

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: 052008-004 Project Number: 2008-03-089

Parent Company: Higgins Asphalt Paving Co., Inc.

Parent Company Address: 35086 Higgins Rd., Tipton, MO 65081

Installation Name: Higgins Asphalt Paving Co., Inc.

Installation Address: Loose Creek Mo. Hwy 50 E

Location Information: Osage County, S2, T43N, R10W

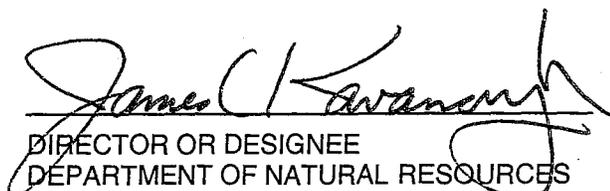
Application for Authority to Construct was made for:
Higgins Asphalt Paving Co., Inc. will change the fuel fired in their drum dryer from #2 fuel oil to #6 fuel oil. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

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

MAY 28 2008

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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Permit No.	
Project No.	2008-03-089

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."

Higgins Asphalt Paving Co., Inc.
Osage County, S2, T43N, R10W

1. Fuel Type Limitation
Higgins Asphalt Paving Co., Inc. may fire Number 2, 3, 4, 5 or 6 fuel oil in the drum dryer.
2. Sulfur Content of Fuel Oil Limitation
 - A. Higgins Asphalt Paving Co., Inc. shall ensure that the sulfur content of the fuel fired in the drum dryer does not exceed 0.5 percent of the fuel weight.
 - B. To demonstrate compliance, Higgins Asphalt Paving Co., Inc. shall obtain the sulfur content of the fuel oil for each fuel oil delivery from the fuel vendors or conduct their own fuel analysis to evaluate the typical sulfur content weight percent of the fuel oil.
3. Emission Limitation
 - A. Higgins Asphalt Paving Co., Inc. shall emit less than 40 tons of Sulfur Dioxide (SO₂) from the drum dryer in any consecutive 12-month period.
 - B. Attachment A or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 2(A).
4. Record Keeping and Reporting
 - A. Higgins Asphalt Paving Co., Inc. shall maintain all records required by this permit for not less than five (5) years and shall make them available to any Missouri Department of Natural Resources personnel upon request.
 - B. Higgins Asphalt Paving Co., Inc. shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which records indicate that the source exceeds a limitation of the Special Conditions.

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

Project Number: 2008-03-089
Installation ID Number: 151-0037
Permit Number:

Higgins Asphalt Paving Co., Inc.
Loose Creek Mo. Hwy 50 E

Complete: 3/28/2008

Parent Company:
Higgins Asphalt Paving Co., Inc.
35086 Higgins Rd., Tipton, MO 65081

Osage County, S2, T43N, R10W

REVIEW SUMMARY

- Higgins Asphalt Paving Co. Inc. has applied for authority to change the fuel fired in their drum dryer from #2 fuel oil to #6 fuel oil.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment, but are below screen modeling action levels.
- Subpart I of the New Source Performance Standards (NSPS) applies to the hot-mix asphalt plant.
- 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.
- No air pollution control equipment is being used to control SO_x emissions.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of SO_x are conditioned below de minimis levels.
- This installation is located in Osage 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 potential emissions of the application are below de minimis levels.
- Emissions testing is not required for the equipment.

- A Basic Operating Permit application is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Higgins Asphalt Paving Co. Inc. operates a drum-mix hot-asphalt plant at Muenks Brothers quarry in Loose Creek. The plant has a maximum hourly design rate of 400 tons per hour.

The following permits have been issued to Higgins Asphalt Paving Co. Inc. from the Air Pollution Control Program.

Table 1: Construction Permits

Permit Number	Description
102002-001	Stationary Asphalt Plant
032005-017	Add equipment
032005-017A	Amend for Co-location

PROJECT DESCRIPTION

Higgins Asphalt Paving Co. Inc. has applied for authority to burn #6 fuel oil in their drum dryer. Higgins Asphalt submitted records from their fuel supplier that show the fuel's sulfur content is 0.5 percent by weight. This permit will allow Higgins Asphalt to burn any fuel oil with sulfur content less than or equal to 0.5 percent by weight.

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, sections 1.3 "Fuel Oil Combustion," September 1998 and 11.1 "Hot Mix Asphalt Plants," April 2004. 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.

The emissions from a drum dryer for all criteria pollutants, except SO₂, are the same for distillate and residual fuel oils. SO₂ emissions are dependent on the amount of sulfur in the fuel oil. For this reason, an emission factor for the combustion of #6 fuel oil was used to determine SO₂ emissions. AP-42 estimates that 50 percent of the fuel bound sulfur is absorbed in the hot mix asphalt.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	¹ Existing Potential Emissions	Existing Actual Emissions (2006 EIQ)	Potential Emissions of the Application	Application Conditioned Potential
PM ₁₀	15.0	45.93	0.96	N/A	N/A
SO _x	40.0	6.14	0.80	104.46	< 40
NO _x	40.0	24.66	0.64	N/A	N/A
VOC	40.0	7.25	0.32	N/A	N/A
CO	100.0	114.95	0.35	N/A	N/A
HAPs	10.0/25.0	3.45	N/A	N/A	N/A

N/A = Not Applicable;

¹Existing Potential Emissions taken from permit # 032005-017

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 SO_x are conditioned below de minimis levels.

APPLICABLE REQUIREMENTS

Higgins Asphalt Paving Co. 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. 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 April 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

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400
- *New Source Performance Regulations*, 10 CSR 10-6.070 – *New Source Performance Standards (NSPS) for Hot Mix Asphalt Plants*, 40 CFR Part 60, Subpart I
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Michael Mittermeyer
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 3/28/2008, received 3/28/2008, designating Higgins Asphalt Paving Co., Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Mr. Keith Higgins
Higgins Asphalt Paving Co. Inc.
35086 Higgins Rd
Tipton, MO 65081

RE: New Source Review Permit - Project Number: 2008-03-089

Dear Mr. Higgins

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, 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 Mr. Michael Mittermeyer, with the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or by phone 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:mmm

Enclosures

c: Northeast Regional Office
PAMS File: 2008-03-089

Permit Number: