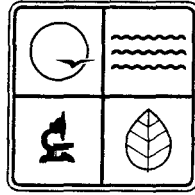


STATE OF MISSOURI  
DEPARTMENT OF NATURAL RESOURCES  
MISSOURI AIR CONSERVATION COMMISSION



PERMIT BOOK

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: **08 2 0 0 6 - 0 0 1** Project Number: **2006-05-039**  
Owner: **EPOCH Composite Products, Inc.**  
Owner's Address: **P.O. Box 567, Lamar, MO 64759**  
Installation Name: **EPOCH Composite Products, Inc.**  
Installation Address: **223 South Hwy KK, Lamar, MO 64759**  
Location Information: **Barton County, S6, T31N, R30W**

Application for Authority to Construct was made for:

**Installation of a controlled pyrolysis cleaning furnace (burn-off oven). 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 (listed as attachments starting on page 2) are applicable to this permit.

AUG - 7 2006

EFFECTIVE DATE

*Steven Feula*

DIRECTOR OR DESIGNEE  
DEPARTMENT OF NATURAL RESOURCES

*for JLK*

## 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.** Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the 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 as provided in RSMo 643.075. If you choose to appeal, the Air Pollution Control Program must receive your written declaration within 30 days of receipt of this permit.

If you choose not to appeal, this certificate, the project review, 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 Department of Natural Resources has established the Outreach and Assistance Center to help in completing future applications or fielding complaints about the permitting process. You are invited to contact them at 1-800-361-4827 or (573) 526-6627, or in writing addressed to Outreach and Assistance Center, P.O. Box 176, Jefferson City, MO 65102-0176.

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 Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention Construction Permit Unit.

Page No.	2
Permit No.	
Project No.	2006-05-039

**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 shall supersede all special conditions established in Permit Number 062004-010 from the Air Pollution Control Program.
2. **Emission Limitations**
  - A. EPOCH Composite Products, Inc. shall emit less than 40 tons of Volatile Organic Compounds (VOCs) from the entire installation in any consecutive 12-month period.
  - B. EPOCH Composite Products, Inc. shall emit less than 64.56 pounds of formaldehyde from Stack FMN in any consecutive 24-hour period.
  - C. EPOCH Composite Products, Inc. shall emit less than ten tons of the Hazardous Air Pollutant (HAP) formaldehyde from the entire installation in any consecutive 12-month period.
  - D. EPOCH Composite Products, Inc. shall emit less than 15 tons particulate matter less than ten microns in diameter (PM<sub>10</sub>) from the entire installation in any consecutive 12-month period.
  - E. EPOCH shall maintain the monthly, 24-hour, and the sum of the most recent consecutive 12-month records of VOC, formaldehyde, and PM<sub>10</sub> emissions for the installation. 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). EPOCH Composite Products, Inc. shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records, if applicable, shall include Material Safety Data Sheets (MSDS) for all materials used in this equipment and shall be considered confidential per Missouri Rule 10 CSR 10-6.210.

Page No.	3
Permit No.	
Project No.	2006-05-039

**SPECIAL CONDITIONS:**

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

- 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 Number 2(A), 2(B), 2(C), or 2(D).

**3. Baghouse Conditions**

- A. EPOCH Composites shall control emissions from the following equipment using baghouses as specified in the permit application:

Emission Point	Emission Unit Controlled
EU-01	Bag Dump & Drop Legs
EU-02	Grinding Conveyor Material Transfer
EU-03	Grinding
EU-04	Ground Material Transfer to Silo
EU-05	Pellet Transfer to Silo
EU-06	Natural Fiber Transfer to Silo
EU-07	Scott AST Dryer
EU-08	Dried Natural Fiber Storage Silo
EU-09	Blending & Material Handling – Plastic/Natural Fiber
EU-10	Compounding & Extruding – Plastic/Natural Fiber
EU-11	Finishing & Grinding
EU-18	Plastic Transfer to Silo
EU-19	Limestone Transfer to Silo
EU-20	Pellet Transfer to Silo
EU-21	Grinding
EU-22	Handling/Mixing/Extrusion - Limestone
EU-23	Cooling/Cutting & Pelletizer/Injection Molding

- B. The baghouses shall be operated and maintained in accordance with the installation's control device operating procedures. The baghouses 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 Missouri Department of Natural Resources employees may easily observe them. Replacement filters for the baghouses shall be kept on hand or order at all times. 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).
- C. EPOCH Composite Products, Inc. shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours of

Page No.	4
Permit No.	
Project No.	2006-05-039

**SPECIAL CONDITIONS:**

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

operation. The operating pressure drop shall be maintained within the design conditions specified by the installation's control device operating procedures.

- D. EPOCH Composite Products, Inc. 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 that have impact air emissions, with inspection schedule, repair actions, and replacements, etc.
  
- 4. Stack Height Requirements  
EPOCH Composite Products, Inc. shall have a minimum stack height of 75 feet for Stack B and 95 feet for Stack FMN and shall construct these stacks within thirty (30) days upon commencement of operation of the new compounding and extruding lines (Emission Point ID, EU-10, lines 7 and 8).
  
- 5. Operational Requirements for the Burn-Off Oven (EU-30)
  - A. EPOCH Composite Products, Inc. shall use this burn-off oven exclusively to remove non-chlorinated/non-hazardous coatings from metal parts.
  
  - B. Natural Gas shall be the only fuel burned in this burn-off oven.
  
  - C. EPOCH Composite Products, Inc. shall use a direct flame afterburner to control emissions from the burn-off oven. The afterburner shall operate between 1,500 to 1,800 degrees Fahrenheit with more than a one-half ( $\frac{1}{2}$ ) second residence time to assure a minimum combustion efficiency of 99.9%.
  
  - D. The burn-off oven shall be equipped with an electronic controller, with digital readout, which is able to monitor and display the temperature in the second combustion chamber to an accuracy of plus or minus two percent (2%).
  
  - E. The burn-off oven shall have opacity of less than ten percent (10%) at all times. Opacity shall be determined by Method 9 compliance testing.

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

Project Number: 2006-05-039  
Installation ID Number: 011-0030  
Permit Number:

EPOCH Composite Products, Inc.  
223 South Hwy KK  
P.O. Box 567  
Lamar, MO 64759

Complete: May 18, 2006  
Reviewed: June 7, 2006

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

Barton County, S6, T31N, R30W

REVIEW SUMMARY

- EPOCH Composite Products, Inc. has applied for authority to install a controlled pyrolysis cleaning furnace (burn-off oven).
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment in insignificant amounts due to the combustion of fuel.
- 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.
- A direct flame afterburner is being used to control emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. The burn-off oven in this permit is classified as an incinerator. All incinerators are required to obtain a permit from the Air Pollution Control Program as mandated in 10 CSR 10-6.060. Potential emissions of criteria air pollutants are less than de minimis 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 the equipment.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

EPOCH Composite Products, Inc. manufactures shingles and decking/fencing products at their installation in Lamar, Missouri. Natural fibers, limestone, and plastic are mixed together to make the aforementioned products for the housing market. This installation is considered a de minimis source under construction permits. No operating permit has been issued to this installation. Upon issuance of this construction permit, this installation will continue to be a de minimis source and no operating permit will be required.

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

Table 1: Issued Permits from the Air Pollution Control Program

Permit Number	Description
022004-009	Installation of seven (7) process lines and two (2) injection molding machines
052004-008	Temporary permit for a pilot study on an existing extrusion line
062004-010	Modification to Permit Number 022004-009 and installation of a sawdust dryer

### PROJECT DESCRIPTION

EPOCH Composite Products, Inc. proposes to install a controlled pyrolysis cleaning furnace (burn-off oven) that will be used to remove cured coating from metal parts, paint hangers, dyes, and motor assemblies. Emissions will be controlled using a direct flame afterburner. The maximum hourly design rate of the oven is 10 pounds of waste per hour. The natural gas fired burner is rated at 0.475 MMBTU per hour.

Since the coatings from metal parts are burned off, this oven is classified as an incinerator. Therefore, a construction permit is required for this oven according to 10 CSR 10-6.060(1)(B).

### EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the manufacturer's data provided by the applicant. The applicant has requested that the

burn-off oven be included in the installation-wide de minimis limits set forth in Permit Number 062004-010. Therefore, the limits of Permit Number 062004-010 are being superceded and reinstated in this permit to include the new equipment. A discussion of the HAP limits, the baghouse condition and the stack requirement can be found in Permit Number 062004-010.

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). Existing potential emissions were taken from Permit Number 062004-010. Existing actual emissions were taken from the installation's 2005 Emission Inventory Questionnaire (EIQ). The following table provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2005 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM <sub>10</sub>	15.0	<15.0	3.25	0.06	<15.0
SO <sub>x</sub>	40.0	0.22	N/D	0.01	N/A
NO <sub>x</sub>	40.0	6.39	0.48	0.12	N/A
VOC	40.0	<40.0	7.83	0.08	<40.0
CO	100.0	6.43	0.65	0.22	N/A
HAPs	10.0/25.0	20.57	3.61	N/A	N/A

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

## PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. The burn-off oven in this permit is classified as an incinerator. All incinerators are required to obtain a permit from the Air Pollution Control Program as mandated in 10 CSR 10-6.060. Potential emissions of criteria air pollutants are less than de minimis levels.

## APPLICABLE REQUIREMENTS

EPOCH Composite Products, 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  
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.

- *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

#### 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.

---

Emily E. Wilbur  
Environmental Engineer

---

Date

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated April 24, 2006, received May 11, 2006, designating EPOCH Composite Products, Inc. as the owner and operator of the installation.
- Manufacturer's Data for Controlled Pyrolysis Furnace
- Southwest Regional Office Site Survey, dated May 24, 2006.







than 10.0 tons indicates compliance.



Mr. Mike Burgess  
Environmental Coordinator  
EPOCH Composite Products, Inc.  
P.O. Box 567  
Lamar, MO 64759

RE: New Source Review Permit - Project Number: 2006-05-039

Dear Mr. Burgess:

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 me at (573) 751-4817, or you may write to me at the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:ewl

Enclosures

c: Southwest Regional Office  
PAMS File 2006-05-039

Permit Number: