09
PM ₁₀	15.0	20.22	N/A	43.18	<15.0
PM _{2.5}	10.0	15.90	N/A	18.79	6.53
SO _x	40.0	N/A	N/A	N/A	N/A
NO _x	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 (CO ₂ e)	N/A	N/A	N/A	N/A	N/A
GHG (mass)	N/A	N/A	N/A	N/A	N/A
Total HAPs	25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable

^aExcludes haul roads and storage pile emissions

^bIncludes haul road and storage pile emissions

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 concrete batch plant:

- Calculated using emission factors from AP-42 Section 11.12 "Concrete Batching," June 2006.
- This section cites Equation (1) in Section 13.2.4 "Aggregate Handling and Storage Piles," November 2006 for calculating the emissions from aggregate and sand transfer.
- The cement and supplement silos are controlled with a baghouse, so the controlled emission factors were used.

Emissions from the aggregate weigh hopper:

- Calculated using AP-42 Section 13.2.4, Equation (1).
- These emissions are not controlled.
- Emissions from mix truck loading are uncontrolled, so the uncontrolled emission factor was used.

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.

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 50% control efficiency for PM and PM₁₀ and a 41% control efficiency for PM_{2.5} were applied to the emission calculations for the use of undocumented watering.

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*. The conditioned potential emissions include emissions from sources that will limit their production to ensure compliance with the annual PM₁₀ emission limit of 15.0 tons per year for stationary plants in order to avoid refined modeling. Potential emissions of PM are above de minimis but below major source levels. There are no modeling requirements for PM.

APPLICABLE REQUIREMENTS

Davis Concrete Contractors 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.
- No Operating Permit is required for this installation because all emissions are conditioned below de minimis levels and PM does not trigger operating permits requirements. There are no federal regulations requiring an operating permit.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400. The aggregate weigh hopper's potential emission rate of 0.39 pounds per hour of PM and the truck loading potential emission rate of 1.36 pounds per hour of PM are individually below the process weight of 51.28 pounds per hour and therefore complies with this regulation.

- 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 August 8, 2018, received August 24, 2018, designating Davis Concrete Construction as the owner and operator of the installation.

APPENDIX A

Abbreviations and Acronyms

%	percent	MMBtu	Million British thermal units
°F	degrees Fahrenheit	MMCF	million cubic feet
acfm	actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	NAAQS	National Ambient Air Quality Standards
BMPs	Best Management Practices	NESHAPs ..	National Emissions Standards for Hazardous Air Pollutants
Btu	British thermal unit	NO_x	nitrogen oxides
CAM	Compliance Assurance Monitoring	NSPS	New Source Performance Standards
CAS	Chemical Abstracts Service	NSR	New Source Review
CEMS	Continuous Emission Monitor System	PM	particulate matter
CFR	Code of Federal Regulations	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CO	carbon monoxide	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
CO₂	carbon dioxide	ppm	parts per million
CO_{2e}	carbon dioxide equivalent	PSD	Prevention of Significant Deterioration
COMS	Continuous Opacity Monitoring System	PTE	potential to emit
CSR	Code of State Regulations	RACT	Reasonable Available Control Technology
dscf	dry standard cubic feet	RAL	Risk Assessment Level
EQ	Emission Inventory Questionnaire	SCC	Source Classification Code
EP	Emission Point	scfm	standard cubic feet per minute
EPA	Environmental Protection Agency	SDS	Safety Data Sheet
EU	Emission Unit	SIC	Standard Industrial Classification
fps	feet per second	SIP	State Implementation Plan
ft	feet	SMAL	Screening Model Action Levels
GACT	Generally Available Control Technology	SO_x	sulfur oxides
GHG	Greenhouse Gas	SO₂	sulfur dioxide
gpm	gallons per minute	SSM	startup, shutdown, & malfunction
gr	grains	tph	tons per hour
GWP	Global Warming Potential	tpy	tons per year
HAP	Hazardous Air Pollutant	VMT	vehicle miles traveled
hr	hour	VOC	Volatile Organic Compound
hp	horsepower		
lb	pound		
lbs/hr	pounds per hour		
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		
m/s	meters per second		
Mgal	1,000 gallons		
MW	megawatt		
MHDR	maximum hourly design rate		

Engine Set Information	7A	7B	7C
Type of Fuel			
Brake Horsepower (bhp)			
Engine kilowatt rating (KW)			
gallons per hour			
Engine MHR (mmBtu per hour, input)			
is this a generator-set engine?			
Model Year (yyy)			
Fuel Sulfur Content (% weight sulfur)			

Combustion Sources						
Combustion ID - Description	Combustion #1	Desc #1	Combustion #2	Desc #2	Combustion #3	Desc #3
Heat Rate		mmBtu/hour		mmBtu/hour		mmBtu/hour
		mgal/hour		mgal/hour		mgal/hour
		mmmcf/hour		mmmcf/hour		mmmcf/hour
	In regards to AP-42 Chapter 1	In regards to 40 CFR Part 98	In regards to AP-42 Chapter 1	In regards to 40 CFR Part 98	In regards to AP-42 Chapter 1	In regards to 40 CFR Part 98
Fuel Type						
Fuel Sulfur Content (% weight sulfur, for oil; grains of sulfur/100 cuft gas vapor for Butane and Propane, not used for Natural gas)		% weight sulfur		% weight sulfur		% weight sulfur

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.

	Pollutant	Justification for Limit	Limit Hours per Year
Hours per day	24.0	PM10	NAAQS
Days per year	126.6	N/A	N/A
Hours per year	3043.0	PM10	De Minimis

Pollutant	Potential Emissions of Process Equipment (tons/yr)	Potential Emissions including fugitives (tons/yr)	Allowable Emissions for 3043 hours per year (tons/yr)	DeMinimis Thresholds	Plant-wide Composite Emission Factor (lb/ton)
PM	67.06	138.43	48.09	25	0.3161
PM ₁₀	20.22	43.18	15.00	15	0.0986
PM _{2.5}	15.90	18.79	6.53	10	0.0429
SO ₂	0.00	0.00	0.00	40	0.0000
NO ₂	0.00	0.00	0.00	40	0.0000
VOC	0.00	0.00	0.00	40	0.0000
CO	0.00	0.00	0.00	100	0.0000
CH ₂ O	0.00	0.00	0.00	2	0.0000
C ₁₁ H ₁₀	0.00	0.00	0.00	-	0.0000
Pb	0.00	0.00	0.00	0.01	0.0000
HAPs	0.00	0.00	0.00	10	0.0000
CO ₂	0.00	0.00	0.00	100	0.0000
N ₂ O	0.00	0.00	0.00	100	0.0000
CH ₄	0.00	0.00	0.00	100	0.0000
GHC _{mass}	0.00	0.00	0.00	100	0.0000
CO ₂ eq	0.00	0.00	0.00	100,000	0.0000

Maximum hourly design rate (tons/hr)	100
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Tons of product per day	2,400.0
Tons of product per year	304,299.4

E=55.0 P.11 - 40
 P=Process Rate=MHDR
 E=
 51.27727991

Process Rate 100
 Allowable lb/hr 51.27727991
 Potential lb/hr 3.93E-01 Weigh hopper EP-5 1.36E+01 Truck Loading EP-6
 .39 lb/hr from the weigh hopper EP-5 is less than 51.28 lb/hr, therefore the aggregate weigh hopper is in compliance with the process rate rule 10 CSR 6.400
 1.36 lb/hr from the truck loading EP-6 is less than 51.28 lb/hr, therefore the truck loading is in compliance with the process rate rule 10 CSR 6.400

Emission Point Number	Emission Unit Number	Description	SCC	MHDR	Units	Control Device Number	Control Type	Capture Efficiency (%)	Control Efficiency (%)	Pollutant	Emission Factor	Units (pounds per)	Emission Rate (lb/hr)	Potential Emissions (tons/yr)	Allowable Emissions (tons/yr)
1	1	Aggregate transfer Moisture Content (% wt.) = 0.7	3-05-011-04	46.35	tons per hour			N/A	N/A	PM	0.0254	ton	1.18E+00	5.15	1.79
								N/A	N/A	PM ₁₀	0.0120	ton	5.56E-01	2.43	0.85
								N/A	N/A	PM _{2.5}	0.0018	ton	8.42E-02	0.37	0.13
2	2	Sand transfer Moisture Content (% wt.) = 4.17	3-05-011-05	35.49	tons per hour			N/A	N/A	PM	0.0021	ton	7.40E-02	0.32	0.11
								N/A	N/A	PM ₁₀	0.0010	ton	3.50E-02	0.15	0.05
								N/A	N/A	PM _{2.5}	0.0001	ton	5.30E-03	0.02	0.01
3	3	Cement unloading to silo	3-05-011-07	12.20	tons per hour	Fabric filter		100%	N/A	PM	0.0010	ton	1.21E-02	0.05	0.02
								100%	N/A	PM ₁₀	0.0003	ton	4.15E-03	0.02	0.01
								100%	N/A	PM _{2.5}	0.0003	ton	4.15E-03	0.02	0.01
4	4	Supplement unloading (pneumatic)	3-05-011-17	1.81	tons per hour	Fabric filter		100%	N/A	PM	0.0089	ton	1.61E-02	0.07	0.02
								100%	N/A	PM ₁₀	0.0049	ton	8.89E-03	0.04	0.01
								100%	N/A	PM _{2.5}	0.0049	ton	8.89E-03	0.04	0.01
5	5	Weigh hopper loading	3-05-011-08	81.83	tons per hour	Uncontrolled		N/A	N/A	PM	0.0048	ton	3.93E-01	1.72	0.60
								N/A	N/A	PM ₁₀	0.0028	ton	2.29E-01	1.00	0.35
								N/A	N/A	PM _{2.5}	0.0014	ton	1.18E-01	0.52	0.18
6	6	Truck loading (truck mix) Moisture Content (% wt.) = 0.12	3-05-011-10	14.02	tons per hour	Uncontrolled		N/A	N/A	PM	1.118	ton	1.36E+01	59.75	20.76
								N/A	N/A	PM ₁₀	0.31	ton	3.78E+00	16.57	5.76
								N/A	N/A	PM _{2.5}	0.2795	ton	3.41E+00	14.94	5.19
7A	7A	Generator Model Year			bhp gallons per hour mmBtu/hour			N/A	N/A	PM		MMBtu			
								N/A	N/A	PM ₁₀		MMBtu			
								N/A	N/A	PM _{2.5}		MMBtu			
								N/A	N/A	SO ₂		MMBtu			
								N/A	N/A	NO ₂		MMBtu			
								N/A	N/A	CO		MMBtu			
								N/A	N/A	VOC		MMBtu			
								N/A	N/A	CH ₂ O		MMBtu			
								N/A	N/A	HAPs		MMBtu			
								N/A	N/A	CO ₂		MMBtu			
								N/A	N/A	N ₂ O		MMBtu			
								N/A	N/A	GHG _{mass}		MMBtu			
7B	7B	Generator Model Year			bhp gallons per hour mmBtu/hour			N/A	N/A	PM		MMBtu			
								N/A	N/A	PM ₁₀		MMBtu			
								N/A	N/A	PM _{2.5}		MMBtu			
								N/A	N/A	SO ₂		MMBtu			
								N/A	N/A	NO ₂		MMBtu			
								N/A	N/A	CO		MMBtu			
								N/A	N/A	VOC		MMBtu			
								N/A	N/A	CH ₂ O		MMBtu			
								N/A	N/A	HAPs		MMBtu			
								N/A	N/A	CO ₂		MMBtu			
								N/A	N/A	N ₂ O		MMBtu			
								N/A	N/A	GHG _{mass}		MMBtu			
7C	7C	Generator Model Year			bhp gallons per hour mmBtu/hour			N/A	N/A	PM		MMBtu			
								N/A	N/A	PM ₁₀		MMBtu			
								N/A	N/A	PM _{2.5}		MMBtu			
								N/A	N/A	SO ₂		MMBtu			
								N/A	N/A	NO ₂		MMBtu			
								N/A	N/A	CO		MMBtu			
								N/A	N/A	VOC		MMBtu			
								N/A	N/A	CH ₂ O		MMBtu			
								N/A	N/A	HAPs		MMBtu			
								N/A	N/A	CO ₂		MMBtu			
								N/A	N/A	N ₂ O		MMBtu			
								N/A	N/A	GHG _{mass}		MMBtu			

Equipment	Unit ID	Description of Unit	Equipment Description/SCC	Heat Rate	UoM per hour					Emission Factor (lbs/UoM)			
		Combustion #1								100%	N/A	PM	mgal
										100%	N/A	PM ₁₀	mgal
										100%	N/A	PM _{2.5}	mgal
										100%	N/A	SO ₂	mgal
										100%	N/A	NO ₂	mgal
										100%	N/A	VOC	mgal
										100%	N/A	CO	mgal
										100%	N/A	CH ₂ O	mgal
										100%	N/A	Pb	mgal
										100%	N/A	HAPs	mgal
										100%	N/A	CO ₂	mgal
										100%	N/A	N ₂ O	mgal
										100%	N/A	GHG _{mass}	mgal
		Combustion #2								100%	N/A	PM	mgal
										100%	N/A	PM ₁₀	mgal
										100%	N/A	PM _{2.5}	mgal
										100%	N/A	SO ₂	mgal
										100%	N/A	NO ₂	mgal
										100%	N/A	VOC	mgal
										100%	N/A	CO	mgal
										100%	N/A	CH ₂ O	mgal
										100%	N/A	Pb	mgal
										100%	N/A	HAPs	mgal
										100%	N/A	CO ₂	mgal
										100%	N/A	N ₂ O	mgal
										100%	N/A	GHG _{mass}	mgal
		Combustion #3								100%	N/A	PM	mgal
										100%	N/A	PM ₁₀	mgal
										100%	N/A	PM _{2.5}	mgal
										100%	N/A	SO ₂	mgal
										100%	N/A	NO ₂	mgal
										100%	N/A	VOC	mgal
										100%	N/A	CO	mgal
										100%	N/A	CH ₂ O	mgal
										100%	N/A	Pb	mgal
										100%	N/A	HAPs	mgal
										100%	N/A	CO ₂	mgal
										100%	N/A	N ₂ O	mgal
										100%	N/A	GHG _{mass}	mgal
100%	N/A	CH ₄	mgal										

Pile #1(used for Aggregate transfer)	Load in	46.35	tons per hour			N/A	N/A	PM	0.0254	ton	1.18E+00	5.15	1.79
						N/A	N/A	PM ₁₀	0.0120	ton	5.56E-01	2.43	0.85
						N/A	N/A	PM _{2.5}	0.0018	ton	8.42E-02	0.37	0.13
	Load out	46.35	tons per hour			N/A	N/A	PM	0.0254	ton	1.18E+00	5.15	1.79
						N/A	N/A	PM ₁₀	0.0120	ton	5.56E-01	2.43	0.85
						N/A	N/A	PM _{2.5}	0.0018	ton	8.42E-02	0.37	0.13
	Vehicular Activity	0.44	VMT per hour		Unpaved, Undocumented Watering	N/A	50%	PM	7.0640	VMT	1.55E+00	6.79	2.36
						N/A	50%	PM ₁₀	2.0087	VMT	4.41E-01	1.93	0.67
						N/A	41%	PM _{2.5}	0.2009	VMT	5.19E-02	0.23	0.08
	Wind Erosion	0.20	acres			N/A	N/A	PM	0.1783	acre-hr	3.57E-02	0.16	0.05
					N/A	N/A	PM ₁₀	0.0892	acre-hr	1.78E-02	0.08	0.03	
					N/A	N/A	PM _{2.5}	0.0134	acre-hr	2.67E-03	0.01	0.00	
Pile #2(used for Sand transfer)	Load in	35.49	tons per hour			N/A	N/A	PM	0.0021	ton	7.40E-02	0.32	0.11
						N/A	N/A	PM ₁₀	0.0010	ton	3.50E-02	0.15	0.05
						N/A	N/A	PM _{2.5}	0.0001	ton	5.30E-03	0.02	0.01
	Load out	35.49	tons per hour			N/A	N/A	PM	0.0021	ton	7.40E-02	0.32	0.11
						N/A	N/A	PM ₁₀	0.0010	ton	3.50E-02	0.15	0.05
						N/A	N/A	PM _{2.5}	0.0001	ton	5.30E-03	0.02	0.01
	Vehicular Activity	0.34	VMT per hour		Unpaved, Undocumented Watering	N/A	50%	PM	7.0640	VMT	1.19E+00	5.20	1.81
						N/A	50%	PM ₁₀	2.0087	VMT	3.38E-01	1.48	0.51
						N/A	41%	PM _{2.5}	0.2009	VMT	3.98E-02	0.17	0.06
	Wind Erosion	0.20	acres			N/A	N/A	PM	0.2898	acre-hr	5.80E-02	0.25	0.09
					N/A	N/A	PM ₁₀	0.1449	acre-hr	2.90E-02	0.13	0.04	
					N/A	N/A	PM _{2.5}	0.0217	acre-hr	4.35E-03	0.02	0.01	
Pile #3	Load in		tons per hour			N/A	N/A	PM		ton			
						N/A	N/A	PM ₁₀		ton			
						N/A	N/A	PM _{2.5}		ton			
	Load out		tons per hour			N/A	N/A	PM		ton			
						N/A	N/A	PM ₁₀		ton			
Vehicular Activity		VMT per hour			N/A	N/A	PM		VMT				
					N/A	N/A	PM ₁₀		VMT				
					N/A	N/A	PM _{2.5}		VMT				
Wind Erosion		acres			N/A	N/A	PM		acre-hr				
					N/A	N/A	PM ₁₀		acre-hr				
					N/A	N/A	PM _{2.5}		acre-hr				
Pile #4	Load in		tons per hour			N/A	N/A	PM		ton			
						N/A	N/A	PM ₁₀		ton			
						N/A	N/A	PM _{2.5}		ton			
	Load out		tons per hour			N/A	N/A	PM		ton			
						N/A	N/A	PM ₁₀		ton			
Vehicular Activity		VMT per hour			N/A	N/A	PM		VMT				
					N/A	N/A	PM ₁₀		VMT				
					N/A	N/A	PM _{2.5}		VMT				
Wind Erosion		acres			N/A	N/A	PM		acre-hr				
					N/A	N/A	PM ₁₀		acre-hr				
					N/A	N/A	PM _{2.5}		acre-hr				
Road #1		0.66	VMT per hour		Unpaved, Undocumented Watering	N/A	50%	PM	11.8780	VMT	3.91E+00	17.14	5.95
						N/A	50%	PM ₁₀	3.5059	VMT	1.15E+00	5.06	1.76
						N/A	41%	PM _{2.5}	0.3506	VMT	1.36E-01	0.60	0.21
Road #2		1.38	VMT per hour		Unpaved, Undocumented Watering	N/A	50%	PM	10.2413	VMT	7.05E+00	30.89	10.73
						N/A	50%	PM ₁₀	3.0228	VMT	2.08E+00	9.12	3.17
						N/A	41%	PM _{2.5}	0.3023	VMT	2.45E-01	1.07	0.37