

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: 07 2 0 0 9 - 0 0 7 Project Number: 2009-01-033

Parent Company: TAMKO Building Products, Inc.

Parent Company Address: 601 North High Street, Joplin, MO 64801

Installation Name: TAMKO Building Products, Inc. - High Street Installation

Installation Address: 601 North High Street, Joplin, MO 64801

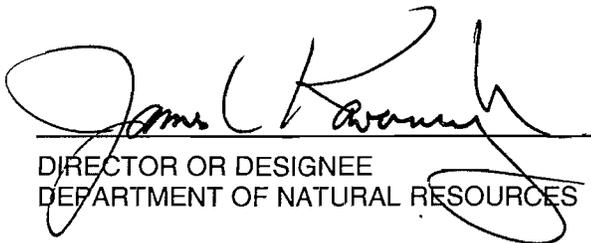
Location Information: Jasper County, S2, T27N, R33W

Application for Authority to Construct was submitted for the installation of two 22 tons per hour (tph) rock grinding mills and the removal of two 15 tph rock grinding mills. This project includes the installation of the limestone storage tank (EP 2B), preground truck unloading, and bucket elevator (EP 131). 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.

JUL - 9 2009

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 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 not more than 60 days but at least 30 days in advance of this date. 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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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."

TAMKO Building Products, Inc. - High Street Installation
 Jasper County, S2, T27N, R33W

1. Baghouse Conditions

- A. TAMKO Building Products, Inc. - High Street Installation shall control emissions from emission points listed in Table 1 using baghouses as specified in the permit application. The baghouses shall be operated and maintained in accordance with the installation's Control Device Operation Procedure. 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 the Department of Natural Resources' employees may easily observe them. Replacement filters for the baghouses shall be kept on hand or on order at all times. If the filters are ever changed or under emergency conditions (not during preventive maintenance), there shall be a period of time when the filters will be on order and not "on hand." The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

Table 1: Equipment and Control Devices

Emission Point	Control Devices	Control Device Efficiency
EP-2 (Bradley Mill #1)	CD2	95 %
EP-2A (Bradley Mill #2)	CD2A	95 %
Preground Truck Unloading	CD2B	95 %
EP-2B (Limestone Storage Tank)	CD2B	95 %

- B. TAMKO Building Products, Inc. - High Street Installation shall monitor and record the operating pressure drop across the baghouses at least once a day within each 24-hour calendar day period. The operating pressure drop shall be maintained within the design conditions specified by the installation's Control Device Operation Procedure.

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SPECIAL CONDITIONS:

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

- C. TAMKO Building Products, Inc. - High Street Installation 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.

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

Project Number: 2009-01-033
Installation ID Number: 097-0013
Permit Number:

TAMKO Building Products, Inc.
High Street Installation
601 North High Street
Joplin, MO 64801

Complete: July 02, 2009

Parent Company:
TAMKO Building Products, Inc.
601 North High Street
Joplin, MO 64801

Jasper County, S2, T27N, R33W

REVIEW SUMMARY

- TAMKO Building Products, Inc. - High Street Installation has applied to install two 22 tons per hour (tph) rock grinding mills and the removal of two 15 tph rock grinding mills. This permit also covers the installation of the limestone storage tank (EP 2B), preground truck unloading, and bucket elevator (EP 131).
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- Subpart UU of the New Source Performance Standards (NSPS) applies to the Limestone Storage Tank (EU 108) and Subpart OOO of the NSPS applies to each cyclone (EU 130) of this installation.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- Three baghouses (CD2, CD 2A, and CD2B) are being used to control the PM₁₀ emissions from the equipment in this permit (Bradley Mill # 1 (EP 2), Bradley Mill # 2 (EP 2A), and Limestone Storage Tank (EP 2B)).
- This review was conducted in accordance with Section (Section 5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of pollutant are above *de minimis* levels.
- This installation is located in Jasper County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].

- Ambient air quality modeling was not performed since conditioned emissions of the application are below *de minimis* levels.
- Emission testing is required for the EP-2B (Limestone Storage Tank), EP-2A (Bradley Mill #2) and EP-2 (Bradley Mill #1) per Subparts OOO and UU and 40 CFR 60.
- Because the potential to emit of this installation is above 100.0 tons per year, a Part 70 Operating Permit application revision is required for this installation within 1 year of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

TAMKO Roofing Products, Inc. is an existing asphalt roofing (shingles) production installation located at Joplin, Missouri in Jasper County. The installation has received nine (9) construction permits previously from the Air Pollution Control Program and has submitted a Part 70 operating permit on January 5, 2007 that is currently under review.

The following permits have been issued to TAMKO Building Products, Inc. - High Street Installation from the Air Pollution Control Program.

