

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

PERMIT BOOK

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: 102015-011

Project Number: 2015-07-026
Installation Number: 225-0026

Parent Company: Hutchens Industries, Inc.

Parent Company Address: P.O. Box 1427, Springfield, MO 65801

Installation Name: Hutchens Industries – Seymour

Installation Address: 623 Steel Street, Seymour, MO 65746

Location Information: Webster County (S2, T28N, R17W)

Application for Authority to Construct was made for:
The installation of two new spray paint booths. 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.

Prepared by
Ryan Schott
New Source Review Unit

Director or Designee
Department of Natural Resources

OCT 30 2015

Effective Date

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 Department's Air Pollution Control Program of the anticipated date of startup of these air contaminant sources. The information must be made available within 30 days of actual startup. 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 startup of these air contaminant sources.

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 sources(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.

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."

Hutchens Industries – Seymour
Webster County (S2, T28N, R17W)

1. VOC Emission Limitation
 - A. Hutchens Industries – Seymour shall emit less than 40.0 tons of VOCs in any consecutive 12-month period from the entire installation (which includes the following emission points):
 - 1) EP-05 Small Parts Washer Heater
 - 2) EP-06 Small Parts Drying Oven
 - 3) EP-10 Body Rail Washer Heater
 - 4) EP-11A Water Reducible Spray Booth #1
 - 5) EP-11B Water Reducible Spray Booth #2
 - 6) EP-11C Water Reducible Spray Booth #3
 - 7) EP-11D Water Reducible Spray Booth #4 (Touch-Up)
 - 8) EP-12 Space Heaters
 - 9) EP-16 Welding
 - 10) EP-17 Gasoline Storage Tank
 - 11) EP-18 Gasoline Storage Tank
 - B. Attachment A or an equivalent form, such as and electronic form approved by the Air Pollution Control Program, shall be used to demonstrate compliance with Special Condition 1.A.
2. Paint Gun Usage Restriction

Hutchens Industries – Seymour shall only use one (1) paint gun per booth at a time.
3. Capture Device Requirement – Paint Booth
 - A. Hutchens Industries – Seymour shall capture emissions from the two new spray paint booths, EP-11C and EP-11D, using total enclosure.
 - B. All openings in the booths shall be closed during operation, and all fresh air vents shall be equipped with visual indicators, such as streamers, that show air flow into the booths.

SPECIAL CONDITIONS:

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

4. Control Device Requirement – Fabric Filters
 - A. Hutchens Industries – Seymour shall control emissions from the two new spray paint booths, EP-11C and EP-11D, using fabric filters as specified in the permit application.
 - B. The filters shall be operated and maintained in accordance with the manufacturer's specifications.
 - C. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
 - D. Hutchens Industries – Seymour shall maintain a copy of the filter manufacturer's performance warranty on site.
 - E. Hutchens Industries – Seymour shall maintain an operating and maintenance log for the paint booths, 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, with inspection schedule, repair actions, and replacements, etc.
5. Record Keeping and Reporting Requirements
 - A. Hutchens Industries – Seymour shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all materials used.
 - B. Hutchens Industries – Seymour shall report to the Air Pollution Control Program's Compliance/ Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

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

Project Number: 2015-07-026
Installation ID Number: 225-0026
Permit Number:

Installation Address:
Hutchens Industries – Seymour
623 Steel Street
Seymour, MO 65746
Webster County (S2, T28N, R17W)

Parent Company:
Hutchens Industries, Inc.
P.O. Box 1427
Springfield, MO 65801

REVIEW SUMMARY

- Hutchens Industries – Seymour has applied for authority to install two new spray paint booths.
- The application was deemed complete on August 6, 2015.
- No HAP emissions are expected from the proposed equipment.
- None of the NSPS, NESHAP, or MACT regulations apply to the equipment.
- Fabric filters are being used to control particulate 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*. Potential emissions of VOCs are conditioned below the de minimis level.
- This installation is located in Webster County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- 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

Hutchens Industries manufactures truck trailer suspension components at their existing facility in Seymour, Missouri. The plant was constructed prior to 1980, and therefore was previously exempt from construction permitting. The facility is presently a de minimis source for construction permitting and does not require an operating permit. The facility previously required an intermediate operating permit; however, it was determined in project 2011-06-098 that the facility no longer required an operating permit.

The following New Source Review permits have been issued to Hutchens Industries – Seymour from the Air Pollution Control Program:

Table 1: Permit History

Permit Number	Description
0793-003	Four spray paint booths, 2 dip tanks, and a drying oven
0796-018	Paint oven
0996-015	Robotic welding line

PROJECT DESCRIPTION

Hutchens Industries plans to install two new spray paint booths at their existing facility in Seymour, Missouri. The first new unit, Spray Booth #3 (EP-11C), will be similar to the two existing spray paint booths (EP-11A and EP-11B). The new booth will be equipped with a conveyor system that will transport steel parts through the booth at a standard rate. The parts will travel through the spray booth, an optical sensor will detect when the parts are in place, and the guns will automatically begin spraying. EP-11C has a maximum paint application rate of 2.378 gallons per hour. The second new unit, Spray Booth #4 (EP-11D) will serve as a touch-up system, utilized after the parts go through the other three booths. Parts will be transported by fork trucks into the booth in bundles and touched-up in necessary spots using the same primer used in the other booths. EP-11D has a maximum paint application rate of 0.19 gallons per hour. Both new spray booths will be equipped with fabric filters to control particulate emissions.

EMISSIONS/ CONTROLS EVALUATION

VOC emissions from spray painting were calculated using a mass balance approach. The highest theoretical volatile percentage of the coating and additive were multiplied by their respective densities and the maximum design rate of the process to obtain a maximum VOC usage rate. It was assumed that 100% of VOCs were emitted. Neither the coating nor additive contain HAPs.

PM₁₀ and PM_{2.5} emissions from spray painting were also calculated using a mass balance approach. The highest theoretical solids content of the coating and additive were multiplied by their respective densities, a solids transfer efficiency of 45% for the spray guns, and the maximum design rate of the process. It was assumed that all particulate matter was PM_{2.5}.

The fabric filters used in the paint booths were rated with a capture efficiency of 98.67%

and a control efficiency of 80%, yielding an overall efficiency of 78.94% for both PM₁₀ and PM_{2.5} [which is conservative for this type of control device compared to the values listed in the EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Appendix B.2 *Generalized Particle Size Distributions* (September 1996)].

The following table provides an emissions summary for this project. Existing potential emissions were reevaluated using information submitted in this permit application. Since the last construction permit was issued for Hutchens Industries, the only HAP emitted by the facility has been delisted from the Table of Hazardous Air Pollutants; therefore, the existing potential emissions were updated to reflect the current status. Existing actual emissions were taken from the installation's 2011 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year). Conditioned potential emissions represent the subsequent potentials of all equipment after limiting VOC emissions below the de minimis level and accounting for the use of fabric filters.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2011 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/D	N/D	N/D	N/D
PM ₁₀	15.0	8.02	0.59	20.57	9.84
PM _{2.5}	10.0	8.02	0.01	20.57	9.84
SO _x	40.0	N/A	N/A	N/A	N/A
NO _x	40.0	0.01	0.48	N/A	0.01
VOC	40.0	61.67	1.18	33.30	<40.0
CO	100.0	N/A	0.15	N/A	N/A
Total HAPs	25.0	N/A	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 VOCs are conditioned below the de minimis level.

APPLICABLE REQUIREMENTS

Hutchens Industries – Seymour 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*
- *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 10-6.165*

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*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated June 19, 2015, received July 20, 2015, designating Hutchens Industries, Inc. as the owner and operator of the installation.

Attachment A – VOC Compliance Worksheet

Hutchens Industries – Seymour
 Webster County (S2, T28N, R17W)
 Project Number: 2015-07-026
 Installation ID Number: 225-0026
 Permit Number: _____

This sheet covers the month of _____ in the year _____.

A	B	C	D	E	F	G
*Emission Point	Emission Point Description	VOC Containing Material	¹ Amount of Material Used (gal)	VOC Content (weight %)	Material Density (lb/gal)	² VOC Emissions (tons)
EP-11A	Water Reducible Spray Booth #1	Primer		30.78	9.13	
		Additive		100	7.51	
EP-11B	Water Reducible Spray Booth #2	Primer		30.78	9.13	
		Additive		100	7.51	
EP-11C	Water Reducible Spray Booth #3	Primer		30.78	9.13	
		Additive		100	7.51	
EP-11D	Water Reducible Spray Booth #4 (Touch-Up)	Primer		30.78	9.13	
		Additive		100	7.51	
H	³ Total Monthly VOC Emissions (tons)					
I	⁴ Previous 11-Month Total VOC Emissions (tons)					
J	⁵ Current 12-Month Total VOC Emissions (tons)					

* Emission Points EP-5, 6, 10, 12, 16, 17 & 18 emit only negligible amounts of VOCs or no VOCs; therefore, these emissions were not included in the worksheet

¹ Record the amount of material processed through the respective emission point

² VOC Emissions are calculated using the following equation: $[G] = [D] \times [E] \div (100\%) \times [F] \div (2,000 \text{ lb/ton})$

³ Total Monthly VOC Emissions are calculated by adding up all the values in [G]

⁴ Previous 11-Month Total VOC Emissions are calculated by adding [H] on Attachment A for the previous 11 months

⁵ Current 12-Month Total VOC Emissions are calculated using the following equation: $[J] = [H] + [I]$

Current 12-Month VOC Emissions must always be less than 40.0 tons in order to be compliant.

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual cubic feet per minute	MW	megawatt
BACT	Best Available Control Technology	MHDR	maximum hourly design rate
BMPs	Best Management Practices	MMBtu	Million British thermal units
Btu	British thermal unit	MMCF	million cubic feet
CAM	Compliance Assurance Monitoring	MSDS	Material Safety Data Sheet
CAS	Chemical Abstracts Service	NAAQS ...	National Ambient Air Quality Standards
CEMS	Continuous Emission Monitor System	NESHAPs	National Emissions Standards for Hazardous Air Pollutants
CFR	Code of Federal Regulations	NO_x	nitrogen oxides
CO	carbon monoxide	NSPS	New Source Performance Standards
CO₂	carbon dioxide	NSR	New Source Review
CO_{2e}	carbon dioxide equivalent	PM	particulate matter
COMS	Continuous Opacity Monitoring System	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CSR	Code of State Regulations	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
dscf	dry standard cubic feet	ppm	parts per million
EQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SDS	Safety Data Sheet
GHG	Greenhouse Gas	SIC	Standard Industrial Classification
gpm	gallons per minute	SIP	State Implementation Plan
gr	grains	SMAL	Screening Model Action Levels
GWP	Global Warming Potential	SO_x	sulfur oxides
HAP	Hazardous Air Pollutant	SO₂	sulfur dioxide
hr	hour	tph	tons per hour
hp	horsepower	tpy	tons per year
lb	pound	VMT	vehicle miles traveled
lbs/hr	pounds per hour	VOC	Volatile Organic Compound
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		

Mr. Kevin Dobson
HR Director
Hutchens Industries – Seymour
P.O. Box 137
Mansfield, MO 65704

RE: New Source Review Permit - Project Number: 2015-07-026

Dear Mr. Dobson:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions 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 were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty 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 administrative hearing commission, whose contact information is: Administrative Hearing Commission, Truman State Office Building, P.O. Box 1557, Jefferson City, Missouri 65102, www.oa.mo.gov/ahc. If you have questions regarding this permit, contact Ryan Schott, Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 at (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:rs1

Enclosures

c: Southwest Regional Office
PAMS File: 2015-07-026
Permit Number: