

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: 102013-016

Project Number: 2013-09-046

Installation ID: PORT-0652

Parent Company: Britz Wrecking Inc.

Parent Company Address: PO Box 1332, Platte City, MO 64079

Installation Name: Britz Wrecking, Inc.

Installation Address: 5415 NE Antioch Rd, Kansas City, MO 64119

Location Information: Clay County, S31 T51N R32W

Application for Authority to Construct was made for:
Portable rock crusher and screen. 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.

OCT 25 2013

EFFECTIVE DATE

A handwritten signature in cursive script that reads "Kyla Z Moore".

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.	2013-09-046

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**
Britz Wrecking, Inc. shall maintain easily read permanent markings on each component of the plant. These markings shall be the equipment's serial number or a company assigned identification number that uniquely identifies the individual component.
2. **Relocation of Portable Rock Crushing Plant**
 - A. Britz Wrecking, Inc. 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.
 - 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**
Britz Wrecking, Inc. shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request.
4. **Reporting Requirement**
Britz Wrecking, Inc. shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, no later than 10 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."

PORT ID Number: PORT-0652

Site ID Number: 047-0195

Site Name: Antioch Mall

Site Address: 5307 Center Mall/NE Antioch Rd, Kansas City, MO 64119

Site County: Clay S31 T51N R32W

1. Ambient Air Impact Limitation
 - A. Britz Wrecking, Inc. shall not cause an exceedance of the NAAQS for PM₁₀ of 150.0 µg/m³ 24-hour average in ambient air.
 - B. Britz Wrecking, Inc. shall demonstrate compliance with Site Specific Special Condition 1.A using Attachment A or other equivalent forms that have been approved by the Air Pollution Control Program, including electronic forms. Britz Wrecking, Inc. shall account for the impacts from other sources of PM₁₀ as instructed in the attachments.
2. Wet Suppression Control System Requirement
 - A. Britz Wrecking, Inc. shall install and operate wet spray devices on the primary crusher (EP-02) and the following conveyor (EP-03).
 - B. Watering may be suspended during periods of freezing condition, when use of the wet spray devices may damage the equipment. During these conditions, Britz Wrecking, Inc. shall adjust the production rate to control emissions from these units. Britz Wrecking, Inc. shall record a brief description of such events.
3. Minimum Distance to Property Boundary Requirement
The primary emission point, the jaw crusher (EP-02) shall be located at least 450 feet from the nearest property boundary.
4. Concurrent Operation Restriction
Britz Wrecking, Inc. is prohibited from operating whenever other plants are located at the site.
5. Primary Equipment Requirement
Britz Wrecking, Inc. shall process all rock through the primary crusher (EP-02). Bypassing the primary crusher is prohibited.

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SITE SPECIFIC SPECIAL CONDITIONS:

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

6. Record Keeping Requirement
Britz Wrecking, Inc. shall maintain all records required by this permit for not less than five years and make them available to any Missouri Department of Natural Resources personnel upon request.

7. Reporting Requirement
Britz Wrecking, Inc. shall report to the Air Pollution Control Program Enforcement Section P.O. Box 176, Jefferson City, MO 65102, 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: 2013-09-046
Installation ID Number: PORT-0652
Permit Number:

Britz Wrecking, Inc.
5415 NE Antioch Rd
Kansas City, MO 64119

Complete: September 25, 2013

Parent Company:
Britz Wrecking Inc.
PO Box 1332
Platte City, MO 64079

Clay County, S31 T51N R32W

PROJECT DESCRIPTION

This project is for a new portable (PORT-0652) track-mounted jaw crusher, KPI-JCI FT26550, and a track-mounted GT144S Astec track-mounted three-deck screen. Britz Wrecking Inc. will recycle concrete and initially locate this new portable plant at 5307 Center Mall, formally known as the Antioch Mall in Kansas City, Missouri. This unit is capable of processing 500 tph, but within the limitations of this project and the size of the material being crushed, the MHDR is 250 tph or less. Britz Wrecking Inc. will be crushing concrete from a former demolition project, and also limestone rock which has been excavated for the new construction taking place at the site. They estimated crushing half of the excavated rock and half demolition concrete material. The total tonnage of the project is anticipated to be 4,000 to 6,000 tons. The time required to operate at this site is approximately one month. The portable crushing plant will be located and operated at a minimum distance of 450 feet to the nearest property line. Water spray devices will be located on the crusher (EP-2) and the conveyor (EP-3). Britz Wrecking Inc. will locate the portable plant near the storage piles and use a track-mounted excavator to load material into the crusher with an average distance traveled of 50 feet. There will be no haul roads at the site because material will stay on site as based rock for the new construction.

The crusher is powered by CAT 275 hp diesel engine and the screen is powered by a John Deere 99 hp diesel engine. These engines serve a dual purpose for the track mounted crusher and track-mounted screen by propelling itself and performing another function (supplying power to the crusher and screen) and therefore meets the definition of a nonroad engine as stated in 40 CFR 89.2 *Nonroad Engine* (1)(i).

This installation is located in Clay County, a maintenance area for ozone and an attainment area for all other 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 Britz Wrecking, Inc. from the Air Pollution Control Program.

TABLES

Table 1 below lists the Unit ID and equipment description for PORT- 0652.

Table 1 Emission Units

Unit ID	Equipment/Description
EP-01	Load into Grizzly
EP-02	KPI-JCO FT2650 Jaw Crusher w/ Grizzly feeder
EP-03	Conveyor belt 48"x38'
EP-04	GT145S Aztec 3-Deck Screen
EP-05	Conveyor/Stacker
EP-06	Load into storage pile
EP-07	Wind erosion
EP-08	Vehicular Activity

The Table 2 below summarizes the emissions of this project. The potential emissions of the process equipment, which excluded emissions vehicular activity and wind erosion, are not site specific and should not vary from site to site. There are no existing actual emissions since this is a new portable plant. The potential emissions of the application represent the emissions of all equipment and activities assuming continuous operation (8760 hours per year). The conditioned potential emissions include emissions from sources that will limit their production to ensure compliance with the NAAQS limit.

Table 2: Emissions Summary (tons per year)

Air Pollutant	De Minimis Level/SMAL	Potential Emissions of Process Equipment	Existing Actual Emissions	^a Potential Emissions of the Application	^b Conditioned Potential Emissions
PM	25.0	36.49	N/A	47.48	29.44
PM ₁₀	15.0	17.40	N/A	20.70	12.85
PM _{2.5}	10.0	2.52	N/A	2.86	1.78
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)	75,000 / 100,000	N/A	N/A	N/A	N/A
GHG (mass)	0.0 / 100.0 / 250.0	N/A	N/A	N/A	N/A
Total HAPs	25.0	N/A	N/A	N/A	N/A

N/A = Not Applicable; N/D = Not Determined

^aIncludes site vehicular activity and storage pile emissions

^bConditioned Potential Emissions are based on a voluntary limit in order to be in compliance with NAAQS for PM₁₀.

Table 3 summarizes the ambient air quality impact analysis. The maximum modeled impact is the impact of each pollutant when the plant is operating continuously. The 24-hour limited impacts and daily limit are based on compliance with the NAAQS for PM₁₀.

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	304.39	150.0	0.0	3682.7

^aModeled impact at maximum capacity with controls

^bIndirect limit based on compliance with NAAQS.

^cSolitary operation .

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 controlled emission factors were used for the crusher because the equipment is control by water spray devices. The uncontrolled emission factors were used for the screening plant because there are no water spray devices located on it.

The engine emissions were not evaluated for this review because the engine meets the definition of a nonroad engine as stated in 40 CFR 89.2 *Nonroad Engine* (1)(i). 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 because the engines are nonroad engines.

Emissions vehicular activity areas were calculated using the predictive equation from AP-42 Section 13.2.2 “Unpaved Roads,” November 2006. BMPs are not used in the calculations for vehicular activity. 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. In cases where the plant is providing material for a highway project and not at a quarry, 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.

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 are above the de minimis level, but below the 100 tons per year threshold that is allowed for portable plants according to 10 CSR 10-6.060 (4)(A). No refined modeling is required because PM₁₀ emissions are below the 50 ton per year according to 10 CSR 10-6.060 (6)(B)(3).

APPLICABLE REQUIREMENTS

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

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110.
- No Operating Permit is required for this installation because it is a portable plant.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- 40 CFR 60 Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants" applies to the equipment and needs to be tested.
- 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*, I recommend this permit be granted with special conditions.

Kathy Kolb
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 September 23, 2013, received September 25, 2013, designating Britz Wrecking, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Mr. Shawn Britz
Vice President
Britz Wrecking, Inc.
P.O. Box 1332
Kansas City, MO 64079

RE: New Source Review Permit - Project Number: 2013-09-046

Dear Mr. Britz:

Enclosed with this letter is your permit to construct. Please study it carefully. 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. 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, 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 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:kkk

Enclosures

c: Kansas City Regional Office
PAMS File: 2013-09-046

Permit Number: