

STATE OF MISSOURI

PERMIT BOOK



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: 022015-008

Project Number: 2014-12-001
Installation Number: 115-0001

Parent Company: Walsworth Publishing Company

Parent Company Address: 306 North Kansas Avenue, Marceline, MO 64658

Installation Name: Walsworth Publishing Company

Installation Address: 803 South Missouri Avenue, Marceline, MO 64658

Location Information: Linn County, S29, T57N, R18W

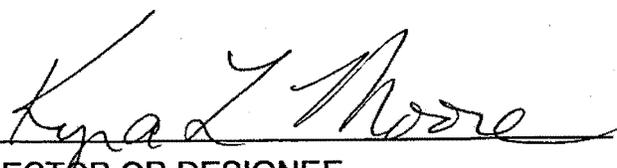
Application for Authority to Construct was made for:
The installation of two lithographic sheet-fed presses and a UV screen press to print short run books. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

FEB 11 2015

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 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.

Page No.	3
Permit No.	
Project No.	2014-12-001

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."

Walsworth Publishing Company
Linn County, S29, T57N, R18W

1. VOC Emission Limitation
 - A. Walsworth Publishing Company shall emit less than 250.0 tons of VOCs in any consecutive 12-month period from the entire installation. This includes all equipment listed in Table 1.

Table 1: Equipment that Emits VOCs at the Installation

Emission Point	Description
EP01	Film cleaning
EP04	Komori Lithrone 40 Model L-640-III 6-color non-heatset lithographic printing press
	Two Komori Lithrone 40 Model L-440-III 4-color non-heatset lithographic printing presses with coater
	Komori Lithrone 40 Model L-440 5-color non-heatset lithographic printing press with coater
	Heidelberg SM-102P 8-color non-heatset lithographic press
	Five Miller TP-38A non-heatset sheet-fed lithographic printing presses
	Komori Lithrone 40 L-440 non-heatset sheet-fed lithographic printing press
	Komori Lithrone 40 L-540 5-color non-heatset lithographic printing press
	Heidelberg 8-color lithographic printing press
Heidelberg SM-102 8-color non-heatset lithographic press*	
Heidelberg PM-52 4-color non-heatset lithographic press*	
EP20	20 natural gas space heaters, 0.966 MMBtu/hr total
EP22	0.4 MMBtu/hr natural gas boiler
EP24	Solna C-96 6-color heatset web lithographic press with natural gas dryer
EP25	Sakurai SC 102 UV screen press with associated screen making equipment
	Sakurai SC 102 UV screen press*
EP26	HP-Indigo 7600 Digital Press
	HP-Indigo 10000 Digital Press
EP27	Baker Perkins G-14 lithographic web press and natural gas dryer
N/A	Three 165 Btu/hr (each) natural gas hot water heaters
N/A	Two Parts Washer
N/A	Hot melt glue application
N/A	Four Creo Platemakers

N/A = Not Assigned

*New Equipment in this permit

Page No.	4
Permit No.	
Project No.	2014-12-001

SPECIAL CONDITIONS:

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

- B. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 1.A.

2. **Operational Requirement - Solvent/Ink Cloths**
Walsworth Publishing Company shall keep the ink solvents and cleaning solutions in sealed containers whenever the materials are not in use. Walsworth Publishing Company shall provide and maintain suitable, easily read, permanent markings on all inks, solvent and cleaning solution containers used with this equipment.

3. **Record Keeping and Reporting Requirements**
 - A. Walsworth Publishing Company 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. Walsworth Publishing Company 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: 2014-12-001
Installation ID Number: 115-0001
Permit Number:

Walsworth Publishing Company
803 South Missouri Avenue
Marceline, MO 64658

Complete: December 8, 2014

Parent Company:
Walsworth Publishing Company
306 North Kansas Avenue
Marceline, MO 64658
Linn County, S29, T57N, R18W

REVIEW SUMMARY

- Walsworth Publishing Company has applied for authority to install two lithographic sheet-fed presses and a UV screen press to print short run books.
- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are hexane, naphthalene, and alkyl acrylate esters.
- None of the New Source Performance Standards (NSPS) apply to the project.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- No air pollution control equipment is being used 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 all pollutants are below de minimis levels.
- This installation is located in Linn 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.
- An application to modify your Part 70 Operating Permit is required within 1 year of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Walsworth Publishing Company operates a printing installation in Marceline, Missouri. The company previously elected to take a 250 tons per year installation-wide VOC limit in construction permit 042011-003 to make the installation a minor source for construction permits. The facility currently has a Part 70 Operating Permit, OP2013-007.

The following New Source Review permits have been issued to Walsworth Publishing Company from the Air Pollution Control Program:

Table 2: Permit History

Permit Number	Description
0195-010	Addition of a Komori Lithrone Model L-640-III offset printing press
0195-011	Addition of a Komori Lithrone Model L-440-111 offset printing press
042000-013	Addition of four web presses
042001-009	Addition of a Komori lithographic press with coater
052001-004	Addition of a Komori 5-color lithographic press with coater
062002-002	Installation of a 6-color heat-set web press
102002-002	Installation of a Sakurai SC 28/20 II screen press and screen equipment
062003-022	Modification of existing Komori press K-5 and installation of four Creo Platemakers
012007-011	Installation of a Heidelberg 8-color lithographic printing press
122007-004	Installation of a Heidelberg 8-color lithographic printing press
042011-003	Installation of a Baker Perkins G-14 web press and natural gas dryer

PROJECT DESCRIPTION

Walsworth Publishing Company has applied for authority to install a Heidelberg SM-102 8-color non-heatset lithographic sheet-fed press, a Heidelberg PM-52 4-color non-heatset lithographic sheet-fed press, and a Sakurai SC-102 ultraviolet screen press. The SM-102 and PM-52 lithographic presses have maximum design rates of 0.484 and 0.121 gallons of ink per hour, respectively. The SC-102 UV press has a maximum design rate of 0.515 gallons of coating per hour. These design rates are based on a maximum historical usage of similar existing presses. All other materials including the cleaner, blanket wash, ink additives, fountain solution, and adhesive are based on predetermined ratios of the particular material to the amount of ink used. These three new presses may eventually replace the existing Komori K-2, K-3, and K-5 lithographic sheet-fed presses, as well as the Sakurai SC 28/20 II UV screen press.

EMISSIONS/CONTROLS EVALUATION

Emissions from the ink were calculated by assuming that 5% of the VOCs and HAPs were emitted, while 95% were retained on the paper. Emissions from non-ink materials were calculated by assuming that 100% of the VOCs and HAPs were emitted. VOC and HAP contents were taken from their respective SDS.

Particulate emissions from the adhesive were calculated by assuming that all non-volatiles were emitted as particulate and that all particulate was PM_{2.5}.

A majority of the equipment at the installation was permitted before 2005, when the Air Pollution Control Program calculated emissions from lithographic printing presses by assuming that all (100%) of the VOCs contained in the Ink are emitted; however, after 2005, the Air Pollution Control Program calculated emissions from lithographic printing presses by assuming that only 5% of the VOCs in non-heatset inks are emitted. Therefore, if the post-2005 procedures were used, the existing potential emissions of VOCs at this installation may be less than 250 tons per year. The installation was given the option of either recalculating the existing potential emissions using the post-2005 calculation procedures or keeping the pre-2005 calculations and accepting the 250 tons per year VOC limit. The facility elected to keep the previous calculations and accept the 250 tons per year VOC limit; however, the facility may use the post-2005 procedure in Attachment A to track the actual VOC emissions for compliance. In the future, the facility may submit an amendment requesting that the potential emissions of the installation be recalculated.

The following table provides an emissions summary for this project. Existing potential emissions were taken from the previous construction permit 042011-003. Existing actual emissions were taken from the installation's 2013 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year).

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2013 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/D	N/D	0.032	N/A
PM ₁₀	15.0	N/D	0.03	0.032	N/A
PM _{2.5}	10.0	N/D	0.03	0.032	N/A
SO _x	40.0	N/D	0.00	N/A	N/A
NO _x	40.0	N/D	0.42	N/A	N/A
VOC	40.0	<250.0	70.55	18.10	<250.0
CO	100.0	N/D	0.08	N/A	N/A
Combined HAPs	25.0	8.33	N/D	0.65	N/A
Hexane	10.0	0.20	N/D	0.00085	N/A
Naphthalene	10.0	N/D	N/D	0.15	N/A
Alkyl Acrylate Ester	10.0	N/D	N/D	0.50	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 all pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

Walsworth Publishing Company 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
- *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 10-6.165

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*, I recommend this permit be granted with special conditions.

Ryan Schott
New Source Review Unit

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated November 25, 2014, received December 1, 2014, designating Walsworth Publishing Company as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

APPENDIX A

Abbreviations and Acronyms

%percent	m/s meters per second
°Fdegrees Fahrenheit	Mgal 1,000 gallons
acfmactual 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
CO₂e 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/m³micrograms per cubic meter	

Mr. Matthew Derickson
CAD Draftsman/ Environmental Tech
Walsworth Publishing Company
306 North Kansas Avenue
Marceline, MO 64658

RE: New Source Review Permit - Project Number: 2014-12-001

Dear Mr. Derickson:

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, 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 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 of 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, MO 65102, www.ao.mo.gov/ahc.

If you have any questions regarding this permit, please contact Ryan Schott, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:rs1

Enclosures

c: Northeast Regional Office
PAMS File: 2014-12-001
Permit Number: