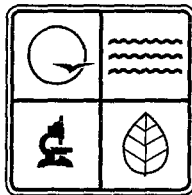


STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI AIR CONSERVATION COMMISSION



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: **022006 - 002**

Project Number: 2005-11-036

Owner: Ozark Mountain Technologies, Incorporated

Owner's Address: 109 Midland Drive, P.O. Box 680, Cuba, MO 65453

Installation Name: Ozark Mountain Technologies, Incorporated

Installation Address: 109 Midland Drive, P.O. Box 680, Cuba, MO 65453

Location Information: Crawford County, S31, T39N, R4W

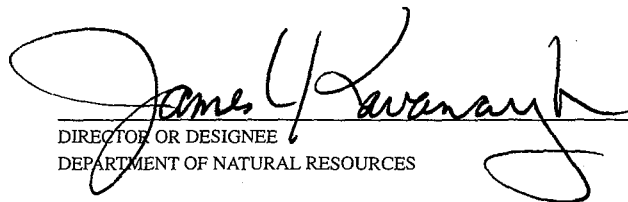
Application for Authority to Construct was made for:

Addition of two (2) paint booths and one (1) electric 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.

FEB - 1 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.

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Permit No.	
Project No.	2005-11-036

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."

Ozark Mountain Technologies, Incorporated
Crawford County, S31, T39N, R4W

1. **Superseding Condition**

The conditions of this permit supersede all special conditions found in the previously issued construction permit (Permit Number 0297-014) from the Air Pollution Control Program.

2. **VOC and HAPs Emission Limitations**

- A. Ozark Mountain Technologies, Incorporated shall emit less than 40 tons of Volatile Organic Compounds (VOCs) from the installation in any consecutive 12-month period.
- B. Ozark Mountain Technologies, Incorporated shall emit less than ten (10) tons individually or twenty-five (25) tons combined of Hazardous Air Pollutants (HAPs) from the installation in any consecutive 12-month period.
- C. Ozark Mountain Technologies, Incorporated shall emit less than five (5) tons of glycol ethers from the installation in any consecutive 12-month period, except for those glycol ethers specifically listed in Attachment H.
- D. Ozark Mountain Technologies, Incorporated shall emit less than 0.1 tons of 4,4-diphenylmethane diisocyanate (MDI) from the installation in any consecutive 12-month period.
- E. Ozark Mountain Technologies, Incorporated shall emit less than 0.02 tons of 1,6-diisocyanate hexamethylene (HDI) from the installation in any consecutive 12-month period.
- F. When considering using a new coating in the two (2) paint booths (EP1 and EP2) that is different to those listed in the Application for Authority to Construct, Ozark Mountain Technologies, Incorporated must calculate the potential emissions for each individual HAP in the alternative coating that has a Screen Modeling Action Level (SMAL) as listed in Attachment I. If the potential HAP emissions for the alternative paint is equal to or greater

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Permit No.	
Project No.	2005-11-036

SPECIAL CONDITIONS:

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

than the Screen Modeling Action Levels (SMAL), then Ozark Mountain Technologies, Incorporated must seek approval from the Air Pollution Control Program before use of the alternative coating.

- G. Attachment A, Attachment B, Attachment C, Attachment D, Attachment E, Attachment F, and Attachment G or equivalent forms approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1(A), 1(B), 1(C), 1(D), 1(E), and 1(F). Ozark Mountain Technologies, Incorporated 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 the two (2) paint booths (EP1 and EP2).
 - H. Ozark Mountain Technologies, Incorporated 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 1(G) indicate that the source exceeds the limitation of Special Conditions Number 1(A), 1(B), 1(C), 1(D), 1(E), and 1(F).
3. Shut Down of Existing Equipment at Installation
- A. Ozark Mountain Technologies, Incorporated shall render the following emission units inoperable (listed below) before the date the new equipment being added under this permit begins operations. The equipment listed below may not be operated after the start up of the new equipment without first obtaining a New Source Review permit or receiving approval for the like-kind replacement of other existing equipment at the installation from the Air Pollution Control Program.

<u>Unit ID</u>	<u>Emission Unit Description</u>
EP1	Water-based crossflow paint booth
EP2	Solvent-based crossflow paint booth

- B. Ozark Mountain Technologies, Incorporated shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than 15 days after the following events occur:
 - 1) The date of initial start-up of the new equipment added under this permit, and
 - 2) The date the existing equipment (as indicated in Special Condition Number 3.A) was rendered inoperable.

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Permit No.	
Project No.	2005-11-036

SPECIAL CONDITIONS:

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

4. **Solvent Cloths**
Ozark Mountain Technologies, Incorporated shall keep the solvents and cleaning solutions in sealed containers whenever the materials are not in use. Ozark Mountain Technologies, Incorporated shall provide and maintain suitable, easily read, permanent markings on all solvent and cleaning solution containers used with this equipment.

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

Project Number: 2005-11-036
Installation ID Number: 055-0040
Permit Number:

Ozark Mountain Technologies, Incorporated
109 Midland Drive, P.O. Box 680,
Cuba, MO 65453

Complete: November 9, 2005
Reviewed: December 30, 2005

Parent Company:
Ozark Mountain Technologies, Incorporated
109 Midland Drive, P.O. Box 680
Cuba, MO 65453

Crawford County, S31, T39N, R4W

REVIEW SUMMARY

- Ozark Mountain Technologies, Incorporated has applied for authority to construct two (2) paint booths and one (1) electric oven.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are xylene, ethyl benzene, phenol, HDI, methyl isobutyl ketone (MIK), toluene, cumene, phenol, methyl ethyl ketone (MEK), chromium compounds, antimony compounds, nickel compounds, MDI, lead compounds, and glycol ethers.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- The Maximum Achievable Control Technology (MACT) standard, 40 CFR Part 63, Subpart N, *National Emission Standards for Hazardous Air for Chromium Electroplating and Chromium Anodizing*, applies to this installation. However, as of December 2005, the Environmental Protection Agency (EPA) has permanently exempted area sources that fall under Subpart N from Title V permitting requirements. The MACT standard, 40 CFR Part 63, Subpart M, *National Emission Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*, does not apply to this installation since it is not a major source of HAPS.
- High efficiency filters are used with the paint booths to control particulate matter less than 10 microns (PM₁₀).
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOCs are conditioned to de minimis levels. Potential emissions of individual and combined HAPs are conditioned to below major levels.

- This installation is located in Crawford 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 performed to determine the ambient impact of phenol, MDI, lead compounds, 2-butoxyethanol (a glycol ether), and HDI.
- 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

This facility started operation in Crawford County in August 1994. The facility chemically anodizes aluminum automotive and aircraft parts. A fraction of these anodized parts are then painted. The emission points for this installation are listed in the following table.

Table 1: Installation-Wide Emission Points

Emission Point	Description of Unit	Comments
EP1*	Downflow Spray Booth	This spray booth will replace the existing Water-Based Crossflow Spray Booth.
EP2*	Downflow Spray Booth	This spray booth will replace the existing Solvent-Based Crossflow Spray Booth.
EP3	MEK Application	No changes.
EP4	Anodizing Kettle	No changes.
EP5	2.65 mmBTU/hour Boiler	No changes.

*These paint booths are not specialized. Both booths will be used for solvent-based and water-based paints.

This source is considered a minor source and has received no operating permits.

The following permits have been issued to Ozark Mountain Technologies, Incorporated from the Air Pollution Control Program.

Table 2: Previously Issued Construction Permits

Permit Number	Description
0297-014	Construction of a spray paint booth and an anodizing kettle.
0598-008	Installation of a DeVibris paint spray booth, a chromium anodizing tank, and addition two (2) rinse tanks to an existing anodizing kettle.

PROJECT DESCRIPTION

Ozark Mountain Technologies, Incorporated has applied for authority to construct two (2) new paint booths. The new paint booths will be downflow and replace the existing crossflow paint booths. The existing two (2) spray booths will be permanently removed. Water-based and solvent-based paints will be used in the paint booths (EP1 and EP2). Both new paint booths contain high efficiency filters for control of PM₁₀ emissions. The maximum hourly design rate (MHDR) for application of the paints in EP1 and EP2 are 0.24 gallons per hour for water-based paints and 3 gallons per hour for solvent-based paints. These numbers are based on maximum historical production rates. A MEK wash for the sprayer and general cleaning is used with solvent-based paints. The MHDR for the MEK wash (EP3) is 0.1 gallons per hour which is based on maximum historical usage rates. The MHDR for the MEK wash takes into account the recycling of the used MEK.

In addition, Ozark Mountain Technologies, Incorporated will be adding one new electric oven and relocating the existing oven. No emissions are expected from the addition of the electric oven.

EMISSIONS/CONTROLS EVALUATION

The VOC and HAP emission factors used in this analysis were estimated using information obtained from the Material Safety Data Sheets for the water-based paints and solvent-based paints to be used in the new spray booths. A mass balance approach was used to conservatively estimate that 100% of the VOC and HAP content of the paints would be emitted into the atmosphere. No pollution control equipment was proposed in the permit application to control the emission of VOCs and HAPs from the new spray booths.

PM₁₀ emissions are evaluated based on the solids content of the paint and a transfer efficiency from the spray gun (50%). The solids content of the material was conservatively estimated by taking the density of the paint and subtracting the VOC content and assuming the remainder to be all PM₁₀. PM₁₀ emissions are controlled through the use of fabric filters that have at least ninety seven percent (97.0%) control efficiency.

Using the Material Safety Data Sheets (MSDS) and paint makeup ratios provided by Ozark Mountain Technologies, potential emissions of each pollutant were determined for each paint. The highest potential emissions for total VOCs, combined HAPs, individual HAPs and PM₁₀ were then used to determine the worst case potential emissions for each pollutant. Since all paints can be used in both spray booths, the worst case potential emissions for each pollutant were doubled.

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). The existing potential emissions are taken from Permit No. 0598-008. These include conditioned potential emissions of 40 tons per year for VOCs and a 10/25 tons per year for individual and combined HAPs,

respectively. The following table provides an emissions summary for this project.

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2004 EIQ)	Potential Emissions of the Installation	Installation Conditioned Potential
PM ₁₀	15.0	0.13	0.13	3.54	N/A
SO _x	40.0	0.01	0.01	0.01	N/A
NO _x	40.0	2.30	1.16	2.30	N/A
VOC	40.0	55.73	2.36	146.58	<40
CO	100.0	0.23	0.23	0.23	N/A
HAPs	10.0/25.0	10.29/25.29	0.20	208.09	<10/25
Xylene	10.0	N/D	N/D	13.53	<10
Cumene	10.0	N/D	N/D	0.28	<10
Ethyl Benzene	10.0	N/D	N/D	3.37	<10
MIK	10.0	N/D	N/D	33.81	<10
Phenol	0.1*	N/D	N/D	2.87	N/A
MEK	10.0	N/D	N/D	36.77	<10
Chromium Compounds	5.0*	N/D	N/D	1.23	N/A
Antimony Compounds	5.0*	N/D	N/D	0.11	N/A
Nickel Compounds	1.0*	N/D	N/D	0.04	N/A
Toluene	10.0	N/D	N/D	27.59	<10
MDI	0.1*	N/D	N/D	15.56	<0.1
Lead Compounds	0.01*	N/D	N/D	0.02	N/A
2-Butoxyethanol (a glycol ether)	5.0*	N/D	N/D	9.89	<5
HDI	0.02*	N/D	N/D	0.39	<0.02

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

*Screen Modeling Action Levels

Please note that the MSDS of the following activators as manufactured by PRC-DeSoto International, Inc. (910-175 Integral Fuel Tank Coating Activator and 910-702 Heat & Fluid Resistant Ctg Activator) have been provided by Ozark Mountain for use in the two new paint booths. The VOC content listed in the MSDS of the two activators does not include the diisocyanates content. However, according to 10 CSR 10-6.020, these compounds are considered VOCs. Since the total content of all three diisocyanates range from 61% by weight to 130% for both activators, 100% VOC content is assumed for the activators. Unless Ozark Mountain wishes to test the VOC content of these activators, 100% VOC content should be used when determining emissions for these activators.

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 are conditioned below de minimis levels for VOC and PM₁₀ and below major levels for HAPs.

APPLICABLE REQUIREMENTS

Ozark Mountain Technologies, Incorporated 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
- *Maximum Achievable Control Technology (MACT) Regulations*, 10 CSR 10-6.075, *National Emission Standards for Hazardous Air for Chromium Electroplating and Chromium Anodizing*, 40 CFR Part 63, Subpart N
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260
- *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*, 10 CSR 10-3.060

AMBIENT AIR QUALITY IMPACT ANALYSIS

A Screen 3 modeling analysis was performed to determine if the acceptable National Ambient Air Quality Standard (NAAQS) for the listed individual HAPs will be exceeded at or beyond the property line of Ozark Mountain's facility. The stack parameters as provided by the applicant are listed in Table 4.

Table 4: Stack Parameters

Stack No.	Height (ft)	Diameter (ft)	Temperature (F)	Flow Rate (actual cubic feet/min)
EP1	31.0	2.5	70	12,800
EP2	31.0	2.5	70	12,800

The following table lists the air quality impact for the individual HAPs.

Table 5: Ambient Air Quality Impact Analysis

Pollutant	Emission Rate (lb/hr)	Modeled Impact ($\mu\text{g}/\text{m}^3$)	NAAQS ($\mu\text{g}/\text{m}^3$)	Time Period
Phenol	1.31	12.1	45	24-hour
		2.4	9.5	Annual
MDI	7.11	114.7	2.7	8-hour
Lead Compounds	0.010	0.16	2	8-hour
Glycol Ethers	4.52	41.7	3	24-hour
		8.3	2	Annual
HDI	0.18	1.6	0.03	24-hour

As indicated in the above table, phenol and lead compound emissions from the equipment added under this permit are expected to be in compliance with the NAAQS. MDI, glycol ethers, and HDI are not expected to be in compliance. Therefore, Ozark Mountain Technologies, Inc. has requested an annual limitation at the respective individual HAP's SMAL.

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 October 26, 2005, received November 7, 2005, designating Ozark Mountain Technologies, Incorporated 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 November 22, 2005.
- MSDS

- (e) Calculate the New 12-Month Combined HDI emissions total. **A 12-Month HDI emissions total (e) of less than 0.02 tons for the installation indicates compliance.**

Mr. Greg Smotherman, Sr.
President
Ozark Mountain Technologies, Incorporated
P.O. Box 680
Cuba, MO 65453

RE: New Source Review Permit - Project Number: 2005-11-036

Dear Mr. Smotherman:

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, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:smhl

Enclosures

c: Southeast Regional Office
PAMS File 2005-11-036

Permit Number: