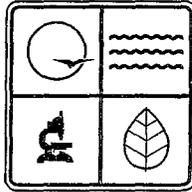


STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI AIR CONSERVATION COMMISSION



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: 102006-003 Project Number: 2006-07-008

Owner: MOCAP, Inc.

Owner's Address: 13100 Manchester Road, St. Louis, MO 63131

Installation Name: MOCAP, Inc.

Installation Address: 111 Industrial Drive, Park Hills, MO 63601

Location Information: St. Francois County, S36, T37N, R5E

Application for Authority to Construct was made for:

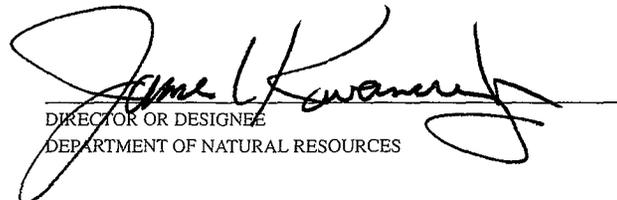
Construction of three vinyl dip-molding machines and addition of a lab oven.
This review was conducted in accordance with Section (5), Missouri State Rule
10 CSR 10-6.060, *Construction Permits Required*.

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.

OCT - 4 2006

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. 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.

2006-07-008

MOCAP, Inc.

13100 Manchester Road, St. Louis, MO 63131

MOCAP, Inc.

111 Industrial Drive, Park Hills, MO 63601

St. Francois County, S36, T37N, R5E

Construction of three vinyl dip-molding machines and addition of a lab oven.
This review was conducted in accordance with Section (5), Missouri State Rule
10 CSR 10-6.060, *Construction Permits Required*.

Page No.	2
Permit No.	
Project No.	2006-07-008

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."

MOCAP, Inc.
St. Francois County, S36, T37N, R5E

1. **Superseding Condition**
The conditions of this permit supersede all special conditions found in the previously issued construction permit (Permit Number 072004-004) from the Air Pollution Control Program.
2. **VOC Emission Limitation**
 - A. MOCAP, Inc. shall emit less than 40 tons of Volatile Organic Compounds (VOCs) from entire installation 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). MOCAP, 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 shall include Material Safety Data Sheets (MSDS) for all materials used in this installation.
 - C. MOCAP, 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(B) indicate that the source exceeds the limitation of Special Conditions Number 2(A).
3. **Operational Requirements**
 - A. MOCAP, Inc. shall keep solvents and cleaning solutions in sealed containers whenever the materials are not in use. MOCAP, Inc. shall provide and maintain suitable, easily read, permanent markings on all solvent and cleaning solution containers used with this equipment.
 - B. MOCAP, Inc. shall place the cleaning cloths/rags that are used on this equipment in sealed containers when not in use and while awaiting off-site transport.

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

Project Number: 2006-07-008
Installation ID Number: 187-0049
Permit Number:

MOCAP, Inc.
111 Industrial Drive
Park Hills, MO 63601

Complete: July 5, 2006

Parent Company:
MOCAP, Inc.
13100 Manchester Road
St. Louis, MO 63131

St. Francois County, S36, T37N, R5E

REVIEW SUMMARY

- MOCAP, Inc. has applied for authority to construct three vinyl dip-molding machines and add a lab oven.
- Hazardous Air Pollutant (HAP) emissions are not expected from the proposed equipment.
- 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 VOC are conditioned to de minimis levels for the entire installation.
- This installation is located in St. Francois 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

MOCAP, Inc. manufactures two principal products – vinyl dip-molded components and extruded plastic components. The following emission points are currently operating in this installation.

Emission Point(s)	Description
EP-01	Dip Molding Bake Oven (Machine #1)
EP-02	Dip Molding Bake Oven (Machine #2)
EP-03	Dip Molding Bake Oven (Machine #3)
EP-04	Dip Molding Bake Oven (Machine #4)
EP-06	Dip Molding Bake Oven (Machine #10)
EP-07	Dip Molding Bake Oven (Machine #9)
EP-08	Dip Molding Bake Oven (Machine #8)
EP-09	Dip Molding Bake Oven (Machine #7)
EP-10	Screen Printing Operation

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

Permit Number	Description
0187-007A thru 0187-016A	Construction of ten (10) custom-built ovens.
1196-005	Supersede Permit No. 0187-007 through 0187-016A and addition of two (2) dip molding bake ovens.
042001-014	Installation of a vinyl dip-molding machine.
072004-004	This permit put an enforceable limit on VOCs so that the installation could remain a de minimis source.

The installation's VOC emissions are above de minimis levels considering maximum operating conditions; however, MOCAP, Inc. requested an enforceable facility-wide VOC emissions limits to less than 40 tons per 12-month period so the facility remain a de minimis source. Since this facility's potential emissions are conditioned to less than de minimis, no Operating Permit is required.

PROJECT DESCRIPTION

MOCAP, Inc is proposing to add three additional dip-molding machines and one lab oven to its facility. Vinyl dip-molding components are manufactured in dip-molding machines by dipping metal molds into heated liquid plastisol. VOC emissions (approximately 1% by weight according to manufacturer estimates) occur from the

heating and curing of the plastisol and from the use of a VOC-containing mold release compound applied to the molds prior to dipping. The mold release compound is mineral spirits and has a 100% VOC content. According to the application, the maximum design rates of the machines are as high as 375 to 500 pounds of plastisol per hour; however, MOCAP can process a maximum of approximately 75 pounds per hour due to the types of compounds manufactured and other process constraints. Natural gas combustion emissions also occur as part of the heating and curing process.

The lab oven is approximately one-quarter the size of the dip-molding machines. The maximum hourly design rate of the lab oven is therefore 18.75 pounds of plastisol per hour.

EMISSIONS/CONTROLS EVALUATION

The emission factors used in the VOCs and HAP emissions analysis were developed from the Material Safety Data Sheets (MSDS) submitted with the permit application and through the use of mass balances around the process. The emission factors for the combustion of natural gas were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 1.4, *Natural Gas Combustion* (3/98). Potential emissions of the new equipment were based on the maximum hourly design rate of the equipment assuming continuous operation (8760 hours per year) and the content of air pollutant in the chemicals. Detailed calculations can be found in the enclosed worksheet. The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2005 EIQ)	Potential Emissions of the Application	Installation Conditioned Potential
PM ₁₀	15.0	0.03	0.01	0.08	N/A
SO _x	40.0	0.01	N/A	0.02	N/A
NO _x	40.0	1.17	0.48	3.67	N/A
VOC	40.0	50.05	17.52	17.03	<40.0
CO	100.0	0.29	0.12	0.92	N/A
HAPs	10.0/25.0	0.73	N/D	N/A	N/A
Toluene	10.0	0.40	N/D	N/A	N/A
Hexane	10.0	0.40	N/D	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*. Potential emissions of VOC are below de minimis levels.

APPLICABLE REQUIREMENTS

MOCAP, 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*

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.

Susan Heckenkamp
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated July 5, 2006, received July 5, 2006, designating MOCAP, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southeast Regional Office Site Survey dated July 19, 2006.

Mr. Glen Weible
Plant Manager
MOCAP, Inc.
111 Industrial Drive
Park Hills, MO 63601

RE: New Source Review Permit - Project Number: 2006-07-008

Dear Mr. Weible:

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 and 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 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, Missouri 65102. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH: shk

Enclosures

c: Southeast Regional Office
PAMS File: 2006-07-008
Permit Number: