

STATE OF MISSOURI

PERMIT BOOK



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: 012014-003

Project Number: 2013-09-006
Installation ID: PORT-0653

Parent Company: Tony E. Abney Construction

Parent Company Address: 1 Vine Street, Viburnum, MO 65566

Installation Name: Tony E. Abney Construction

Installation Address: 6854 Highway KK, Bunker, MO 63629

Location Information: Reynolds County, S1, T32N, R2W

Application for Authority to Construct was made for:
Installation of a portable Keestrac Explorer 1800 screen 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.

JAN 06 2014

EFFECTIVE DATE

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 Department's Air Pollution Control Program of the anticipated date of startup 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 startup 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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Project No.	2013-09-006

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. **Equipment Identification Requirement**
Tony E. Abney Construction 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.
2. **Relocation of Portable Rock Crushing Plant**
 - A. Tony E. Abney Construction shall not be operated at any location longer than 24 consecutive months except if the Site Specific Special Conditions of this portable plant, PORT-0653, contain a nonroad engine requirement limiting the portable plant at the site specific location to 12 consecutive months.
 - B. A complete "Portable Source Relocation Request" application must be submitted to the Air Pollution Control Program prior to any relocation of this portable rock crushing plant.
 - 1) If the portable rock crushing plant is moving to a site previously permitted, and if the circumstances at the site have not changed, then the application must be received by the Air Pollution Control Program at least seven days prior to the relocation.
 - 2) If the portable rock crushing plant is moving to a new site, or if circumstances at the site have changed (e.g. the site was only permitted for solitary operation and now another plant is located at the site), then the application must be received by the Air Pollution Control Program at least 21 days prior to the relocation. The application must include written notification of any concurrently operating plants.
3. **Record Keeping Requirement**
Tony E. Abney Construction 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.
4. **Reporting Requirement**
Tony E. Abney Construction 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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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. Ambient Air Impact Limitation
 - A. Tony E. Abney Construction shall not cause an exceedance of the NAAQS for PM₁₀ of 150.0 µg/m³ 24-hour average in ambient air.
 - B. Tony E. Abney Construction shall demonstrate compliance with Special Condition 1.A using Attachment A or other equivalent forms that have been approved by the Air Pollution Control Program, including an electronic form.
2. PM₁₀ Emission Limitation
 - A. Tony E. Abney Construction shall emit less than 50.0 tons of PM₁₀ in any consecutive 12-month period from the entire installation as shown in Table 1.
 - B. Attachment B or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 2.A.
3. Minimum Distance to Property Boundary Requirement
The primary emission point shall be located at least 1450 feet from the nearest property boundary.
4. Concurrent Operation Restriction
Tony E. Abney Construction is prohibited from operating whenever other plants, other than the equipment owned and operated by the Doe Run Company (179-0019), are located at the site.
5. Primary Equipment Requirement
Tony E. Abney Construction shall process all rock through the primary screen (EU-3). Bypassing the primary screen is prohibited.
6. Record Keeping Requirement
Tony E. Abney Construction 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.
7. Reporting Requirement
Tony E. Abney Construction 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.

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

Project Number: 2013-09-006
Installation ID Number: PORT-0653
Permit Number:

Tony E. Abney Construction
6854 Highway KK
Bunker, MO 63629

Complete: October 21, 2013

Parent Company:
Tony E. Abney Construction
1 Vine Street
Viburnum, MO 65566

Reynolds County, S1, T32N, R2W

PROJECT DESCRIPTION

Tony E. Abney Construction has proposed the installation of a portable Keestrac Explorer 1800 screening plant. The plant will be located on a Doe Run Company site. The aggregate screened will be used by Doe Run Company at another site. According to Tony E. Abney Construction, the rock that is screened will not contain lead ore. The plant is capable of screening up to 400 tons of aggregate per hour. The plant is powered by a track mounted engine and therefore qualifies as a nonroad engine. The process equipment can be found below in Table 1.

The Doe Run Company (179-0019) operates a lead refining process at this location. According to the Doe Run Company, this facility does not operate on a full time basis. Due to the relatively small potential to emit PM₁₀, the ambient air impact from the Doe Run Company lead refining process was not included within this review.

Table 1: Process Equipment

Emission Unit	Description
EU-1	Truck Unloading
EU-2	Conveyor
EU-3	Screen
EU-4	Conveyor
EU-5	Storage Pile
EU-6	Haul Road #1
EU-7	Haul Road #2
EU-8	Haul Road #3

This installation is located in Reynolds 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 Tony E. Abney Construction from the Air Pollution Control Program.

TABLES

The table below summarizes the emissions of this project. The potential emissions of the process equipment, which excluded emissions from haul roads and wind erosion, are not site specific and should not vary from site to site. The existing actual emissions are unavailable because this plant was not previously permitted. 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 account for a voluntary PM₁₀ emission limit in accordance with 10 CSR 6-6.060(4).

Table 2: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level	^a Potential Emissions of Process Equipment	Existing Actual Emissions (2012 EIQ)	^b Potential Emissions of the Application	Conditioned Potential Emissions
PM	25.0	54.37	N/A	1172.2	163.73
PM ₁₀	15.0	19.12	N/A	357.3	<50.0
PM _{2.5}	10.0	2.13	N/A	38.1	5.35
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)	100,000	N/A	N/A	N/A	N/A
GHG (mass)	0.0 / 250.0	N/A	N/A	N/A	N/A
Total HAPs	25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable

^aExcludes site specific haul road and storage pile emissions

^bIncludes site specific haul road and storage pile emissions

Table 3: Ambient Air Quality Impact Analysis

Pollutant	NAAQS/RAL (µg/m ³)	Averaging Time	^a Maximum Modeled Impact (µg/m ³)	Limited Impact (µg/m ³)	Background (µg/m ³)	^b Daily Limit (tons/day)
^c PM ₁₀ (solitary)	150.0	24-hour	1,277	150.0	N/A	2,293

N/A = Not Applicable

^aModeled impact of PORT-0693 at maximum capacity with controls

^bIndirect limit based on compliance with NAAQS

^cTony E. Abney Construction is prohibited from operating with other plants other than the Doe Run Company

EMISSIONS CALCULATIONS

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

Emissions from the rock-crushing equipment were 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.

The engine emissions were not evaluated for this review as the diesel engine at this site is classified as a nonroad engine. 40 CFR 63 Subpart ZZZZ, "National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and 40 CFR 60 Subpart IIII, "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" do not apply.

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. No control efficiencies were applied to the particulate emission calculations. 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 by default 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."

AMBIENT AIR QUALITY IMPACT ANALYSIS

An ambient air quality impact analysis (AAQIA) was performed to determine the impact of the pollutants listed in Table 3. 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 or screening model action level (SMAL). The AAQIA was performed using the Air Pollution Control Program's generic nomographs and when appropriate the EPA modeling software AERSCREEN. For each pollutant that was modeled, the maximum concentration that occurs at or beyond the site boundary was compared to the NAAQS or 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.

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 PM₁₀ exceed the de minimis level but remain below the major source level.

APPLICABLE REQUIREMENTS

Tony E. Abney Construction shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

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

J Luebbert
New Source Review Unit

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated August 30, 2013, received September 3, 2013, designating Tony E. Abney Construction 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
 Tony E. Abney Construction PORT-0653
 Project Number: 2013-09-006

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

Date	Tony E. Abney Construction PORT-0653 Permit #:			The Doe Run Company Plant Name: West Fork Plant ID:179-0019 Permit #:	Same Owner Plant Plant Name: Plant ID: Permit #:	Same Owner Plant Plant Name: Plant ID: Permit #:	Back-ground ($\mu\text{g}/\text{m}^3$)	Total Impact ² ($\mu\text{g}/\text{m}^3$)
	Daily Production (tons)	Impact Factor ($\mu\text{g}/\text{m}^3/\text{ton}$)	Impact ¹ ($\mu\text{g}/\text{m}^3$)	Impact ² ($\mu\text{g}/\text{m}^3$)	Impact ² ($\mu\text{g}/\text{m}^3$)	Impact ² ($\mu\text{g}/\text{m}^3$)		
<i>Example</i>	2,293	0.0654	149.96	0.0	N/A	N/A	N/A	149.96
		0.0654			N/A	N/A	N/A	
		0.0654			N/A	N/A	N/A	
		0.0654			N/A	N/A	N/A	
		0.0654			N/A	N/A	N/A	
		0.0654			N/A	N/A	N/A	
		0.0654			N/A	N/A	N/A	
		0.0654			N/A	N/A	N/A	
		0.0654			N/A	N/A	N/A	
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		0.0654			N/A	N/A	N/A	
		0.0654			N/A	N/A	N/A	

¹Calculate the impact for PORT-0653 by multiplying the daily production by the impact factor.

²Calculate the total impact by adding the impact and background. PORT-0653 is only permitted to operate with The Doe Run Company (179-0019) A total of 150 $\mu\text{g}/\text{m}^3$ or less is necessary for compliance.

Attachment B: PM₁₀ Compliance Tracking Sheet
 Tony E. Abney Construction PORT-0653
 Project Number: 2013-09-006

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

Month	Production (tons)	Emission Factor (lb/ton)	Monthly Emissions ¹ (lbs)	Monthly Emissions ² (tons)	12-Month Total Emissions ³ (tons)
<i>Example</i>	<i>100,000</i>	<i>0.204</i>	<i>20,400</i>	<i>10.2</i>	<i>11.2</i>
		0.204			
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		0.204			

¹Multiply the monthly production by the emission factor.

²Divide the monthly emissions (lbs) by 2000.

³Add the monthly emissions (tons) to the sum of the monthly emissions from the previous eleven months. The sample calculation was made under the assumption that the emissions from the previous eleven months are equal to one ton.

A total of less than **50.0** tons of PM₁₀ is necessary for compliance

Mr. Michael Harris
Bookkeeper
Tony E. Abney Construction
P.O. Box 760
Viburnum, MO 65566

RE: New Source Review Permit - Project Number: 2013-09-006

Dear Mr. Harris:

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 and your new source review permit application is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

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

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:jl

Enclosures

c: Southeast Regional Office
PAMS File: 2013-09-006

Permit Number: