

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: 062009-009 Project Number: 2009-03-038

Parent Company: EPOCH Composite Products, Inc.

Parent Company Address: P.O. Box 567, Lamar, MO 64759

Installation Name: EPOCH Composite Products, Inc.

Installation Address: 601 W. 17th St., Lamar, MO 64759 and
223 South County Highway KK, Lamar, MO 64759

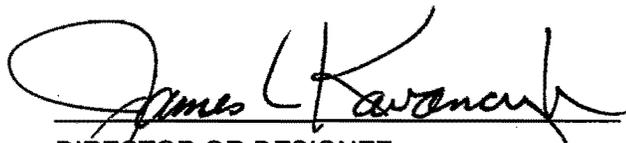
Location Information: Barton County, S6, T31N, R30W

Application for Authority to Construct was made for:
The relocation of an existing Composite Rail Production Area, the construction of one new extrusion line, and the replacement of two extruders. 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.

JUN 22 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.

Page No.	3
Permit No.	
Project No.	2009-03-038

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."

Epoch Composite Products, Inc.
Barton County, S6, T31N, R30W

1. **Superseding Condition**
The conditions of this permit supersede Special Condition 2. found in the permit 012007-001 from the Air Pollution Control Program.
2. **Emission Limitation**
 - A. Epoch Composite Products, Inc. shall emit less than 64.56 pounds of formaldehyde from Stack FMN at the South Plant in any consecutive 24-hour period.
 - B. Epoch Composite Products, Inc. shall emit less than 10.0 tons of the Hazardous Air Pollutant (HAP) formaldehyde from the entire installation (North and South Plants) in any consecutive 12-month period.
 - C. Epoch Composite Products, Inc. shall emit less than 15.0 tons particulate matter less than ten microns in diameter (PM₁₀) from the entire South Plant in any consecutive 12-month period.
 - D. Epoch Composite Products, Inc. shall emit less than 15.0 tons particulate matter less than ten microns in diameter (PM₁₀) from the entire North Plant in any consecutive 12-month period.
 - E. Attachment A, Attachment B, Attachment C, and Attachment D, or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 2(A), 2(B), 2(C) and 2(D).
 - F. Epoch Composite Products, Inc. shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten (10) days after the end of the month during which the records from Special Condition Number 2(E) indicate that the source exceeds the limitation of Special Conditions 2(A), 2(B), 2(C) or 2(D).

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

Project Number: 2009-03-038
Installation ID Number: 011-0030
Permit Number:

EPOCH Composite Products, Inc.
601 W. 17th St. and 223 South County Highway KK
Lamar, MO 64759

Complete: March 13, 2009

Parent Company:
EPOCH Composite Products, Inc.
P.O. Box 567
Lamar, MO 64759

Barton County, S6, T31N, R30W

REVIEW SUMMARY

- EPOCH Composite Products, Inc. (EPOCH) has applied for authority to relocate an existing Composite Rail Production Area from Chilhowie, Virginia to the Lamar, Missouri North Plant, construct one new extrusion line, and replace two extruders, also at the Lamar, Missouri North Plant.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment, but in insignificant amounts.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- 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 in association with the new equipment.
- 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, but above insignificant emission exemption levels.
- This installation is located in Barton 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 this equipment.
- A basic operating permit is required for this installation.
- Approval of this permit is recommended without special conditions.

INSTALLATION DESCRIPTION

EPOCH manufactures composite building materials at their two plants in Lamar, Missouri. Formerly, one plant operated under installation 011-0030, and the other as installation 011-0033. Permit 012007-001 combined the two plants as one installation, 011-0030. The installation was a minor source under construction permits, and has a basic operating permit. Natural plant fibers, aggregate, and plastics are mixed to produce deck boards, shingles, and fencing.

The following permits have been issued to EPOCH Composite Products from the Air Pollution Control Program.

Table 1: Construction Permits Issued

Permit Number	Installation ID	Description
022004-009	011-0030	Limit formaldehyde
052004-008	011-0030	Extruder line
062004-010	011-0030	New emission factors
062004-010	011-0030	Amendment for grinding and pellet transfer
082006-001	011-0030	Burn-off oven
012007-001	011-0030	Combine permits
012007-001	011-0030	Amendment for burn-off oven
092004-009	011-0033	Composite lumber
092004-009	011-0033	Amendment for production and control efficiency

PROJECT DESCRIPTION

EPOCH proposes installing a TAMRail Composite Rail Production Area. The TAMRail area includes one compounding line and three extrusion lines, consisting of mixers, extruders, electric dryers, screens, hoppers, cooling tanks, routers, grinders, saws, and embossers. The compounding line mixes sawdust with plastic pellets, then compounds and extrudes the new composite material, then pelletizes this composite. The maximum hourly design rate (MHDR) of the compounding line is 1,625 pounds per hour. The three extrusion lines form a composite material into a rough deck rail shape. The rough rails are finish cut, routed, and ground. The finished rail is packaged as TAMRail. The combined MHDR of the three extrusion lines is 2,900 pounds per hour. The TAMRail Area has no control devices.

EPOCH also proposes to replace an existing extruder in two extrusion lines. The two existing extruders have a combined MHDR of 1,200 pounds per hour. The two replacement extruders will have a combined MHDR of 2,800 pounds per hour. Therefore, this project considered an increase in MHDR of only 1,600 pounds per hour for the replacement extruders.

EMISSIONS EVALUATION

The emission factors used in this analysis were obtained from permit 012007-001, and are listed in Table 2.

Table 2: Emission Factors (pounds per ton of product)

Pollutant	Compounding Line				Extrusion Lines		
	Plastic Pellet and Sawdust Storage	Blending and Handling	Extrusion	Pelletization	Sawdust Storage	Extrusion	Finishing and Grinding
PM ₁₀	0.36	0.36	0.36	0.2	0.36	0.36	0.2
VOC	N/A	N/A	0.042	0.042	N/A	0.042	N/A
HAP	N/A	N/A	0.0004	0.0004	N/A	0.0004	N/A

N/A = Not Applicable

Table 3 provides an emissions summary for this project. Existing Potential Emissions from permit 012007-001. Potential Emissions of the Application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.)

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2008 EIQ)	Potential Emissions of the Application	North Plant Conditioned Potential Emissions	South Plant Conditioned Potential Emissions
PM ₁₀	15.0	20.93	3.42	13.62	<15.0	<15.0
SO _x	40.0	0.71	0.01	N/A	N/A	
NO _x	40.0	9.36	2.05	N/A	N/A	
VOC	40.0	20.70	1.87	0.71	N/A	
CO	100.0	37.52	2.55	N/A	N/A	
HAP	10.0/25.0	2.31	0.51	0.007	<10.0/25.0	
Formaldehyde	2.0 ^a /10.0	<10.0	N/A	N/A	<10.0	

N/A = Not Applicable ^a Screen Modeling Threshold Level

Emissions are calculated by multiplying the process MHDR by the appropriate emission factor per pollutant and process, then summing these products per pollutant. No control devices are used. Permit 012007-001 separately limits PM₁₀ emissions from each the North and South Plant to less than 15.0 tons per year (tpy) and formaldehyde to less than 10.0 tpy, all from the equipment and processes at the installation as of the date of that permit. This permit re-establishes those limits to include the equipment in this project.

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, but above insignificant emission exemption levels.

APPLICABLE REQUIREMENTS

EPOCH Composite Products 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

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes*, 10 CSR 10-6.400

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.

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.

David Little
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated March 2, 2009, received March 9, 2009, designating EPOCH Composite Products 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 Regional Office Site Survey, dated March 17, 2009.

10.0 tons indicates compliance.

Attachment C – Formaldehyde Emission Factors to be Used with Attachments A and B

Epoch Composite Products, Inc.
Barton County, S6, T31N, R30W
Project Number: 2009-03-038
Installation ID Number: 011-0030
Permit Number:

EP ID	Emission Point Description	Emission Factor (lbs/ton)
EU-N06 & EU-S06	Sawdust Transfer to Silo	0.00015
EU-N10a	Compounding & Extruding (Plastic)	6.0 E-6
EU-S10a	Compounding & Extruding (Plastic)	0.00012
EU-N10b	Compounding & Extruding (Sawdust)	0.0135
EUS10b	Compounding & Extruding (Sawdust)	0.27
EU-S22	Handling/Mixing/Extrusion - Shingle	0.00012
EU-S23	Pelletization/Injection Molding - Shingle	0.00012
EU-N29	Rotary Dryer	.0135

Mr. Dan Blackburn
Plant Manager
EPOCH Composite Products
223 South County Highway KK
Lamar, MO 64759

RE: New Source Review Permit - Project Number: 2009-03-038

Dear Mr. Blackburn:

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 amended 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 David Little, 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:dll

Enclosures

c: Southwest Regional Office Regional Office
PAMS File: 2009-03-038

Permit Number: