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:	052020-012	Project Number: 2020-03-009 Installation Number: 097-0132
Parent Company:	Bemis Packaging, Inc	
Parent Company Address:	PO Box 669, Neenah, WI 54957	
Installation Name:	Bemis Packaging, Inc - Joplin	
Installation Address:	3210 North Progress, Joplin, MO 64801	
Location Information:	Jasper County, S30, T28N, R32W	

Application for Authority to Construct was made for:
Installation of a new flexographic printing press (JF-3) at the Bemis Packaging, Inc site in Joplin Missouri. 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.

Kendall B. Hall

Director or Designee
Department of Natural Resources

May 22, 2020
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. Permittee should notify the Enforcement and Compliance Section of 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 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 to 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 (3)(E). "Conditions required by permitting authority."

Bemis Packaging, Inc - Joplin
Jasper County, S30, T28N, R32W

1. Superseding Condition
   A. The conditions of this permit supersede Special Condition 2 and Special Condition 3 found in the previously issued construction permit amendment 082012-005A issued by the Air Pollution Control Program.

   B. The conditions of this permit supersede Special Condition 5 found in the previously issued construction permit 082012-005 issued by the Air Pollution Control Program.

2. VOC Emission Limitation
   A. Bemis Packaging, Inc - Joplin shall emit less than 250.0 tons of VOC in any consecutive 12-month period from all VOC emitting units at the installation as defined in Table 1.

Table 1: Installation VOC Emission Units

Emission Point	Description
EP-01	8-Color Flexographic Press JF-1
EP-02	10-Color Rotogravure Press JR-1
EP-04	Solvent-less Adhesive Laminator JA-2
EP-05	Parts Washer
EP-06	9-Color Rotogravure Press JR-2
EP-08	Tandem Coextrusion Laminator 1st and 2nd Deck
EP-08B	Tandem Coextrusion Laminator 3rd Deck JE-1
EP-10	Tandem Extrusion Laminator JE-2
EP-12	Site Wide Natural Gas Combustion
T-1A to T-3B	Above Ground Tank Farm (6 tanks)
EP-13	Central Impression Flexographic Printing Press JF-2
EP-14	Tandem Extrusion Laminator JE-3
EP-15	Tandem Extrusion Laminator JE-4
EP-16	Caterpillar 3054C Emergency Generator
EP-20	Flexographic Printing Press JF-3

   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 Conditions 2.A.

SPECIAL CONDITIONS:

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

C. The forms in Special Condition 2.B. shall use 90 percent capture efficiency for emission units not equipped with permanent total enclosure and 100 percent capture efficiency for units with permanent total enclosure. The control (destruction) efficiency shall be obtained from the latest oxidizer performance testing results.

1) When an emission unit is applying solvent-less coating or material, the VOC capture and control efficiency associated with that emission unit are each zero. For this installation, solvent-less is defined as coatings or materials containing VOC less than 1 percent by weight as applied.

2) Emission units such as natural gas combustion, where the emissions are not routed to a control device shall not include control efficiency.

3. HAP Emission Limitation

A. Bemis Packaging, Inc - Joplin shall emit less than 10.0 tons individually and less than 25.0 tons combined of HAPs in any consecutive 12-month period from all HAP emitting emission units at the installation as defined in Table 2.

Table 2: Installation HAP Emission Units

Emission Point	Description
EP-01	8-Color Flexographic Press JF-1
EP-02	10-Color Rotogravure Press JR-1
EP-06	9-Color Rotogravure Press JR-2
EP-08	Tandem Coextrusion Laminator 1st and 2nd Deck
EP-08B	Tandem Coextrusion Laminator 3rd Deck JE-1
EP-10	Tandem Extrusion Laminator JE-2
EP-12	Site Wide Natural Gas Combustion
EP-13	Central Impression Flexographic Printing Press JF-2
EP-16	Caterpillar 3054C Emergency Generator
EP-20	Flexographic Printing Press JF-3

B. Attachment B1 and B2 or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with Special Conditions 3.A.

4. Capture Device Requirement – Permanent Total Enclosure

A. Except as provided in Special Condition 4.B., Bemis Packaging, Inc - Joplin shall operate EP-20, the new flexographic printing press (JF-3), within a permanent total enclosure such that all emissions associated with the laminating, coating, and printing operations are captured and exhausted to the oxidation system (EP-11A, EP-11B, EP-11C, and EP-11D).

SPECIAL CONDITIONS:

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

B. Operation of permanent total enclosure is not required during application of solvent-less coatings or materials. Bemis Packaging, Inc - Joplin shall maintain records of all solvent-less coating or materials applied including names, monthly usage amount, date, and time.

C. Bemis Packaging, Inc - Joplin shall verify within 30 days of the startup of EP-20, the new flexographic printing press (JF-3), that its permanent total enclosure has 100 percent capture efficiency according to the procedures of EPA Test Method 204 *Criteria for and Verification of a Permanent or Temporary Total Enclosure*, set forth in 40 CFR Part 51, Appendix M.

1) Bemis Packaging, Inc - Joplin shall submit the capture efficiency verification to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176, Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, no later than 15 days after conducting the verification.

D. Bemis Packaging, Inc - Joplin shall maintain an operating and maintenance log associated with each permanent total enclosure which shall include the following:

1) Incidents of malfunction, with impact on emissions, time, date and duration of event, probable cause, and corrective actions; and
2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

5. Control Device Requirement – Oxidation System

A. Except as provided in Special Condition 5.B., Bemis Packaging, Inc - Joplin shall control emissions from the emission units listed in Table 3 using the oxidation system (EP-11A, EP-11B, EP-11C, and EP-11D) as specified in the permit application.

Table 3: Emission Units Controlled by the Oxidation System and Capable of Applying Solvent-less Material

Emission Point	Description
EP-01	8-Color Flexographic Press JF-1
EP-02	10-Color Rotogravure Press JR-1
EP-03	Adhesive Laminator JA-1
EP-06	9-Color Rotogravure Press JR-2
EP-08	Tandem Coextrusion Laminator JE-1 1st and 2nd Deck
EP-08B	Tandem Coextrusion Laminator JE-1 3rd Deck
EP-10	Tandem Extrusion Laminator JE-2
EP-13	Central Impression Flexographic Printing Press JF-2
EP-14	Tandem Extrusion Laminator JE-3
EP-15	Tandem Extrusion Laminator JE-4
EP-20	Flexographic Printing Press JF-3

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

B. Bemis Packaging, Inc - Joplin may emit directly to the ambient air uncontrolled emissions from emission units in Table 3 during solvent-less coating or material application.

C. The total exhaust flow rate in dry standard cubic feet per minute (DSCFM) from all operating emission units in Table 3 shall not exceed the total flow rate capacity in DSCFM of all operating oxidizers in the oxidation system.
   1) A list of the individual oxidizers that are in operation shall be continuously monitored and recorded at least once every 15 minutes of operation.
   2) A list of the emission units in Table 3 that are in operation and exhausting to the oxidizer system shall be continuously monitored and recorded at least once every 15 minutes of operation.
   3) Pressure in the common emission unit exhaust shall be continuously monitored and recorded at least once every 15 minutes of operation to verify negative pressure.

D. Catalytic Oxidizers (EP-11A, EP-11B, and EP-11C)
   1) The catalytic oxidizers shall be operated and maintained in accordance with the manufacturer's specifications and operational ranges established in the latest catalytic oxidizer performance test and latest Compliance Assurance Monitoring (CAM) Plan from the installation's operating permit. All specifications and operating ranges shall be kept on site.
   2) At least once per calendar year a representative catalyst core sample from the catalyst chamber of each oxidizer shall be analyzed for catalyst activity. Samples respective to a single oxidizer may not be taken within four months of each other. If the analysis indicates the catalyst activity is not sufficient to achieve at least 95.00 percent VOC destruction efficiency, Bemis Packaging, Inc - Joplin shall,
      a. Raise the oxidizer inlet control temperature to a level that will indicate compliance and retest the VOC destruction efficiency of the oxidizer, or
      b. Replace the catalyst and retest the VOC destruction efficiency of the oxidizer.
      c. A report of each sampling event, analysis, and resulting action shall be submitted to the Director within 30 days of the completion of the resulting action. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete calculations.

E. Regenerative Thermal Oxidizer (RTO) (EP-11D)
The RTO shall be operated and maintained in accordance with the

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

manufacturer's specifications and operational ranges established in the latest RTO performance test and latest CAM Plan from the installation's operating permit. All specifications and operating ranges shall be kept on site.

F. Bemis Packaging, Inc - Joplin shall maintain an operating and maintenance log for the oxidation system which shall include the following:
   1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
   2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

6. Operational Requirement – Coating/Ink/Solvent
   A. Bemis Packaging, Inc - Joplin shall keep the coatings, inks, solvents, and cleaning solutions in sealed containers whenever the materials are not in use.

   B. Bemis Packaging, Inc - Joplin shall provide and maintain suitable, easily read, permanent or affixed markings on all VOC and HAP containing containers used with this equipment.

7. Use of Alternative Coating in EP-20
   A. When considering using an alternative coating, ink, or solvent in EU-20 that is different than the material listed in the Application for Authority to Construct, Bemis Packaging, Inc - Joplin shall calculate the potential emissions of all individual HAP in the alternative material.

   B. Bemis Packaging, Inc - Joplin shall seek approval from the Air Pollution Control Program before use of the alternative material if the potential individual HAP emissions for the alternative material are equal to or greater than the screening model action level (SMAL) for any chemical listed in Appendix A.

   C. Attachment C or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to show compliance with Special Condition 7.A.

8. Record Keeping and Reporting Requirements
   A. Bemis Packaging, Inc - Joplin 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. Bemis Packaging, Inc - Joplin shall report to the Air Pollution Control Program's Compliance/Enforcement Section, by mail at P.O. Box 176,

SPECIAL CONDITIONS:

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

Jefferson City, MO 65102 or by email at AirComplianceReporting@dnr.mo.gov, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW
Project Number: 2020-03-009
Installation ID Number: 097-0132
Permit Number:052020-012

Installation Address:
Bemis Packaging, Inc - Joplin
3210 North Progress
Joplin, MO 64801

Parent Company:
Bemis Packaging, Inc
PO Box 669
Neenah, WI 54957

Jasper County, S30, T28N, R32W

REVIEW SUMMARY

- Bemis Packaging, Inc - Joplin has applied for authority to install a new flexographic printing press (JF-3) at the Bemis Packaging, Inc site in Joplin Missouri.

- The application was deemed complete on March 6, 2020.

- HAP emissions are expected from the combustion of natural gas in dryers for EP-20, the new flexographic printing press (JF-3). All HAP emissions are not expected to exceed their individual SMAL. HAP emissions for the entire installation are limited to less than 25 tpy of total HAPs and 10 tpy of each individual HAP by Special Condition 3 of this permit.

- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.

- None of the NESHAPs apply to the proposed equipment.

- 40 CFR 63 Subpart KK, National Emission Standards for the Printing and Publishing Industry, (MACT KK) applies to the installation. However, due to the HAP limit in Special Condition 3 of this permit and the use of inks with no HAP content in the equipment of this application, only §63.829(d) (recordkeeping) and §63.830(b)(1) (initial notification) apply. See operating permit OP2017-058 for further discussion on Subpart KK applicability.

- The existing oxidation system (EP-11A, EP-11B, EP-11C, and EP-11D) will be used to control VOC emissions from EP-20, the new flexographic printing press (JF-3).

- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOC from the entire installation are conditioned below the NSR major source levels.

- This installation is located in Jasper County, an attainment/unclassifiable 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.

- 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.

- An application to amend the Part 70 Operating Permit is required for this installation within 1 year of equipment startup.

- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Bemis Packaging, Inc is a manufacturer of flexible packaging located in Joplin. Operations include an 8-color flexographic press, a 10-color flexographic press, a 10-color rotogravure press, an adhesive laminator, a solvent-less adhesive laminator, a 9-color rotogravure press and two tandem coextrustion laminators and multiple gas fired dryers. A parts washer with solvent recovery (distillation) is also present. Extruding, printing, and coating/lamination of substrates, normally followed by natural gas fired drying is performed. Corona treaters are also used to pretreat substrates. An oxidizer system is used to control VOC emissions.

The installation is a minor source under NSR permits and a major source for VOC under Operating Permits. The following NSR permits have been issued to Milprint Packaging LLC from the Air Pollution Control Program.

The following NSR permits have been issued to Bemis Packaging, Inc - Joplin from the Air Pollution Control Program.

Table 4: NSR Permit History

Permit Number	Description
0198-019	Installation of a new flexible packaging manufacturing facility
032002-020	Installation of a flexographic printing press (equipment was not installed)
122002-001	Water-based VOC-containing materials in the third coating deck/dryer of the tandem coextrusion laminator JE-1

022004-008	Installation of an extrusion coater laminator with a natural gas fired dryer and an oxidizer.
022004-008A	Amendment to add installation wide 250 ton per year VOC limit
052012-018	Phase 1: Modification of existing tandem coextrusion laminator JE-1 third deck for solvent capability, increased utilization of rotogravure press JR-2
082012-005	Phase 2: To install tandem extrusion laminators (JE-3 and JE-4) with dryers, corona treaters, flexographic printing press (JF-2), plastic pellet receiving, regenerative thermal oxidizer, and an emergency generator.
082012-005A	Amendment for the addition of natural gas, direct-fired dryers and corona treatment for printing press (JF-2)

PROJECT DESCRIPTION

Bemis Packaging, Inc has requested authorization to construct EP-20, a new Central Impression 10-color flexographic printing press (JF3), at their Joplin location. The press consists of natural gas between color dryers with a combined rating of 2.3 MMBtu/hr and a 1.73 MMBtu/hr natural gas final tunnel dryer. A new [redacted] corona treater will also be installed along with this press. The press has a line speed of [redacted] and a print media width of [redacted]. At the design rate of the press it can use [redacted] of ink.

Bemis Packaging, Inc has moved to inks and solvents that do not contain any HAPs.

The additional emissions units of this project will not debottleneck existing machines.

VOC emissions from the printing press are totally enclosed and vented to an existing oxidizer system comprised of 3 catalytic oxidizers and 1 RTO operating in parallel. The existing oxidizer system has sufficient capacity to accommodate the airflow from the additional equipment of this project. The stack testing required in permit 082012-005 demonstrated 98% control efficiency for each oxidizer.

The potential emissions of this project are above de minimis levels for VOC and Bemis Packaging, Inc has requested emissions from the equipment of this project be included in their installation wide 250 tpy VOC limit.

EMISSIONS/CONTROLS EVALUATION

Bemis Packaging, Inc supplied calculations for the VOC emissions from the printing and drying process that were verified by Air Pollution Control Program staff. They used a material balance approach and assumed all of the VOC content in the ink as listed in its MSDS is emitted during the printing and drying process. Since this is the most conservative approach it was used in determining the project PTE listed in this permit. A 100% capture efficiency was applied since the VOC emissions from printing and drying are emitted within a permanent total enclosure required by Special Condition 4 of this permit. Stack tests required in permit 082012-005 indicated that Bemis Packaging,

Inc's oxidizer system operates at a control efficiency of 98%. However, Bemis Packaging, Inc requested a more conservative 95% control efficiency be used for the PTE calculations for this permit.

Natural gas combustion potential emissions were calculated using emission factors from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 1.4, *Natural Gas Combustion*, July 1998, Source Classification Code (SCC) 1-02-006-03 for industrial boilers less than 10 MMBtu/hr heat input.

Potential emissions from the corona treatment were calculated using an ozone emission factor of 0.073 pounds per kilowatt hour. The emission factor was supplied by the applicant and has been used in other permits issued by the Air Pollution Control Program for corona treaters.

The following table provides an emissions summary for this project. Existing potential emissions are the sum of exiting potential emissions from permit 082012-005 and amended project PTE from permit amendment 082012-005A. Existing actual emissions were taken from the installation's 2019 EIQ. Potential emissions of the project represent the potential of the new equipment, assuming continuous operation (8760 hours per year). New installation conditioned potential includes the installation wide VOC and HAP limits taken in Special Condition 2 and Special Condition 3 of this permit.

Table 5: Emissions Summary (tpy)

Pollutant	Regulatory *De Minimis* Levels	Existing Potential Emissions	Existing Actual Emissions (2019 EIQ)	Potential Emissions of the Project	New Installation Conditioned Potential
PM	25.0	N/D	N/D	0.13	N/D
PM_{10}	15.0	10.1	0.7	0.13	10.2
$PM_{2.5}$	10.0	N/D	0.7	0.13	N/D
SOx	40.0	0.5	0.03	0.01	0.5
NOx	40.0	77.8	5.0	1.77	79.6
VOC	40.0	<250.0	139.6	216.9	<250.0 [2]
CO	100.0	24.8	4.2	1.48	26.3
HAPs	10.0/25.0	<10.0/25.0	N/D	0.03	<10.0/25.0 [3]
Ozone [1]		20.5	N/D	4.80	25.3

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

[1] Ozone does not have a de minimis level, however it does have an ambient air quality standard.

[2] Installation wide VOC emission are limited to <250.0 tpy by Special Condition 2 of this permit

[3] Installation wide total HAP emission are limited to <25.0 tpy and individual HAP emissions are limited to <10.0 tpy by Special Condition 3 of this permit

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of VOC from the

entire installation are conditioned below the NSR major source levels.

APPLICABLE REQUIREMENTS

Bemis Packaging, Inc - Joplin 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

- *Operating Permits*, 10 CSR 10-6.065
- *Start-Up, Shutdown, and Malfunction Conditions,* 10 CSR 10-6.050
- *Submission of Emission Data, Emission Fees and Process Information,* 10 CSR 10-6.110
    - Part 70 installations are required to submit a full EIQ each calendar year.
- *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

- *Maximum Achievable Control Technology (MACT) Regulations, 10 CSR 10-6.075, National Emission Standards for National Emission Standards for the Printing and Publishing Industry, 40 CFR Part 63, Subpart KK*
- *Control of Sulfur Dioxide Emissions*, 10 CSR 10-6.261

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 March 3, 2020, received March 6, 2020, designating Bemis Packaging, Inc as the owner and operator of the installation.

Attachment A - VOC Compliance Worksheet

Bemis Packaging, Inc - Joplin
Jasper County
Project Number: 2020-03-009
Installation ID Number: 097-0132
Permit Number: 052020-012

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

Materials Used[1] (Name, Type: Solvent/Ink/Extender)	Amount Used Monthly (gal)	Density[2] (lb/gal)	VOC Content[3] (%)	Overall Control Efficiency[4] (%)	Monthly VOC Emissions (tons)

Emission Point	Description	Monthly Throughput	Emission Factor	Source	Monthly VOC Emissions (tons)
EP-12	Site Wide Natural Gas Combustion	MMscf	5.5 lb/MMscf	SCC 10200603	
EP-16	Diesel Combustion in Emergency Generator	hp-hr	$2.5 \cdot 10^{-3}$ lb/hp-hr	SCC 20200102	
T-1A to T-3B	Above Ground Tank Farm	1000gal	2.3 lb/1000gal	SCC 40704406	
Monthly Start-Up, Shutdown, and Malfunction (SSM) VOC Emissions[5] (tons/month):					
Monthly VOC Emissions (tons/month):					
12 Month Rolling Total VOC Emissions[6] (tons/year):					

[1] Used for EP-01, EP-02, EP-04, EP-05, EP-06, EP-08, EP-08B, EP-10, EP-13, EP-14, EP-15, EP-16, and EP-20.
[2] From the SDS for the material. If specific gravity is provided instead, the density can be obtained by multiplying the specific gravity by 8.33.
[3] From the SDS for the material. If a range of VOC contents is provided, the highest value in the range shall be used to demonstrate compliance.
[4] 90% capture efficiency shall be used for emission units not equipped with permanent total enclosures and 100% capture efficiency for units with permanent total enclosures. The control (destruction) efficiency shall be obtained from the latest oxidizer performance testing results. 95% minimum destruction efficiency required for emission points fed to oxidizer system. Higher control efficiencies can be used if obtained from the most recent Air Pollution Control Program approved stack test. When using a solvent-less coating or material, VOC capture and control efficiency of that emission unit is 0%.
[5] As reported to the Air Pollution Control Program's Compliance/Enforcement section for compliance with 10 CSR 10-6.050. SSM emissions should be calculated with an overall control efficiency of 0%.
[6] Must be less than 250.0 tons/year in order to be in compliance.

Attachment B1 – Total HAP Compliance Worksheet

Bemis Packaging, Inc - Joplin
Jasper County
Project Number: 2020-03-009
Installation ID Number: 097-0132
Permit Number: 052020-012

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

Materials Used[1] (Name, Type: Solvent / Ink / Extender)	Amount Used Monthly (gal)	Density[2] (lb/gal)	HAP (Name, CAS)	HAP Content[3] (%)	Overall Control Efficiency[4] (%)	SSM Emissions[5] (tons)	Monthly HAP Emissions (tons)

Emission Point[6]	Monthly Throughput (units)	HAP (Name, CAS)	Emission Factor[7]	Overall Control Efficiency (%)	SSM Emissions (tons)	Monthly HAP Emissions (tons)
Sum of Monthly Start-Up, Shutdown, and Malfunction (SSM) Total HAP Emissions (tons/month):						
Sum of Monthly Total HAP Emissions (ton/month):						
12 Month Rolling Total HAP Emissions[8] (tons/year):						

[1] Used for EP-01, EP-02, EP-06, EP-08, EP-08B, EP-10, EP-13, and EP-20
[2] From the SDS for the material. If specific gravity is provided instead, the density can be obtained by multiplying the specific gravity by 8.33.
[3] From the SDS for the material. If a range of HAP contents is provided, the highest values in the ranges shall be used to demonstrate compliance.
[4] 90% capture efficiency shall be used for emission units that emit HAP-VOC not equipped with permanent total enclosures and 100% capture efficiency for units that emit HAP-VOC with permanent total enclosures. The control (destruction) efficiency shall be obtained from the latest oxidizer performance testing results. 95% minimum destruction efficiency required for emission points fed to oxidizer system for HAP-VOCs. Higher control efficiencies can be used if obtained from the most recent Air Pollution Control Program approved stack test. When using a solvent-less coating or material, HAP-VOC capture and control efficiency of that emission unit is 0%.
[5] Monthly Start-Up, Shutdown, and Malfunction (SSM) Emissions. As reported to the Air Pollution Control Program's Compliance/Enforcement section for compliance with 10 CSR 10-6.050. SSM emissions should be calculated with an overall control efficiency of 0%.
[6] Used for site wide natural gas combustion EP-12 and diesel combustion in emergency generator EP-16.
[7] Emission factor sources should be SCC 10200603 for natural gas-fired units and SCC 20200102 for the diesel emergency engine.
[8] Must be less than 25.0 tons/year in order to be in compliance.

Attachment B2 – Individual HAP Compliance Worksheet

Bemis Packaging, Inc - Joplin
Jasper County
Project Number: 2020-03-009
Installation ID Number: 097-0132
Permit Number: 052020-012

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

Individual HAP (Name, CAS)	Monthly Individual HAP Emissions1 (tons/month)	12-Month Rolling for Individual HAP Emissions (tons/year)

[1] From the HAP emissions calculated from each material used/emission point in Attachment B1 (including SSM emissions) sum monthly emissions for each individual HAP.
[2] Sum this monthly individual HAP emissions with the 11 previous monthly individual HAP emissions. 12-month rolling individual HAP emissions for each HAP must be less than 10.0 tons/year in order to be in compliance.

Attachment C - Alternative Coating Potential to Emit Compliance Worksheet

Bemis Packaging, Inc - Joplin
Jasper County
Project Number: 2020-03-009
Installation ID Number: 097-0132
Permit Number: 052020-012

This sheet covers EP-20 for coating or material name_____Date_____.

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Process and Emission Unit	Individual HAP Name and CAS No.	HAP is also Particulate Matter (yes / no)	Individual HAP Content (maximum weight %)	Coating Non-Volatiles (weight %)	Maximum Hourly Application Rate (pounds coating per hour)	Overall Control Efficiency (%)	Individual HAP PTE (tons per year)	Individual HAP SMAL (tons per year)

A. Record the process description and emission unit.
B. Record the individual HAPs from this coating/material MSDS.
C. Compare the HAP to Appendix A for verification as particulate matter. If the HAP is also particulate matter, and the coating is applied by rolling, the HAP potential emissions (H) are zero.
D. Record the maximum weight percent of each HAP from the MSDS.
E. Record the coating's non volatile weight % from the MSDS.
F. Calculate the coating's maximum hourly application rate by multiplying the maximum reams per hour by the solids rate (lb/ream), divide by the coating's non-volatile percent mass. Example: 162.5 reams/hr x 1 lb solids/ream / (E) = 796.96 pounds coating per hour.
G. Calculate the overall control efficiency by multiplying the capture efficiency by the control efficiency. For a permanent total enclosure use 100 percent capture efficiency. Use 95 percent control efficiency for the catalytic oxidizers. For solvent-less coatings use zero percent overall control efficiency.
H. Calculate the HAP potential to emit. (H) = (D) x (F) x (1-(G)) x 8,760 / 2,000.
I. Record the Individual HAP SMAL as reported in Appendix A. If the Individual HAP PTE is equal to or greater than the Individual HAP SMAL, seek approval from the Air Pollution Control Program New Source Review Unit before using this coating.

APPENDIX A

Abbreviations and Acronyms

%.....percent
ºF.....degrees Fahrenheit
acfm.....actual cubic feet per minute
BACT.....Best Available Control Technology
BMPs.....Best Management Practices
Btu.....British thermal unit
CAM.....Compliance Assurance Monitoring
CAS.....Chemical Abstracts Service
CEMS.....Continuous Emission Monitor System
CFR.....Code of Federal Regulations
CO.....carbon monoxide
CO_2.....carbon dioxide
CO_2e.....carbon dioxide equivalent
COMS.....Continuous Opacity Monitoring System
CSR.....Code of State Regulations
dscf.....dry standard cubic feet
EIQ.....Emission Inventory Questionnaire
EP.....Emission Point
EPA.....Environmental Protection Agency
EU.....Emission Unit
fps.....feet per second
ft.....feet
GACT.....Generally Available Control Technology
GHG.....Greenhouse Gas
gpm.....gallons per minute
gr.....grains
GWP.....Global Warming Potential
HAP.....Hazardous Air Pollutant
hr.....hour
hp.....horsepower
lb.....pound
lbs/hr.....pounds per hour
MACT.....Maximum Achievable Control Technology
$\mu g/m^3$.....micrograms per cubic meter
m/s.....meters per second
Mgal.....1,000 gallons
MW.....megawatt
MHDR.....maximum hourly design rate
MMBtu....Million British thermal units
MMCF.....million cubic feet
MSDS.....Material Safety Data Sheet
NAAQS....National Ambient Air Quality Standards
NESHAPs National Emissions Standards for Hazardous Air Pollutants
NO_x.....nitrogen oxides
NSPS.....New Source Performance Standards
NSR.....New Source Review
PM.....particulate matter
$PM_{2.5}$.....particulate matter less than 2.5 microns in aerodynamic diameter
PM_{10}.....particulate matter less than 10 microns in aerodynamic diameter
ppm.....parts per million
PSD.....Prevention of Significant Deterioration
PTE.....potential to emit
RACT.....Reasonable Available Control Technology
RAL.....Risk Assessment Level
SCC.....Source Classification Code
scfm.....standard cubic feet per minute
SDS.....Safety Data Sheet
SIC.....Standard Industrial Classification
SIP.....State Implementation Plan
SMAL.....Screening Model Action Levels
SO_x.....sulfur oxides
SO_2.....sulfur dioxide
SSM.....Startup, Shutdown & Malfunction
tph.....tons per hour
tpy.....tons per year
VMT.....vehicle miles traveled
VOC.....Volatile Organic Compound

May 22, 2020

Rob Harmon
Air Compliance Manager
Bemis Packaging, Inc - Joplin
2200 Badger Ave.
Oshkosh, WI 54904

RE: New Source Review Permit - Project Number: 2020-03-009

Dear Rob Harmon:

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

If you have any questions regarding this permit, please do not hesitate to contact Jared Rhodes, 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:jara

Enclosures

c: Southwest Regional Office
PAMS File: 2020-03-009

Permit Number: 052020-012