Table 2: Permit History of Installation

Project Number	Permit Number	Project Description
2008-11-049	062009-001	A Section (5) permit for the construction of a metal shingle fabrication line.
2008-12-052	022009-006	A Section (3) temporary permit for the construction of two portable road maintenance melters and a temporary laminant applicator.
1998-03-065	0499-005	A Section (5) permit for the construction of a spunbond production line for the manufacture of membranes and re-enforced membranes.
1998-02-0198	0598-017	A Section (5) permit for the construction of a pilot plant for the shredding and grinding of tabs and waste asphalt shingles.
2260-0013-019	1096-020	A Section (5) permit issued on October 15, 1996 for the replacement of two (2) horizontal asphalt storage tanks/natural gas fired heaters with two (2) vertical asphalt storage tanks with new natural gas heaters (i.e. Tank #13 and Tank #15).
2260-0013-015	0493-004	A Section (5) permit issued on April 6, 1993 for the construction of two (2) underground vertical storage tanks.
2260-0013-012	0292-004	A Section (5) permit issued on February 4, 1992 for the replacement of three (3) asphalt storage tanks and two (2) natural gas fired heaters with two (2) vertical asphalt storage tanks with two (2) new natural gas heaters.
2260-0013-10/11 & 2260-0013-017	0889-001 & 0889-001A	A Section (5) permit originally issued on August 4, 1989 to construct a AWA fire retardant production system. The amendment to this permit allowed the use of an additional raw material in the above process.
2260-0013-005	0184-001A to 0184-011A	A Section (5) permit issued on January 1984 for the construction of a new asphalt roofing production line. The permit required testing in accordance with NSPS Subpart UU, <i>Standards for Performance for Asphalt Roofing Plants</i> .

PROJECT DESCRIPTION

TAMKO Building Products, Inc. - High Street Installation will be modifying their Joplin, Missouri installation (097-0013) by installing two 22 tons per hour (tph) rock grinding mills and the removal of two 15 tph rock grinding mills. This equipment will be used to grind limestone on-site to provide raw materials to the manufacturing operation. Each mill will be using baghouses to control fugitive PM₁₀ emissions. This permit also covers the installation of the limestone storage tank (EP 2B), preground truck unloading, and bucket elevator (EP 131).

The air flow closed loop system for Bradley Mill #1, Bradley Mill #2, preground truck unloading, and Limestone Storage Tank shall be exhausted to baghouses (CD2, CD2A, and CD2B). The Limestone Storage Tank (EU 108) shall meet the NSPS Subpart UU requirements and each cyclone (EU 130) and each Bradley Mill shall meet the NSPS Subpart OOO requirements.

Because the changes to the elevator are occurring near the timeframe of the mill replacement and the elevator provides the rock supply to the mill, it is included in this permit.

The limestone storage tank is included in the permit because the throughput permitted under Permit 0184-001, is being increased from 25 tph to 71.7 tph.

The preground truck unloading is being included in the permit because it is used as a means to increase throughput of the Limestone Storage Tank (EU 108). The only record of this emission unit being permitted is found in OP2002-055. Calculations show that this equipment is below the insignificant emission exception level per 10 CSR 10-6.061, *Construction Permit Exemptions* (3)(A)3.A. The throughput of the preground truck unloading is based upon the information provided for the proposed and existing emissions from the limestone storage tank.

Because the application is only for crushed stone, other materials were not considered.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, 11.19-2 January 1995. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) The following table provides an emissions summary for this project.

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Previous Existing Potential Emissions ¹	Existing Potential Emissions ²	Existing Actual Emissions (2008 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM ₁₀	15.0	128.990	40.33	7.64	10.08	N/A
SO _x	40.0	0.360	5.86	1.60	N/A	N/A
NO _x	40.0	81.000	74.81	4.32	N/A	N/A
VOC	40.0	52.310	225.8	59.16	N/A	N/A
CO	100.0	16.460	17.0	8.14	N/A	N/A
HAPs (Combined)	25.0	0.260	1.266	0.0	N/A	N/A
Xylene (HAP)	10.0	N/A	1.117	N/A	N/A	N/A
EthylBenzene (HAP)	10.0	N/A	0.149	N/A	N/A	N/A
Hexane (HAP)	10.0	N/D	1.29	N/A	N/A	N/A
Polycyclic Organic Matter (HAP)	0.01	N/D	0.110	N/A	N/A	N/A

N/A = Not Applicable

¹ Previous Existing Potential Emissions obtained from 0499-005.

² Existing potential emissions obtained from construction permit number 062009-001

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 PM₁₀ are below *de minimis* levels.

APPLICABLE REQUIREMENTS

TAMKO Building Products, Inc. - High Street Installation shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- *Operating Permits*, 10 CSR 10-6.065
- *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
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-3.080

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.

Daronn Williams
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 14, 2009, received January 23, 2009, designating TAMKO Building Products, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southwest Regional Office Site Survey, dated February 6, 2009.

Mr. Shannon Lenker
General Manufacturing Manager
TAMKO Building Products, Inc. - High Street Installation
601 North High Street
Joplin, MO 64801

RE: New Source Review Permit - Project Number: 2009-01-033

Dear Mr. Lenker:

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 and with your operating permit is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Daronn Williams, at the Departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:dwl

Enclosures

c: Southwest Regional Office
PAMS File: 2009-01-033

Permit Number: