



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: **082016-010**

Project Number: 2016-05-043
Installation Number: 071-0031

Parent Company: Graphic Packaging Holding Company

Parent Company Address: 1500 Riveredge Parkway NW Suite 100, Atlanta, GA 30328

Installation Name: Graphic Packaging International, Inc.

Installation Address: 1101 South Denton Road, Pacific, MO 63069

Location Information: Franklin County, S13, T43N, R2E

Application for Authority to Construct was made for:

Addition of one Rapida 142 lithographic press. 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.

Kent Branson

Prepared by
Branson, Kent
New Source Review Unit

Kyra L. Moore

Director or Designee
Department of Natural Resources

AUG 24 2016

Effective Date

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within 18 months from the effective date of this permit. Permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within 18 months 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 Enforcement and Compliance Section of 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's 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 the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's 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 using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
<http://dnr.mo.gov/regions/>

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."

Graphic Packaging International, Inc.
Franklin County, S13, T43N, R2E

1. Alternative Coating and Solutions
 - A. When considering using an alternative material that is different than a material listed in the Application for Authority to Construct, Graphic Packaging International, Inc. shall calculate the potential emissions of volatile organic compounds (VOCs) and each individual HAP in the alternative material using the Safety Data Sheet (SDS) of the new material. If the SDS lists a range for a HAP or VOC content, use the highest value in this range.
 - B. Graphic Packaging International, Inc. shall seek approval from the Air Pollution Control Program before use of the alternative material in the following cases:
 - 1) If the VOC and HAP content of the alternative material is greater than the associated values given on Attachment A.
 - 2) If the potential individual HAP emissions for the alternative material is equal to or greater than the Screening Model Action Levels (SMAL) for any compound listed in Appendix B. The proper calculation method is given in Attachment A.
 - C. Attachment A or an equivalent form shall be used to show compliance with Special Condition 2.A and 2.B.
2. Operational Requirement - Solvent/Ink Cloths
 - A. Graphic Packaging International, Inc. shall keep the ink solvents, coating solutions, fountain solutions, glue, and cleaning solutions in sealed containers whenever the materials are not in use. Graphic Packaging International, Inc. 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. Graphic Packaging International, Inc. 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.

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

Project Number: 2016-05-043
Installation ID Number: 071-0031
Permit Number:

Installation Address:

Graphic Packaging International, Inc.
1101 South Denton Road
Pacific, MO 63069

Parent Company:

Graphic Packaging Holding Company
1500 Riveredge Parkway NW Suite 100
Atlanta, GA 30328

Franklin County, S13, T43N, R2E

REVIEW SUMMARY

- Graphic Packaging International, Inc. has applied for authority to install and operate one eight station sheetfed Rapida-142 non-heatset lithographic printing press, one sheeter, and one dye sheet cutter.
- The application was deemed complete on May 31, 2016.
- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are Acrylic Acid (CAS 79-10-7), Ethylene Glycol (CAS 107-21-1), Glycol Ether (CAS 20-10-0), Hydroquinone (CAS 123-31-9), and Styrene (CAS 100-42-5).
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment. The MACT National Emissions Standards for Hazardous Air Pollutants 40 CFR, Part 63, Subpart KK does not apply to lithographic printing presses.
- No air pollution control equipment is being used in association 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 Franklin County, a nonattainment area for the 8-hour ozone standard and the PM-2.5 standard and an attainment area for all other criteria pollutants.
- This installation is not on the List of Named Installations found in 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 as a part of this permit. Testing may be required as part of other state, federal or applicable rules.
- No Operating Permit is required for this installation.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Graphic Packaging International, Inc. operates a printing facility in Pacific, Missouri. The facility manufactures folding cartons from paperboard to meet customer specifications and product end use requirements. The cartons undergo printing and drying. Graphic Packaging International, Inc. currently operates four lithographic printing presses at the facility (one KBA Rapida 142, one Komori, and two KBA Rapida 162).

The facility is located in the St. Louis nonattainment area for ozone. The facility is a major source for VOCs and is not a major source for HAPs. Graphic Packaging International, Inc. currently operates on a Part 70 operating permit.

Since this installation is located at Franklin County and potential emissions of VOC are above 100 tons, Missouri State Rule 10 CSR 10-5.442, *Control of Emissions from Lithographic Printing Operations*, applies to this installation. Since the above mentioned rule applies to this installation, Missouri State Rule 10 CSR 10-5.520, *Control of Volatile Organic Compound Emissions From Existing Major Sources*, does not apply.

The following New Source Review permits have been issued to Graphic Packaging International, Inc. from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
0297-020	Installation of a six (6) color, seven (7) unit Komori offset sheetfed non-heatset printing press and the addition of a color unit to the existing Planeta RZ printing press.
1097-007	Installation of an eight (8) unit offset, sheetfed, non-heatset, lithographic printing press.
OP1999-151	P70 Operating Permit
0498-008	Installation of a one (1) color flexographic press and a natural gas-fired dryer.
062002-005	7 station lithographic printing press.
OP2005-010	Part 70 Operating Permit Renewal
022006-003	Installation of one (1) eight (8) station sheetfed, non-heatset, offset lithographic printing press and two (2) cutters.
112007-009	Installation of one (1) eight (8) station sheetfed, non-heatset, offset lithographic printing press, a new cutter and a new gluer.
OP2013-056	Part 70 Operating Permit Renewal

PROJECT DESCRIPTION

Graphic Packaging International, Inc. has applied for authority to install and operate one additional eight station sheetfed Rapida-142 non-heatset lithographic printing press (EP-20), one additional sheeter, and one additional dye sheet cutter. The proposed press is capable of printing 14,000 sheets per hour with a sheet size capability of 41.73 inches by 56 inches. The press includes eight chemical application stations. Seven of the press stations are designed for printing and varnishing inks, and one station is designed for aqueous coating. The press will be relocated from a sister facility and rebuilt on site. The pollutant emissions for this project are not controlled by any specialized equipment.

The maximum hourly design rates (MHDR) for the ink and coating operations were calculated using a representative amount of material that would be applied per each sheet processed and multiplying that by 14,000 sheets per hour. The MHDRs for the fountain solution and wash materials reflect the amount of material applied per the maximum amount of applied ink. The new press will be able to apply 0.022 tons of ink per hour, 0.066 tons of coating per hour, 0.044 tons of fountain solution per hour, and 0.0026 tons of wash material and clean up solvent per hour.

The already existing adhesive application process will accommodate the increased production due to the addition of the new press.

EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis were obtained using SDS sheets for the VOC containing materials used. This includes the inks, coatings, fountain solution, wash materials, clean up solvents, and glue. A list of all the material that had safety data sheets supplied with the application can be found on Attachment A.

For each separate process a theoretical material was created to calculate the potential to emit (PTE). The theoretical material was created by taking the greatest pollutant potential emissions for each unit and combining them to create new worst-case material. For example, inks A and B can both be used by the same equipment to print different patterns on a sheet of paper. Ink A is 70% VOC by weight and 5% HAP by weight. Ink B is 10% HAP by weight with no VOC. When calculating the PTE for this equipment a new material is created that contains both 70% VOC by weight and 10% HAP by weight. This approach creates an worst case scenario by using the highest possible weight percentages for each emitted pollutant.

Per 10 CSR 10-5.442 (5)(D)1.B. Control of Emissions From Lithographic and Letterpress Printing Operations, a 95% VOC retention factor was applied when calculating the PTE for the ink solvents.

Per 10 CSR 10-5.442 (5)(D)1.C. Control of Emissions From Lithographic and Letterpress Printing Operations, a 50% VOC retention factor was applied when calculating the PTE for the wash materials and clean up solvents.

Per 10 CSR 10-5.442 (3)1.C. Control of Emissions From Lithographic and Letterpress Printing Operations. The PTE for the fountain solution was calculated assuming that the fountain solution would always be mixed so the concentration will be no more than 5% VOC by weight. This is required for all fountain solutions that contain no alcohol.

The cleaning operations cannot be performed at the same time as the printing operations. The printing operations have the potential to emitted more pollutants than the cleaning operations, as a worst-case scenario the cleaning operations VOC emissions were left out of the final PTE and the only HAP emitted (Naphthalene) from the cleaning operations was included in the final PTE.

To be conservative the potential increased emissions from the gluers were included in the PTE calculations. Assuming the press runs at full production, 14,000 sheets can be glued per hour, each receiving 0.00052 pounds of glue per carton. This equates to a maximum application rate of 0.0036 tons of glue per hour. The emissions were calculated assuming that 100% of the glue's VOCs are emitted (1.12% VOC by weight). The glue contains no HAPs and particulate emissions are not expected.

The emissions from the sheeter and die sheet cutter are considered insignificant and were not calculated for this permit.

The following table provides an emissions summary for this project. Existing potential emissions for greenhouse gases were taken from the potential to emit calculations from Operating Permit OP2013-056. All other potential emissions were taken from the potential to emit calculations from Construction Permit 112007-009. Existing actual emissions were taken from the installation's 2015 EIQ. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year).

Table 2: Emissions Summary (tpy)

Pollutant	Regulatory <i>De Minimis</i> Levels/SMAL	Existing Potential Emissions	Existing Actual Emissions (2015 EIQ) ¹	Potential Emissions of the Project	New Installation Conditioned Potential
PM	25.0	N/D	N/A	N/A	N/D
PM ₁₀	15.0	1.64	N/A	N/A	1.64
PM _{2.5}	10.0	N/D	N/A	N/A	N/D
SO _x	40.0	0.08	N/A	N/A	0.08
NO _x	40.0	3.99	N/A	N/A	3.99
VOC	40.0	160.41	27.96	20.19	180.60
CO	100.0	0.74	N/A	N/A	0.74
GHG (CO ₂ e)	N/A	5,968.42	N/A	N/A	5,968.42
HAPs ¹	10.0/25.0	6.07	6.29	4.14	10.21
Acrylic Acid	0.6*	N/D	0.0006	0.12	N/A
Carbitol	5*	N/D	0	0.31	N/A
Ethylene	10*	N/D	3.43	3.47	N/A

Glycol					
Glycol Ether	5*	N/D	2.71	0.006	N/A
Hydroquinone	1*	N/D	0.002	0.29	N/A
Naphthalene	10*	N/D	0.14	0.11	N/A
Styrene	1*	N/D	0.0001	0.02	N/A

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

1. The actual emissions reported in MoEIS for 2015 are higher than the potential emissions calculated in Construction Permit 112007-009.

* SMAL

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

Graphic Packaging International, 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
 - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation.
- *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

SPECIFIC REQUIREMENTS

- Control of Emissions From Lithographic and Letterpress Printing Operations, 10 CSR 10-5.442

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 December 13, 2016, received May 13, 2016, designating Graphic Packaging Holding Company as the owner and operator of the installation.

Attachment A – Material Tracking

Graphic Packaging International, Inc.
 Franklin County
 Project Number: 2016-05-043
 Installation ID Number: 071-0031
 Permit Number:

Permitted Material List¹		
Inks	Coatings	Glue
Sun Chemical Black Ink	Sun Chemical Coating 1377	33-983 Adhesive
Sun Chemical Magenta Ink	Coatings & Adhesives SSC9	
Sun Chemical Orange Ink	Coatings & Adhesives 1277	
Sun Chemical Yellow Ink	Coatings & Adhesives 1311	
Fountain Solution		Wash Materials And Clean Up Solvents
Sun Chemical Green Diamond 567		Blanket Wash V60
		Enviro Meter Cleaner
Note 1: An SDS sheet was supplied for each material on the list.		

Theoretical Worst-Case Material²		
Material	Pollutant	Composition By Weight
Ink	VOC	20.2 %
	HAP	1.02 %
Coating	VOC	2.02 %
	HAP	0.08 %
Fountain Solution	VOC	30 %
	HAP	18 %
Wash Material & Clean Up Solvent	VOC	100 %
	HAP	1 %
Glue	VOC	1.12 %
Note 2: If a new material is used with a composition percentage higher than what is presented in the chart then Graphic Packaging International, Inc. will need to get departmental approval before using that material.		

Attachment A – Material Tracking

HAP Potential Emissions³					
Material Type	Maximum Hourly Design Rate (Tons/Hour)	Pollutant⁵	Mass Percentage	Correction Factor⁶	Potential To Emit (Tons/Year)⁷
Ink ⁴	0.022			0.05	
Coating ⁴	0.066			1	
Fountain Solution ⁴	0.044			0.05	
Wash Materials & Clean Up Solvent	0.0026			0.50	
Adhesive	0.0036			1	
<p>Note 3: If a new material is used that contains a HAP with a potential to emit that is higher than its associate Screen Modeling Action Level in Appendix B then Graphic Packaging International, Inc. will need to get departmental approval before using that material.</p> <p>Note 4: Only applies to material applied by a non-heatset lithographic printing press.</p> <p>Note 5: Hazardous air pollutant with an applicable Screen Modeling Action Level in Appendix B.</p> <p>Note 6: The ink correction factor accounts for the 95% retention factor described in 10 CSR 10-5.442 (5)(D)1.B. The wash material & clean up solution correction factor accounts for the 50% retention factor described in 10 CSR 10-5.442 (5)(D)1.C. The fountain solution correction factor accounts for the condition that fountain solution will always be mixed so its concentration will be no more than 5% VOC by weight, as required by the sites operating permit OP2013-056.</p> <p>Note 7: Emissions calculated using $PTE = MHDR \times \text{Mass Percentage} \times \text{Correction Factor} \times 8760$ hours per year</p>					

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		

Appendix B: Table of Hazardous Air Pollutants and Screening Model Action Levels

Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM
ACETALDEHYDE	75-07-0	9		Y	N	CARBARYL	63-25-2	10	V	Y	Y	DICHLOROPROPANE, [1,2-]	78-87-5	1		Y	N
ACETAMIDE	60-35-5	1		Y	N	CARBON DISULFIDE	75-15-0	1		Y	N	DICHLOROPROPENE, [1,3-]	542-75-6	1		Y	N
ACETONITRILE	75-05-8	4		Y	N	CARBON TETRACHLORIDE	56-23-5	1		Y	N	DICHLORVOS	62-73-7	0.2		Y	N
ACETOPHENONE	98-86-2	1		Y	N	CARBONYL SULFIDE	463-58-1	5		Y	N	DIETHANOLAMINE	111-42-2	5		Y	N
ACETYLAMINOFLUORINE, [2-]	53-96-3	0.005	V	Y	Y	CATECHOL	120-80-9	5		Y	N	DIETHYL SULFATE	64-67-5	1		Y	N
ACROLEIN	107-02-8	0.04	Y	N	N	CHLORAMBEN	133-90-4	1	Y	Y	Y	DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	5	P	Y	N
ACRYLAMIDE	79-06-1	0.02	Y	N	N	CHLORDANE	57-74-9	0.01		Y	Y	DIMETHOXYBENZIDINE, [3,3-]	119-90-4	0.1	V	Y	Y
ACRYLIC ACID	79-10-7	0.6	Y	N	N	CHLORINE	7782-50-5	0.1		N	N	DIMETHYL BENZIDINE, [3,3-]	119-93-7	0.008	V	Y	Y
ACRYLONITRILE	107-13-1	0.3		Y	N	CHLOROACETIC ACID	79-11-8	0.1		Y	N	DIMETHYL CARBAMOYL CHLORIDE	79-44-7	0.02		Y	N
ALLYL CHLORIDE	107-05-1	1		Y	N	CHLOROACETOPHENONE, [2-]	532-27-4	0.06		Y	N	DIMETHYL FORMAMIDE	68-12-2	1		Y	N
AMINOBIHENYL, [4-]	92-67-1	1	V	Y	N	CHLOROBENZENE	108-90-7	10		Y	N	DIMETHYL HYDRAZINE, [1,1-]	57-14-7	0.008		Y	N
ANILINE	62-53-3	1		Y	N	CHLOROBENZILATE	510-15-6	0.4	V	Y	Y	DIMETHYL PHTHALATE	131-11-3	10		Y	N
ANISIDINE, [ORTHO-]	90-04-0	1		Y	N	CHLOROFORM	67-66-3	0.9		Y	N	DIMETHYL SULFATE	77-78-1	0.1		Y	N
ANTHRACENE	120-12-7	0.01	V	Y	N	CHLOROMETHYL METHYL ETHER	107-30-2	0.1		Y	N	DIMETHYLAMNOAZOBENZENE, [4-]	60-11-7	1		Y	N
ANTIMONY COMPOUNDS		5	H	N	Y	CHLOROPRENE	126-99-8	1		Y	N	DIMETHYLANILINE, [N-N-]	121-69-7	1		Y	N
ANTIMONY PENTAFLUORIDE	7783-70-2	0.1	H	N	Y	CHROMIUM (VI) COMPOUNDS		0.002	L	N	Y	DINITRO-O-CRESOL, [4,6-] (Note 6)	534-52-1	0.1	E	Y	Y
ANTIMONY POTASSIUM TARTRATE	28300-74-5	1	H	N	Y	CHROMIUM COMPOUNDS		5	L	N	Y	DINITROPHENOL, [2,4-]	51-28-5	1		Y	N
ANTIMONY TRIOXIDE	1309-64-4	1	H	N	Y	CHRYSENE	218-01-9	0.01	V	Y	N	DINITROTOLUENE, [2,4-]	121-14-2	0.02		Y	N
ANTIMONY TRISULFIDE	1345-04-6	0.1	H	N	Y	COBALT COMPOUNDS		0.1	M	N	Y	DIOXANE, [1,4-]	123-91-1	6		Y	N
ARSENIC COMPOUNDS		0.005	I	N	Y	COKE OVEN EMISSIONS	8007-45-2	0.03	N	Y	N	DIPHENYLHYDRAZINE, [1,2-]	122-66-7	0.09	V	Y	Y
ASBESTOS	1332-21-4	0	A	N	Y	CRESOL, [META-]	108-39-4	1	B	Y	N	DIPHENYLMETHANE DIISOCYANATE, [4,4-]	101-68-8	0.1	V	Y	N
BENZ(A)ANTHRACENE	56-55-3	0.01	V	Y	N	CRESOL, [ORTHO-]	95-48-7	1	B	Y	N	EPICHLOROHYDRIN	106-89-8	2		Y	N
BENZENE	71-43-2	2		Y	N	CRESOL, [PARA-]	106-44-5	1	B	Y	N	ETHOXYETHANOL, [2-]	110-80-5	10	P	Y	N
BENZIDINE	92-87-5	0.0003	V	Y	N	CRESOLS (MIXED ISOMERS)	1319-77-3	1	B	Y	N	ETHOXYETHYL ACETATE, [2-]	111-15-9	5	P	Y	N
BENZO(A)PYRENE	50-32-8	0.01	V	Y	N	CUMENE	98-82-8	10		Y	N	ETHYL ACRYLATE	140-88-5	1		Y	N
BENZO(B)FLUORANTHENE	205-99-2	0.01	V	Y	N	CYANIDE COMPOUNDS		0.1	O	Y	N	ETHYL BENZENE	100-41-4	10		Y	N
BENZO(K)FLUORANTHENE	207-08-9	0.01	V	Y	N	DDE	72-55-9	0.01	V	Y	Y	ETHYL CHLORIDE	75-00-3	10		Y	N
BENZOTRICHLORIDE	98-07-7	0.006		Y	N	DI(2-ETHYLHEXYL) PHTHALATE, (DEHP)	117-81-7	5		Y	N	ETHYLENE GLYCOL	107-21-1	10		Y	N
BENZYL CHLORIDE	100-44-7	0.1		Y	N	DIAMINOTOLUENE, [2,4-]	95-80-7	0.02		Y	N	ETHYLENE GLYCOL MONOBUTYL ETHER (Delisted)	111-76-2				
BERYLLIUM COMPOUNDS		0.008	J	N	Y	DIAZOMETHANE	334-88-3	1		Y	N	ETHYLENE GLYCOL MONOHEXYL ETHER	112-25-4	5	P	Y	N
BERYLLIUM SALTS		2E-05	J	N	Y	DIBENZ(A,H)ANTHRACENE	53-70-3	0.01	V	Y	N	ETHYLENE IMINE [AZIRIDINE]	151-56-4	0.003		Y	N
BIPHENYL, [1,1-]	92-52-4	10	V	Y	N	DIOXINS/FURANS		6E-07	D,V	Y	N	ETHYLENE OXIDE	75-21-8	0.1		Y	N
BIS(CHLOROETHYL)ETHER	111-44-4	0.06		Y	N	DIBENZOFURAN	132-64-9	5	V	Y	N	ETHYLENE THIOUREA	96-45-7	0.6		Y	Y
BIS(CHLOROMETHYL)ETHER	542-88-1	0.0003		Y	N	DIBROMO-3-CHLOROPROPANE, [1,2-]	96-12-8	0.01		Y	N	FORMALDEHYDE	50-00-0	2		Y	N
BROMOFORM	75-25-2	10		Y	N	DIBROMOETHANE, [1,2-]	106-93-4	0.1		Y	N	GLYCOL ETHER (ETHYLENE GLYCOL ETHERS)		5	P	Y	N
BROMOMETHANE	74-83-9	10		Y	N	DIBUTYL PHTHALATE	84-74-2	10		Y	Y	GLYCOL ETHER (DIETHYLENE GLYCOL ETHERS)		5	P	Y	N
BUTADIENE, [1,3-]	106-99-0	0.07		Y	N	DICHLOROBENZENE, [1,4-]	106-46-7	3		Y	N	HEPTACHLOR	76-44-8	0.02		Y	N
BUTOXYETHANOL ACETATE, [2-]	112-07-2	5	P	Y	N	DICHLOROBENZIDENE, [3,3-]	91-94-1	0.2	V	Y	Y	HEXACHLOROBENZENE	118-74-1	0.01		Y	N
BUTYLENE OXIDE, [1,2-]	106-88-7	1		Y	N	DICHLOROETHANE, [1,1-]	75-34-3	1		Y	N	HEXACHLOROBUTADIENE	87-68-3	0.9		Y	N
CADMIUM COMPOUNDS		0.01	K	N	Y	DICHLOROETHANE, [1,2-]	107-06-2	0.8		Y	N	HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-6	0.01	F	Y	N
CALCIUM CYANAMIDE	156-62-7	10		Y	Y	DICHLOROETHYLENE, [1,1-]	75-35-4	0.4		Y	N	HEXACHLOROCYCLOHEXANE, [BETA-]	319-85-7	0.01	F	Y	N
CAPROLACTAM (Delisted)	105-60-2					DICHLOROMETHANE	75-09-2	10		N	N	HEXACHLOROCYCLOHEXANE, [DELTA-]	319-86-8	0.01	F	Y	N
CAPTAN	133-06-2	10		Y	Y	DICHLOROPHENOXY ACETIC ACID, [2,4-]	94-75-7	10	C	Y	Y	HEXACHLOROCYCLOHEXANE, [TECHNICAL]	608-73-1	0.01	F	Y	N

Appendix B: Table of Hazardous Air Pollutants and Screening Model Action Levels

Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM
HEXACHLOROCYCLOPENTADIENE	77-47-4	0.1		Y	N	NITROSODIMETHYLAMINE, [N-]	62-75-9	0.001		Y	N	TRIMETHYLPENTANE, [2,2,4-]	540-84-1	5		Y	N
HEXACHLOROETHANE	67-72-1	5		Y	N	NITROSOMORPHOLINE, [N-]	59-89-2	1		Y	N	URETHANE [ETHYL CARBAMATE]	51-79-6	0.8		Y	N
HEXAMETHYLENE,-1,6-DIISOCYANATE	822-06-0	0.02		Y	N	NITROSO-N-METHYLUREA, [N-]	684-93-5	0.0002		Y	N	VINYL ACETATE	108-05-4	1		Y	N
HEXAMETHYLPHOSPHORAMIDE	680-31-9	0.01		Y	N	OCTACHLORONAPHTHALENE	2234-13-1	0.01	V	Y	N	VINYL BROMIDE	593-60-2	0.6		Y	N
HEXANE, [N-]	110-54-3	10		Y	N	PARATHION	56-38-2	0.1		Y	Y	VINYL CHLORIDE	75-01-4	0.2		Y	N
HYDRAZINE	302-01-2	0.004		N	N	PCB [POLYCHLORINATED BIPHENYLS]	1336-36-3	0.009	X	Y	Y	XYLENE, [META-]	108-38-3	10	G	Y	N
HYDROGEN CHLORIDE	7647-01-0	10		N	N	PENTACHLORONITROBENZENE	82-68-8	0.3		Y	N	XYLENE, [ORTHO-]	95-47-6	10	G	Y	N
HYDROGEN FLUORIDE	7664-39-3	0.1		N	N	PENTACHLOROPHENOL	87-86-5	0.7		Y	N	XYLENE, [PARA-]	106-42-3	10	G	Y	N
HYDROQUINONE	123-31-9	1		Y	N	PHENOL	108-95-2	0.1	Y	Y	N	XYLENES (MIXED ISOMERS)	133-20-7	10	G	Y	N
INDENO(1,2,3CD)PYRENE	193-39-5	0.01	V	Y	N	PHENYLENEDIAMINE, [PARA-]	106-50-3	10		Y	N						
ISOPHORONE	78-59-1	10		Y	N	PHOSGENE	75-44-5	0.1		Y	N						
LEAD COMPOUNDS		0.01	Q	N	Y	PHOSPHINE	7803-51-2	5		N	N						
LINDANE [GAMMA-HEXACHLOROCYCLOHEXANE]	58-89-9	0.01	F	Y	N	PHOSPHOROUS (YELLOW OR WHITE)	7723-14-0	0.1		N	N	Legend					
MALEIC ANHYDRIDE	108-31-6	1		Y	N	PHTHALIC ANHYDRIDE	85-44-9	5		Y	N	Group ID	Aggregate Group Name				
MANGANESE COMPOUNDS		0.8	R	N	Y	POLYCYLIC ORGANIC MATTER		0.01	V	Y	N	A	Asbestos				
MERCURY COMPOUNDS		0.01	S	N	N	PROPANE SULTONE, [1,3-]	1120-71-4	0.03		Y	Y	B	Cresols/Cresylic Acid (isomers and mixtures)				
METHANOL	67-56-1	10		Y	N	PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N	C	2,4 - D, Salts and Esters				
METHOXYCHLOR	72-43-5	10	V	Y	Y	PROPIONALDEHYDE	123-38-6	5		Y	N	D	Dibenzofurans, Dibenzodioxins				
METHOXYETHANOL, [2-]	109-86-4	10	P	Y	N	PROPOXUR [BAYGON]	114-26-1	10		Y	Y	E	4, 6 Dinitro-o-cresol, and Salts				
METHYL CHLORIDE	74-87-3	10		Y	N	PROPYLENE OXIDE	75-56-9	5		Y	N	F	Lindane (all isomers)				
METHYL ETHYL KETONE (Delisted)	78-93-3					PROPYLENEMINE, [1,2-]	75-55-8	0.003		Y	N	G	Xylenes (all isomers and mixtures)				
METHYL HYDRAZINE	60-34-4	0.06		Y	N	QUINOLINE	91-22-5	0.006		Y	N	H	Antimony Compounds				
METHYL IODIDE	74-88-4	1		Y	N	QUINONE	106-51-4	5		Y	N	I	Arsenic Compounds				
METHYL ISOBUTYL KETONE	108-10-1	10		Y	N	RADIONUCLIDES		Note 1	Y	N	Y	J	Beryllium Compounds				
METHYL ISOCYANATE	624-83-9	0.1		Y	N	SELENIUM COMPOUNDS		0.1	W	N	Y	K	Cadmium Compounds				
METHYL METHACRYLATE	80-62-6	10		Y	N	STYRENE	100-42-5	1		Y	N	L	Chromium Compounds				
METHYL TERT-BUTYL ETHER	1634-04-4	10		Y	N	STYRENE OXIDE	96-09-3	1		Y	N	M	Cobalt Compounds				
METHYLCYCLOPENTADIENYL MANGANESE	12108-13-3	0.1	R	N	Y	TETRACHLORODIBENZO-P-DIOXIN,[2,3,7,8]	1746-01-6	6E-07	D,V	Y	Y	N	Coke Oven Emissions				
METHYLENE BIS(2-CHLOROANILINE), [4,4-]	101-14-4	0.2	V	Y	Y	TETRACHLOROETHANE, [1,1,2,2-]	79-34-5	0.3		Y	N	O	Cyanide Compounds				
METHYLENEDIANILINE, [4,4-]	101-77-9	1	V	Y	N	TETRACHLOROETHYLENE	127-18-4	10		N	N	P	Glycol Ethers				
METHYLNAPHTHALENE, [2-]	91-57-6	0.01	V	Y	N	TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N	Q	Lead Compounds (except elemental Lead)				
MINERAL FIBERS		0	T	N	Y	TOLUENE	108-88-3	10		Y	N	R	Manganese Compounds				
NAPHTHALENE	91-20-3	10	V	Y	N	TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1	Y	Y	N	S	Mercury Compounds				
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N	TOLUIDINE, [ORTHO-]	95-53-4	4		Y	N	T	Fine Mineral Fibers				
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N	TOXAPHENE	8001-35-2	0.01		Y	N	U	Nickel Compounds				
NICKEL CARBONYL	13463-39-3	0.1	U	N	Y	TRICHLOROETHANE, [1,2,4-]	120-82-1	10		Y	N	V	Polycyclic Organic Matter				
NICKEL COMPOUNDS		1	U	N	Y	TRICHLOROETHANE, [1,1,1-]	71-55-6	10		N	N	W	Selenium Compounds				
NICKEL REFINERY DUST		0.08	U	N	Y	TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N	X	Polychlorinated Biphenyls (Aroclors)				
NICKEL SUBSULFIDE	12035-72-2	0.04	U	N	Y	TRICHLOROETHYLENE	79-01-6	10		Y	N	Y	Radionuclides				
NITROBENZENE	98-95-3	1		Y	N	TRICHLOROPHENOL, [2,4,5-]	95-95-4	1		Y	N						
NITROBIPHENYL, [4-]	92-93-3	1	V	Y	N	TRICHLOROPHENOL, [2,4,6-]	88-06-2	6		Y	N						
NITROPHENOL, [4-]	100-02-7	5		Y	N	TRIETHYLAMINE	121-44-8	10		Y	N	Note 1	The SMAL for radionuclides is defined as the effective dose equivalent to 0.3 millirems per year for 7 years exposure associated with a cancer risk of 1 in 1 million				
NITROPROPANE, [2-]	79-46-9	1		Y	N	TRIFLURALIN	1582-09-8	9		Y	Y						

Mr. Furqan Shaikh
Director, Corporate Environmental
Graphic Packaging International, Inc.
1500 Riveredge Parkway NW Suite 100
Atlanta, GA 30328

RE: New Source Review Permit - Project Number: 2016-05-043

Dear Mr. Shaikh:

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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

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, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.

Mr. Furqan Shaikh
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If you have any questions regarding this permit, please do not hesitate to contact Branson, Kent, 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:kbj

Enclosures

c: St. Louis Regional Office
PAMS File: 2016-05-043

Permit Number: