

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: 022010-004 Project Number: 2010-01-034

Parent Company: Independent Stave Co., Inc

Parent Company Address: 1078 S. Jefferson, Lebanon, MO 65536

Installation Name: Independent Stave Co., Inc

Installation Number: 105-0001

Installation Address: 1078 S. Jefferson, Lebanon, MO 65536

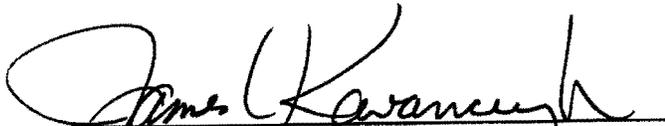
Location Information: Laclede County, S34, T12, R16W

Application for Authority to Construct was made for:
a paint booth (EP-55). 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.

FEB 16 2010

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 Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). 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 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.

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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."

Independent Stave Co., Inc.
Laclede County, S34, T12, R16W

1. Emission Limitation
 - A. Independent Stave Co., Inc shall emit less than 40.0 tons of Volatile Organic Compounds (VOCs) in any consecutive 12-month period from the building #4 paint booth (EP-55).
 - B. Independent Stave Co., Inc shall emit less than the respective individual Screening Model Action Level (SMAL) and less than twenty-five (25.0) tons combined of Hazardous Air Pollutants (HAPs) in any consecutive 12-month period from EP-55. Individual SMAL are listed in Attachment AA "Air Pollution Control Program Table of Hazardous Air Pollutants and Screening Model Action Levels".
 - C. Attachment A, Attachment B, and Attachment C or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 1.A and 1.B.
2. Operational Requirement
Independent Stave Co., Inc shall keep the solvents and cleaning solutions in sealed containers whenever the materials are not in use. Independent Stave Co., Inc shall provide and maintain suitable, easily read, permanent markings on all solvent and cleaning solution containers used with this equipment.
3. Control Device Requirement
 - A. Independent Stave Co., Inc shall vent all exhaust from EP-55 through a filter.
 - B. The filter shall be installed, inspected, and maintained in accordance with the manufacturer's specifications in order to achieve at least 95% control of particulate overspray.

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SPECIAL CONDITIONS:

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

4. Record Keeping and Reporting Requirements
 - A. Independent Stave Co., 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.
 - B. Independent Stave Co., Inc shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, Missouri 65102, no later than ten 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: 2010-01-034
Installation ID Number: 105-0001
Permit Number:

Independent Stave Co., Inc
1078 S. Jefferson
Lebanon, MO 65536

Complete: November 2, 2010

Parent Company:
Independent Stave Co., Inc
1078 S. Jefferson
Lebanon, MO 65536

Laclede County, S34, T12, R16W

REVIEW SUMMARY

- Independent Stave Co., Inc has applied for authority to construct a paint booth (EP-55) in building #4.
- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are cobalt compounds, ethylbenzene (CAS # 100-41-4), glycol ethers, toluene (CAS # 108-88-3), and xylene (CAS # 1330-20-7).
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation. None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment. MACT Subpart M *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products* does not apply as the installation is not a major source of HAPs.
- A filter is being used to control particulate matter overspray.
- 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 and combined HAPs are conditioned below de minimis levels. Potential emissions of individual HAPs are conditioned below their respective SMAL.
- This installation is located in Laclede 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.

- 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.
- A modification to your Intermediate Operating Permit is required for this installation within 90 days of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Independent Stave Co., Inc (Independent Stave) manufactures oak barrels and oak flavoring products for the alcoholic beverage industry. Independent Stave is located in Lebanon, Missouri, is a minor source under construction permits, and an intermediate source under operating permits.

The following construction permits have been issued to Independent Stave Co., Inc from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
0995-014	Installation of a wood/bark waste fired boiler for wine barrel toasting
072001-008	Installation of a bucket loader, a metering bin and a hammermill
0995-014A	Changing to the use of electric elements for barrel toasting instead of using wood scraps burning.
082006-007	New barrel types
092009-024	Installation of a process to draw oak wood dust out of an enclosed fuel bin and drop it to a storage pile.
052009-005	New screen and conveyors

PROJECT DESCRIPTION

This project is to permit a previously installed paint booth. The paint booth (EP-55) was installed in building #4. Also, one parts washer (EP-56) was installed in building #2, another (EP-57) in the truck shop. Both parts washers are Carolina CPW30 models. The paint booth and parts washers were not installed at the same time. The parts washers do not clean parts that are later painted in the booth, and each parts washer meets the construction permit exemption under 10 CSR 10-6.061(3)(A)6.A. Therefore, this project only includes potential emissions from the paint booth.

One gravity fed spray gun operates at the paint booth. The gun is a Jonnesway JA-6111 model with an assumed spray rate of 8 fluid ounces per minute. Independent Stave uses the paint booth for maintenance of its own property, not for production.

Many different pieces may be painted, which require different setup and curing times, as well as coatings. All pieces will be primed with Sherwin Williams Kem Kromik Primer B50WZ1 before being coated with either Sherwin Williams Sher-Kem Enamel F75WC7 or Sherwin Williams Steel Spec B55T804. Cleanup and reducing is with Sherwin Williams Xylene/SW. The Enamel is reduced by 20% volume with xylene. A filter acts as a control device for particulate matter. Operational flexibility for using other coatings is accounted for in Attachments A, B, and C.

EMISSIONS/CONTROLS EVALUATION

Emissions from the paint booth were calculated using the spray rate of 8 fluid ounces per minute. Since all pieces are primed and coated with a single type of topcoat, emissions from the primer and the worst case pollutant independent of topcoat were calculated. Since setup and drying times vary, and the pieces to be coated are custom, there is not a clear bottleneck. Therefore, priming was assumed to occur while topcoating was occurring, for 8,760 hours per year. This represents the greatest potential to emit.

An air-atomized transfer efficiency of 50% was used for PM₁₀, with 95% removal associated with the filter. All available VOC and HAP were considered emitted. Emissions from cleanup were calculated assuming one pint of xylene emitted per 24 hours.

Existing Potential Emissions are cited from construction permit 052009-005. Existing Actual Emissions are from the 2008 Emissions Inventory Questionnaire (EIQ). Unconditioned Potential Emissions of the Application represent the greatest per pollutant potential emissions from the paint booth, assuming continuous operation (8,760 hours per year). Conditioned Potential Emissions of the Application represent voluntary limits to avoid modeling. The following table provides an emissions summary for this project.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2008 EIQ)	Unconditioned Potential Emissions of the Application	Conditioned Potential Emissions of the Application
PM ₁₀	15.0	117.73	13.16	8.01	N/A
SOx	40.0	1.89	1.62	N/A	N/A
NOx	40.0	61.74	32.70	N/A	N/A
VOC	40.0	73.78	1.13	132.68	< 40.0
CO	100.0	< 250.0	37.88	N/A	N/A
Combined HAPs	25.0	N/D	0.00	65.28	< 25.0
cobalt compounds	¹ 0.1	N/D	N/D	0.01	N/A
ethylbenzene	¹ 10.0	N/D	N/D	8.02	N/A
glycol ethers	¹ 5.0	N/D	N/D	3.94	N/A
toluene	¹ 10.0	N/D	N/D	7.53	N/A
xylene	¹ 10.0	N/D	N/D	45.79	< 10.0

¹ Screening Model Action Level

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 and combined HAPs are conditioned below de minimis levels. Potential emissions of individual HAPs are conditioned below their respective SMAL.

APPLICABLE REQUIREMENTS

Independent Stave Co., 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. 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

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 October 27, 2009, received November 2, 2009, designating Independent Stave Co., Inc as the owner and operator of the installation.

Mr. Dale Eichmeyer
Engineer
Independent Stave Co., Inc
P.O. Box 104
Lebanon, MO 65536

RE: New Source Review Permit - Project Number: 2010-01-034

Dear Mr. Eichmeyer:

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 Department's 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
PAMS File: 2010-01-034

Permit Number: