



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: **122015-012** Project Number: 2015-11-057
Installation Number: 115-0001

Parent Company: Walsworth Publishing Company
Parent Company Address: 306 N. Kansas Ave., Marceline, MO 64658
Installation Name: Walsworth Publishing Company
Installation Address: 803 S. Missouri Ave., Marceline, MO 64658
Location Information: Linn County, S29, T57N, R18W

Application for Authority to Construct was made for:
Installation of a Fuji Film J Press 720S digital press. This review was conducted in accordance with Section (6) of 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.

Alana L. Hess

Prepared by
Alana Hess
New Source Review Unit

Kyra L. Moore

Director or Designee
Department of Natural Resources

DEC 22 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. The 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 these air contaminant sources. The information shall be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources' Northeast Regional Office within 15 days after the actual start up 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(12)(A)10. "Conditions required by permitting authority."

Walsworth Publishing Company
Linn County, S29, T57N, R18W

1. Superseding Condition
 - A. The conditions of this permit supersede the following items previously issued by the Air Pollution Control Program:
 - 1) Special Condition 1 found in Construction Permit 042011-003
 - 2) Special Condition 1 found in Construction Permit 022015-008
 - 3) No Construction Permit Required Determination, Project 2014-08-059

2. VOC Emission Limitations
 - A. Walsworth Publishing Company shall emit less than 250.0 tons of VOCs in any consecutive 12-month period from the entire installation as detailed in Table 1.

Table 1: VOC Emissions Sources at the Entire Installation

Emission Unit	Description
EP-01	(4) Creo Platemakers and Film Cleaning
EP-04	Two Color Miller TP-38A Non-heatset Sheet-fed Offset Lithographic Printing Presses
	Five Color Komori Lithrone 40 L-540 Non-heatset Lithographic Printing Press, K-6
	Eight Color Heidelberg XL-106 Non-heatset Lithographic Printing Press
	Eight Color Heidelberg SM-102 Non-heatset Lithographic Printing Press
	Eight Color Heidelberg SM-102 Non-heatset Lithographic Printing Press
	Eight Color Heidelberg SM-102P Non-heatset Lithographic Printing Press
EP-20	(20) Natural Gas Space Heaters, 0.966 MMBtu/hr total
EP-22	Natural Gas Fired Boiler, 0.4 MMBtu/hr
EP-24	Six Color Solna 96 Heatset Web Offset Lithographic Printing Press
	Natural Gas Dryer, 2.0 MMBtu/hr
EP-25	Sakurai SC 102 UV Screen Press with associated screen making equipment
EP-26	HP-Indigo 7800 Digital Press ¹
	HP-Indigo 10000 Digital Press ¹

¹ New equipment in this permit.

SPECIAL CONDITIONS:

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

	Fuji Film J Press 720S ¹
EP-27	Baker Perkins G-14 Lithographic Web Press Natural Gas Dryer, 5.567 MMBtu/hr
EP-28	Diesel Emergency Generator, 315 HP
EP-29	(3) Natural Gas Hot Water Heaters, 165 Btu/hr each
EP-30	(2) Parts Washers
EP-31	Hot Melt Glue Application

- B. Attachment A or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Condition 2.A.

- 3. Operational Requirement - Solvent/Ink Cloths
 - A. Walsworth Publishing Company shall keep all VOC containing chemicals in sealed containers whenever the materials are not in use. Walsworth Publishing Company shall provide and maintain suitable, easily read, permanent markings on all VOC containing chemical containers used with this equipment.

- 4. 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 to Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all chemicals 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: 2015-11-057
Installation ID Number: 115-0001
Permit Number:

Installation Address:
Walsworth Publishing Company
803 S. Missouri Ave.
Marceline, MO 64658

Parent Company:
Walsworth Publishing Company
306 N. Kansas Ave.
Marceline, MO 64658

Linn County, S29, T57N, R18W

REVIEW SUMMARY

- Walsworth Publishing Company has applied for authority to install a Fuji Film J Press 720S digital press.
- The application was deemed complete on November 30, 2015.
- HAP emissions are expected from the proposed equipment. The primer solution and cleaning solution used by the new press contains 10% glycol ethers by weight.
- None of the currently promulgated NSPS, NESHAP, or MACT regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOC are above the de minimis level, but below the major source level.
- 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.
- Ambient air quality modeling was not performed for this review. No model is currently available which can accurately predict ambient ozone concentrations caused by this installation's VOC emissions. Potential glycol ether emissions are below the SMAL.
- Emissions testing is not required for the equipment.

- A Part 70 Operating Permit modification application is required for this installation within one year of commencement of operations.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Walsworth Publishing Company operates a printing installation in Marceline, Missouri. The company is a synthetic minor source for construction permits and a major source for operating permits. The facility currently operates under 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-III 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	Addition of a 6-color heatset web press
102002-002	Addition of a Sakurai SC 28/20 II screen press and screen equipment
062003-022	Modification of an existing Komori press and installation of four Creo Platemakers
012007-011	Addition of a Heidelberg 8-color lithographic printing press
122007-004	Addition of a Heidelberg 8-color lithographic printing press
042011-003	Addition of a Baker Perkins G-14 web press and natural gas dryer
022015-008	Addition of (2) lithographic sheet-fed presses and a UV screen press

PROJECT DESCRIPTION

Walsworth Publishing Company has requested to install a Fuji Film J Press 720S digital press as the HP-Indigo 7800 digital press and HP-Indigo 10000 digital press installed under No Construction Permit Required Determination, Project 2014-08-059, are having quality problems.

As the Fuji Film J Press 720S and the other digital presses (HP-Indigo 7800 and HP-Indigo 10000) installed under No Construction Permit Required Determination, Project 2014-08-059, are being installed within the same two year time span and are being used to reach the same digital printing production goal, it has been determined that the installation of these three digital presses are one project. As the installation of Fuji Film J Press 720 S, HP-Indigo 7800, and HP-Indigo 10000 digital presses is one project, No Construction Permit Required Determination (Project 2014-08-059) is being revoked and replaced by this permit.

EMISSIONS/CONTROLS EVALUATION

Project emissions were calculated using a mass balance approach and assuming 100% of the VOC/HAP content is emitted. Table 3 provides details on the materials evaluated, the application rate (MHDR), VOC content, glycol ether content, and density.

Table 3: Material Information

Press	Material	Application Rate (gallons/hour)	VOC Content (wt%)	Glycol Ether Content (wt%)	Density (lb/gal)
Fuji Film J Press 720S	Black Ink	0.19321	100%	0%	9.01
	Cyan Ink	0.094962	100%	0%	9.01
	Magenta Ink	0.14071	100%	0%	9.01
	Yellow Ink	0.11123	100%	0%	9.01
	Rapid Coagulation Primer Solution	0.26312	100%	10%	9.30
	Head Cleaning Solution	0.0024106	100%	10%	8.67
	Head Moisturizer	0.029291	100%	0%	8.36
HP Indigo 7800	Black Ink	0.0325	81.9%	0%	6.83
	Cyan Ink	0.0325	81.5%	0%	6.80
	Magenta Ink	0.0325	81.7%	0%	6.81
	Yellow Ink	0.0325	81.8%	0%	6.82
HP Indigo 10000	Black Ink	0.0748	82.3%	0%	6.86
	Cyan Ink	0.0748	81.7%	0%	6.81
	Magenta Ink	0.0748	82.3%	0%	6.86
	Yellow Ink	0.0748	81.7%	0%	6.81

The following table provides an emissions summary for this project. Existing potential emissions were taken from Operating Permit OP2013-007 and include the project emissions from Construction Permit 022015-008. Existing actual emissions were taken from the installation's 2014 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year).

Table 4: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2014 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	0.33	N/A	N/A	N/A
PM ₁₀	15.0	0.33	0.04	N/A	N/A
PM _{2.5}	10.0	0.31	0.04	N/A	N/A
SO _x	40.0	0.19	0.01	N/A	N/A
NO _x	40.0	4.41	0.51	N/A	N/A
VOC	40.0	<250.0	67.77	43.71	<250.0
CO	100.0	3.33	0.10	N/A	N/A
HAP	25.0	11.78	1.02	1.08	N/A
Glycol Ethers	10.0 ²	4.26	0.26	1.08	N/A
Isopropylbenzene	10.0	1.76	0.26	N/A	N/A

² The SMAL is 5 tons per year.

Xylene	10.0	2.09	0.26	N/A	N/A
Ethylene Glycol	10.0	N/D	0.23	N/A	N/A
Hexane	10.0	0.20	0.01	N/A	N/A
Diethanolamine	10.0	3.00	N/D	N/A	N/A
Naphthalene	10.0	0.15	N/D	N/A	N/A
Alkyl Acrylate Ester	10.0	0.50	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 (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOC are above the de minimis level, but below the major source level.

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

- 10 CSR 10-6.065 *Operating Permits*
- 10 CSR 10-6.110 *Submission of Emission Data, Emission Fees and Process Information*
 - Walsworth Publishing Company shall submit a full EIQ for the 2016 calendar year.
- 10 CSR 10-6.165 *Restriction of Emission of Odors*
- 10 CSR 10-6.170 *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*
- 10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6) of 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 November 23, 2015, received November 25, 2015, designating Walsworth Publishing Company as the owner and operator of the installation.

Attachment A – VOC Compliance Worksheet

Walsworth Publishing Company
 Linn County, S29, T57N, R18W
 Project Number: 2015-11-057
 Installation ID Number: 115-0001
 Permit Number: _____

This sheet covers the period from _____ to _____.
(month, year) (month, year)

Chemical Usage ³						
Chemical Name	Monthly Material Usage (gallons)	Density ⁴ (lb/gal)	VOC Content ⁵ (weight percent)	Lithographic Ink? (Yes/No)	Heatset/Nonheatset	VOC Emissions ⁶ (tons)
Natural Gas Combustion ⁷						
Monthly Natural Gas Usage (MMscf)		VOC Emission Factor (lb/MMscf)		Emission Factor Source		VOC Emissions ⁸ (tons)
		5.5		FIRE 10200603		
Diesel Combustion ⁹						
Monthly Emergency Generator Usage (hours)		VOC Emission Factor (lb/hr)		Emission Factor Source		VOC Emissions ³ (tons)
		0.79		AP-42 Table 3.3-1 20200102, 315 HP		
Installation Monthly VOC Emissions ¹⁰ (tons):						
Installation 12-Month Rolling Total VOC emissions ¹¹ (tons):						

³ Includes all VOC containing chemicals/materials used in association with EP-01, EP-04, EP-24, EP-25, EP-26, EP-27, EP-30, and EP-31.

⁴ Obtained from the SDS for the chemical. If the specific gravity is provided, density (lb/gal) = specific gravity x 8.33 lb/gal.

⁵ Obtained from the SDS for the chemical. If a range of VOC contents is provided, use the highest value in the range to demonstrate compliance.

⁶ VOC Emissions (tons) = Monthly Material Usage (gallons) x Density (lb/gal) x VOC Content (wt%) / 100 x 0.0005 ton/lb x X. If the chemical is not a lithographic ink, X = 1. If the chemical is a lithographic nonheatset ink, X = 0.05. If the chemical is a lithographic heatset ink, X = 0.8.

⁷ Includes all natural gas combusted by EP-20, EP-22, EP-24, EP-27, and EP-29.

⁸ VOC Emissions (tons) = Monthly Natural Gas Usage (MMscf) x VOC Emission Factor (lb/MMscf) x 0.0005 ton/lb.

⁹ Includes all diesel combusted by EP-28.

¹⁰ Installation Monthly VOC Emissions (tons) = the sum of all VOC emissions (tons) from each emission source (each chemical, natural gas combustion, and diesel combustion).

¹¹ Installation 12-Month Rolling Total VOC Emissions (tons) = the sum of the 12 most recent Installation Monthly VOC Emissions (tons) + the sum of all start-up, shutdown, and malfunction VOC emissions reported to the Air Pollution Control Program's Compliance/Enforcement Section during the same 12-month period. **12-Month Rolling Total VOC Emissions of less than or equal to 250.0 tons per year indicates compliance with Special Condition 2.A.**

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. GARY O'TOOLE
GENERAL MANAGER FINISHING OPERATIONS
WALSWORTH PUBLISHING COMPANY
306 NORTH KANSAS AVENUE
MARCELINE, MISSOURI 64658

RE: New Source Review Permit, Project Number 2015-11-057

Dear Mr. O'Toole:

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 submittal of an operating permit modification application are 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 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 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 Administrative Hearing Commission. You may contact the Administrative Hearing Commission by writing to them at Administrative Hearing Commission, Truman State Office Building, Room 640, 301 West High Street, P.O. Box 1557, Jefferson City, MO 65102 or by phone at 573-751-2422 or by fax at 573-751-5018. More information about the Administrative Hearing Commission can be found on their website at www.oa.mo.gov/ahc.

Mr. Gary O'Toole
Page Two

If you have any questions regarding this permit, please do not hesitate to contact Alana Hess, at the Department of Natural Resources' 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

Susan Heckenkamp
New Source Review Unit Chief

SH:ahl

Enclosures

c: Northeast Regional Office
PAMS File : 2015-11-057

Permit Number: