

PERMIT BOOK

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: 012008-014 Project Number: 2007-07-062

Parent Company: The Valspar Corporation

Parent Company Address: 1101 S. Third Street, Minneapolis, MN 55415

Installation Name: Valspar Industries

Installation Address: 1136 Fayette, N. Kansas City, MO 64116

Location Information: Clay County, S23, T50, R30

Application for Authority to Construct was made for:

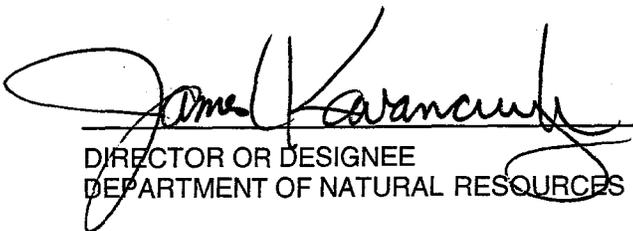
The construction of an additional extruder (EU-09) and a powder coating production line with the associated control equipment. The powder coating production line consists of a mill (M-10) and a second new extruder (EU-08), a product separation cyclone, and a set of screens. The associated control equipment consists of a recycle baghouse (CD-25) and a separate nuisance baghouse (CD-26). 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.

JAN 29 2008

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 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 with 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."

Valspar Industries
Clay County, S23, T50, R30

Control Device Special Conditions

1. Valspar Industries shall control emissions from EP-23 (the extruder EU-08, mill 10, and the cyclone) and from EP-24 (the sieves) using the recycle and nuisance baghouses (CD-25 and CD-26) as specified in the permit application. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouse 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 Department of Natural Resources employees may easily observe them. Replacement filters for the baghouses shall be kept on hand 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).
2. Valspar Industries shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
3. Valspar Industries shall maintain an operating and maintenance log for the baghouses and drum filters which shall include the following:
 - A. Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
 - B. Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

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

Project Number: 2007-07-062
Installation ID Number: 047-0140
Permit Number:

Valspar Industries
1136 Fayette
N. Kansas City, MO 64116

Complete: July 30, 2007
Reviewed: November 15, 2007

Parent Company:
The Valspar Corporation
1101 S. Third Street
Minneapolis, MN 55415

Clay County, S23, T50, R30

REVIEW SUMMARY

- Valspar Industries has applied for authority to construct an extruder (EU-09), a powder coating production line, and associated control equipment. The powder coating production line consists of a mill (M-10) and a second extruder (EU-08), a product separation cyclone, and a set of screens. The associated control equipment consists of a recycle baghouse (CD-25) and a separate nuisance baghouse (CD-26).
- 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.
- Baghouse are being used to control the pollutant 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 all pollutants are below de minimis levels.
- This installation is located in Clay 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.
- A revision to the Basic Operating Permit application is required for this installation within 30 days of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Valspar's North Kansas City plant produces powder coatings from constituent Dry resins, pigments and additives. The raw materials are weighed and charged to mixers according to specific formulas. The mixers blend the raw material into a homogenous mixture. The batches are transferred from the mixers to intermediate bins, then to extruders which convert the material to a molten state. The extruded material is cooled and flaked for further processing. The cooled flaked material is conveyed to a mill and cyclone system. The mills reduce the flake material to a specified particle size. The milled powder coat is pneumatically conveyed to a cyclone which separates the material from the air stream. The powder coat is passed through a set of screens that separate the product by size in order to separate the oversized and undersized product from the final product. The oversize material is recycled back to the mill for regrinding. The undersized material is pneumatically conveyed to a fabric filter separator and deposited into a covered container for off-site disposal. The material is transferred to totes for storage and distribution.

The plant operates with a combination of batch and near continuous processes. The mixing process is as batch process. The extruders, mill, and cyclones operate more continuously. An individual extruder and mill cyclone system is able to produce multiple batches of the same formulas specification. Between production runs of different product formulas the mixers, extruders and mill cyclones system must be cleaned thoroughly. This limits the hours of actual production. The capacity of the extruders also limits production at the plant.

The plant has a permitting history know as Lilly Industries, Inc. The following permits have been issued to installation identification number 047-0140, Valspar Industries from the Air Pollution Control Program.

Table 1: Permits issued to installation 047-0140, Valspar Industries

Permit Number	Description
0794-003	Two grinder Classifier system project number 04701400050
N/A	Additional Mixer No permit required project number 1998-04-078
Basic OP	Basic Operating permit project number 1998-05-415
N/A	Powder Coating and Solvent Lab No permit required project number 1998-06-045
N/A	Extruder replacement project number 1999-02-004
N/A	Fume hood packaging line (permit required) project number 1999-02-091
0999-005	plant process project number 1998-08-010
N/A	Pilot line extension (denied) project number 2000-07-084
112000-003	New manufacturing line project number 2000-08-049
N/A	Powder coating changes (no permit required) project number 2000-11-066
N/A	Powder coating oven (no permit required) project number 2002-03-144
Basic OP	Basic Operating permit project number 1998-05-415
N/A	Powder coating changes (no permit required) project number 2000-11-066
N/A	Powder coating oven (no permit required) project number 2002-03-144
Basic OP	Powder Coating Manufacturing project number 2003-03-110
N/A	Milling & Powder Processing (no permit required) project number 2004-01-023
N/A	Baghouse (no permit required) project number 2005-08-033
N/A	Baghouse (no permit required) project number 2006-01-074
N/A	Laboratory equipment (no permit required) project number 2007-03-014

PROJECT DESCRIPTION

An additional extruder (EU-09) and mill/cyclone powder coating production line along with associated control equipment is being proposed. The powder coating production line consists of a mill (M-10) and an extruder (EU-08), a product separation cyclone, and a set of screens. This extruder (EU-08) will have a maximum batch size of 150 pounds per hour. The associated control equipment consists of a recycle baghouse (CD-25) and a separate nuisance baghouse (CD-26). The production line will be in an enclosure therefore the capture efficiencies for both baghouse was considered to be 100 percent. CD-25 exhausts through emission point EP-23. CD-26 exhausts through emission point EP-24.

A separate line consisting of extruder (EU-09) will also be constructed. This extruder will have a maximum batch size of 150 pounds per hour. The extruded product will be filled to 55 gallon drums and shipped offsite. No additional pollution control systems will be added for this system as no particulate matter is expected to be emitted. No other compound such as HAPs and VOCs have been assumed to be emitted in this project and were not submitted in the application.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies used in this analysis were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Volume 1, Chapter 6, Section 4, Table 6.4-1, Uncontrolled Emission Factors for Paint and Varnish Manufacturing assumes emissions are from the complete process from raw material handling to finished goods handling. Therefore emission are calculated for all batch processing and not for a particular unit. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) 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***	Potential Emissions of the Application	New Installation Conditioned Potential
PM ₁₀	15.0	84.84	N/D	5.82	N/A
SO _x	40.0	32.53	N/D	N/A	N/A
NO _x	40.0	0.03	N/D	N/A	N/A
VOC	40.0	4.38	N/D	N/A	N/A
CO	100.0	0.23	N/D	N/A	N/A
HAPs	10.0/25.0	0.88	N/D	N/A	N/A

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

** Existing PM₁₀ emissions are from current application all other emission are from permit # 112000-003.

*** Newer than 2000 EIQ data could not be located. 2000 EIQ data is found in permit # 11200-003.

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 PM₁₀ are below de minimis levels.

APPLICABLE REQUIREMENTS

Valspar Industries 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 April 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*

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.

Timothy Paul Hines
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 07/25/2007 received 07/26/2007, designating The Valspar Corporation as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Kansas City Regional Office Site Survey, dated 08/13/2007.

Mr. Phil Daley
Plant Manager
Valspar Industries
1136 Fayette
N. Kansas City, MO 64116

RE: New Source Review Permit - Project Number: 2007-07-062

Dear Mr. Daley:

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 Tim Hines at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or (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:thl

Enclosures

c: Kansas City Regional Office
PAMS File 2007-07-062
Permit Number: