

MISSOURI
 DEPARTMENT OF
 NATURAL RESOURCES
 Air Pollution Control Program

PART 70 PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2017-055
Expiration Date: JUL 12 2022
Installation ID: 099-0044
Project Number: 2016-06-013

Installation Name and Address

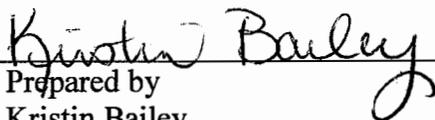
Metal Container Corporation
 42 Tenbrook Industrial Park
 Arnold, MO 63010
 Jefferson County

Parent Company's Name and Address

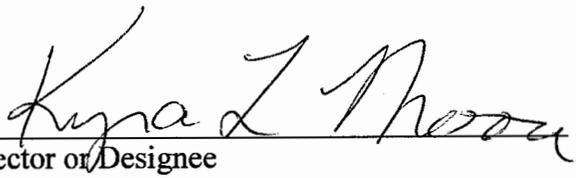
Anheuser Busch InBev
 One Busch Place 137-1
 St. Louis MO, 63118

Installation Description:

Metal Container Corporation produces aluminum cans and bottles in Arnold, Missouri. The installation manufactures two-piece aluminum beverage cans and bottles. Operations include can forming, coating, drying, and curing. Coating operations include basecoat, ink, over varnish, bottom varnish, and inside spray. The installation is a major source of Volatile Organic Compounds (VOCs). The installation is a synthetic minor source of Hazardous Air Pollutants (HAPs) and Glycol Ethers (CAS No. 20-10-0).


 Prepared by
 Kristin Bailey

Operating Permit Unit


 Director or Designee
 Department of Natural Resources

JUL 12 2017

Effective Date

Table of Contents

I. INSTALLATION EQUIPMENT LISTING	5
EMISSION UNITS WITH LIMITATIONS.....	5
EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS.....	6
II. PLANT WIDE EMISSION LIMITATIONS.....	7
PERMIT CONDITION PW001	7
10 CSR 10-6.060 Construction Permits Required.....	7
Construction Permit 0486-001, Issued January 26, 1986.....	7
PERMIT CONDITION PW002.....	7
10 CSR 10-6.060 Construction Permits Required.....	7
Construction Permit 122016-007, Issued December 21, 2016.....	7
PERMIT CONDITION PW003.....	9
10 CSR 10-6.060 Construction Permits Required.....	9
Construction Permit 122016-007, Issued December 21, 2016.....	9
III. EMISSION UNIT SPECIFIC EMISSION LIMITATIONS	10
PERMIT CONDITION 001	10
10 CSR 10-6.060 Construction Permits Required.....	10
Construction Permit 0279-001, Issued February 1, 1979.....	10
PERMIT CONDITION 002.....	11
10 CSR 10-6.060 Construction Permits Required.....	11
Construction Permit 0279-001, Issued February 1, 1979.....	11
PERMIT CONDITION 003.....	12
Inside Spray Machines and Bake Ovens.....	12
10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	12
PERMIT CONDITION 004.....	13
Basecoaters and Varnishers	13
10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	13
PERMIT CONDITION 005.....	15
Printers	15
10 CSR 10-5.340 Control of Emissions From Rotogravure and Flexographic Printing Facilities.....	15
PERMIT CONDITION 006.....	16
Respray Inside Spray Machine	16
10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations and	16
10 CSR 10-6.060 Construction Permits Required.....	16
Construction Permit 0589-001A, Issued April 25, 2003	16
PERMIT CONDITION 007.....	18
Line 3 Inside Spray Machine	18
10 CSR 10-6.060 Construction Permits Required.....	18
Construction Permit 0589-001A, Issued April 25, 2003	18
PERMIT CONDITION 008.....	19
Line 3 and Respray Inside Spray Machine	19
10 CSR 10-6.060 Construction Permits Required.....	19
Construction Permit 0589-001A, Issued April 25, 2003	19
PERMIT CONDITION 009.....	19
Inside Spray Bake Ovens	19
10 CSR 10-6.060 Construction Permits Required.....	19
Construction Permit 0789-003, Issued July 19, 1989.....	19

PERMIT CONDITION 010.....	20
Line 4	20
10 CSR 10-6.060 Construction Permits Required.....	20
Construction Permit 0893-028, Issued July 15, 1993.....	20
PERMIT CONDITION 011	21
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	21
PERMIT CONDITION 012.....	22
Back-Up Fire Pump	22
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	22
40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	22
PERMIT CONDITION 013.....	26
E001 Back-Up Fire Pump.....	26
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds.....	26
PERMIT CONDITION 014.....	26
E001 Back-Up Fire Pump.....	26
10 CSR 10-6.261 Control of Sulfur Dioxide Emissions	26
PERMIT CONDITION 015.....	28
P001 and P002	28
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes	28
PERMIT CONDITION 016.....	29
P004, P005, and P006	29
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes	29
PERMIT CONDITION 017.....	30
Basecoaters, Varnishers, Inside Spray Machines, and Ovens.....	30
10 CSR 10-6.070 New Source Performance Regulations	30
40 CFR Part 60, Subpart WW – Standards of Performance for the Beverage Can Surface Coating Industry.....	30
PERMIT CONDITION 018.....	32
10 CSR 10-6.070 New Source Performance Regulations	32
40 CFR Part 60, Subpart WW – Standards of Performance for the Beverage Can Surface Coating Industry.....	32
10 CSR 10-6.060 Construction Permits Required.....	32
Construction Permit 122016-007, Issued December 21, 2016.....	32
PERMIT CONDITION 019.....	36
10 CSR 10-6.060 Construction Permits Required.....	36
Lowest Achievable Emission Rate (LAER) Capture Requirements	36
Construction Permit 122016-007, Issued December 21, 2016.....	36
PERMIT CONDITION 020.....	37
Regenerative Thermal Oxidizers (RTOs).....	37
10 CSR 10-6.060 Construction Permits Required.....	37
Lowest Achievable Emission Rate (LAER) Control Device Requirements	37
Construction Permit 122016-007, Issued December 21, 2016.....	37
PERMIT CONDITION 021	39
Control Device Requirements – Mist Eliminators	39
10 CSR 10-6.060 Construction Permits Required.....	39
Construction Permit 122016-007, Issued December 21, 2016.....	39
PERMIT CONDITION 022.....	40
Control Device Requirements – Baghouses	40
10 CSR 10-6.060 Construction Permits Required.....	40
Construction Permit 122016-007, Issued December 21, 2016.....	40
PERMIT CONDITION 023.....	41
Fuel Restriction	41
10 CSR 10-6.060 Construction Permits Required.....	41

Lowest Achievable Emission Rate (LAER) Capture Requirements	41
Construction Permit 122016-007, Issued December 21, 2016	41
PERMIT CONDITION 024	42
10 CSR 10-5.300 Control of Emissions From Solvent Metal Cleaning	42
IV. CORE PERMIT REQUIREMENTS	44
V. GENERAL PERMIT REQUIREMENTS	50
VI. ATTACHMENTS	55
ATTACHMENT A	56
Inspection/Maintenance/Repair/Malfunction Log	56
ATTACHMENT B	57
10 CSR 10-6.170 Fugitive Emission Observations	57
ATTACHMENT C	58
Construction Permit 0279-001 Lines 1 – 4 VOC Emissions	58
ATTACHMENT C CONTINUED	60
Construction Permit 0279-001 VOC Emissions	60
ATTACHMENT D	61
Installation-wide Combined HAP Compliance Worksheet	61
ATTACHMENT E	64
Installation-wide Individual HAP Compliance Worksheet	64
ATTACHMENT F	67
SSM Time Tracking Sheet	67
ATTACHMENT G	68
Lines 5 and 6 VOC Compliance Worksheet	68
ATTACHMENT H	71
Alternative Coatings Worksheet	71
ATTACHMENT I	74
Construction Permit 0589-001A VOC Emissions	74
ATTACHMENT J	75
Construction Permit 0789-003 PM ₁₀ Emissions	75
ATTACHMENT K	76
Construction Permit 0893-028 VOC Emissions	76
ATTACHMENT L	77
Method 22 Opacity Observations	77
ATTACHMENT M	78
Method 9 Opacity Observations	78
ATTACHMENT N	79
10 CSR 10-6.400 Compliance Demonstration	79
ATTACHMENT N CONTINUED	80
10 CSR 10-6.400 Compliance Demonstration	80
ATTACHMENT O	81
Pressure Drop Log for Baghouses	81
ATTACHMENT P	82
Solvent Containing Waste Transfer Log	82
ATTACHMENT Q	83
Purchase Records for Cold Cleaning Solvent	83
ATTACHMENT R	84
Employee Solvent Metal Cleaning Training Log	84
ATTACHMENT S	85
10 CSR 10-5.330 Daily Recordkeeping for Coatings, Solvents and Cans Coated	85

I. Installation Equipment Listing

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations. The plant wide conditions apply to all emission units at this installation.

Emission Unit	Description
B001	(9) Make-Up Air Units, 40.9 MMBtu/hr total
B002	1.75 MMBtu/hr Fire Water Heater
B003	(3) 6.3 MMBtu/hr Boilers
B004	2.6 MMBtu/hr Water Heater
B504	Line 5 Water Heater, 2.6 MMBtu/hr natural gas
B604	Line 6 Water Heater, 2.6 MMBtu/hr natural gas
B005	Lines 1 – 4: Catalytic Oxidizer, 13.5 MMBtu/hr natural gas
B006	(21) Space Heaters, 2.5 MMBtu/hr total
B508	Line 5 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
B608	Line 6 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
E001	Emergency Fire Pump Engine, 310 HP diesel
P003	Lines 1 – 4: Can Washer Oven, 1.16 MMBtu/hr natural gas
P503	Line 5 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P603	Line 6 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P001	(4) Cuppers
P002	(4) Wet Can Elevators and (28) Bodymakers
P003	Can Washer Ovens, 6.6 MMBtu/hr
P004	Lines 1 – 4: (3) Basecoaters and (3) Basecoater Ovens, 2.52 MMBtu/hr each natural gas
P504	Line 5 Basecoater and Basecoater Oven, 2.52 MMBtu/hr
P005	Lines 1 – 4: (5) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P505	Line 5 Varnisher and Decorator Oven, 2.52 MMBtu/hr natural gas
P605	Line 6 (2) Varnishers and (2) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P006	Lines 1 – 4: (5) Varnishers, (4) Inside Spray, Respray, and (4) Inside Spray Ovens, 3.43 MMBtu/hr each, natural gas
P602	7,200 gallon Inside Spray Tank
P502	7,200 gallon Inside Spray Tank
P503	Line 5 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P603	Line 6 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P506	Line 5 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P606	Line 6 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P507	Line 5 UV Bottom Coater
P607	Line 6 UV Bottom Coater
P508	Line 5 Rinser Oven, 0.4 MMBtu/hr natural gas
P608	Line 6 Rinser Oven, 0.4 MMBtu/hr natural gas
P509	Necker Process
P609	Necker Process

Emission Unit	Description
F001	Clean-Up Solvent Fugitives
F002	Lines 5 and 6 Coders
T501	7,200 gallon Varnish Tank
T601	7,200 gallon Varnish Tank

EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance. The plant wide conditions apply to all emission units at this installation.

Emission Unit	Description
M001	Grinder
T002	10,000 gallon Basecoat Bulk Tank
T002A	500 gallon Basecoat Day Tank
T003	10,000 gallon Varnish Bulk Tank
T003A	(2) 500 gallon Varnish Day Tanks
T004	10,000 gallon Inside Spray Bulk Tank
T004A	(3) 500 gallon Inside Spray Day Tanks
-	Formaldehyde Formation in Ovens
-	900 gallon Diesel Storage Tank
-	1,000 gallon Diesel Storage Tank

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The plant wide conditions apply to all emission units at this installation. All emission units are listed in Section I under Emission Units with Limitations and Emission Units without Limitations.

PERMIT CONDITION PW001
 10 CSR 10-6.060 Construction Permits Required
 Construction Permit 0486-001, Issued January 26, 1986

Operational Limitation:

Special Condition 8: The permittee shall use a paraffin-based lube for the necker lube. Prior to using any solvent-base lube, the permittee shall obtain approval in accordance with 10 CSR 10-6.060 *Construction Permits Required*.

Reporting:

The permittee shall report any deviations from the operational limitation and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION PW002
 10 CSR 10-6.060 Construction Permits Required
 Construction Permit 122016-007, Issued December 21, 2016

Emission Limitations:

- 1) Special Condition 2A: The permittee shall emit less than ten tons of each individual Hazardous Air Pollutant (HAP) from the entire installation as listed in Table 1 in any consecutive 12-month period.
- 2) Special Condition 2A: The permittee shall emit less than 25 tons combined of HAPs from the entire installation as listed in Table 1 in any consecutive 12-month period.

Table 1: All HAP Emission Sources at Metal Container Corporation

Emission Point	HAP Emission Source Description
B001	(9) Make-up Air Units, 40.9 MMBtu/hr total natural gas
B002	Fire Water Heater, 1.75 MMBtu/hr natural gas
B003	(3) Boilers, 6.3 MMBtu/hr each natural gas
B004	Water Heater, 2.6 MMBtu/hr natural gas
B504	Line 5 Water Heater, 2.6 MMBtu/hr natural gas
B604	Line 6 Water Heater, 2.6 MMBtu/hr natural gas
B005	Lines 1 – 4: Catalytic Oxidizer, 13.5 MMBtu/hr natural gas
B006	(21) Space Heaters, 2.5 MMBtu/hr total natural gas
B508	Line 5 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
B608	Line 6 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
E001	Emergency Fire Pump Engine, 310 HP diesel
P003	Lines 1 – 4: Can Washer Oven, 1.16 MMBtu/hr natural gas
P503	Line 5 Can Washer Oven, 1.16 MMBtu/hr each natural gas

P603	Line 6 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P004	Lines 1 – 4: (3) Basecoaters and (3) Basecoater Ovens, 2.52 MMBtu/hr each natural gas
P504	Line 5 Basecoater and Basecoater Oven, 2.52 MMBtu/hr
P005	Lines 1 – 4: (5) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P505	Line 5 Varnisher and Decorator Oven, 2.52 MMBtu/hr natural gas
P605	Line 6 (2) Varnishers and (2) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P006	Lines 1 – 4: (5) Varnishers, (4) Inside Spray, Respray, and (4) Inside Spray Ovens, 3.43 MMBtu/hr each, natural gas
P506	Line 5 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P606	Line 6 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P508	Line 5 Rinser Oven, 0.4 MMBtu/hr natural gas
P608	Line 6 Rinser Oven, 0.4 MMBtu/hr natural gas
F001	All lines: Cleanup Solvents
T002	10,000 gallon Basecoat Bulk Tank
T002A	500 gallon Basecoat Day Tank
T003	10,000 gallon Varnish Bulk Tank
T003A	(2) 500 gallon Varnish Day Tanks
T004	10,000 gallon Inside Spray Bulk Tank
T004A	(3) 500 gallon Inside Spray Day Tanks
T501	7,200 gallon Varnish Tank
T601	7,200 gallon Varnish Tank
-	900 gallon Diesel Storage Tank
-	1,000 gallon Diesel Storage Tank
-	Formaldehyde Formation in Ovens

Operational Limitation:

Special Condition 9: The permittee shall keep all inks, solvents, cleaning materials and coating in sealed containers or tanks whenever the materials are not in use. The permittee shall provide and maintain suitable, easily read permanent markings on all ink, solvent, cleaning material and coating containers.

Monitoring/Recordkeeping:

- 1) The permittee shall calculate the monthly and rolling 12-month HAP emissions from the entire installation for each individual HAP and for total combined HAP using Attachments D and E or equivalent forms approved by the Air Pollution Control Program.
- 2) The permittee shall retain a complete set of Safety Data Sheets (SDS) for all HAP containing materials at the installation.
- 3) Records may be kept in either written or electronic form.
- 4) All records shall be kept for no less than five years and be made available immediately to Missouri Department of Natural Resources’ personnel upon request.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program’s Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance of either of the HAP emission limitation.
- 2) The permittee shall report any deviations from the emission limitations, operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION PW003

10 CSR 10-6.060 Construction Permits Required
Construction Permit 122016-007, Issued December 21, 2016

Operational Limitation:

Special Condition 12A: The permittee shall obtain VOC offsets in the amount of 157.63 tons.

Recordkeeping/Reporting:

- 1) Special Condition 12B: The permittee shall have an approved Notice of Intent to Use Emissions Reduction Credits (ERC) for the amount of VOC offsets prior to removal of the permanent total enclosures on Lines 5 and 6 and exceedance of the 40.0 tons per VOC limit established by Construction Permit 032014-003A.
- 2) The permittee shall report any deviations from the emission limitations, operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

PERMIT CONDITION 001	
10 CSR 10-6.060 Construction Permits Required Construction Permit 0279-001, Issued February 1, 1979	
Emission Unit	Description
B001	(9) Make-Up Air Units, 40.9 MMBtu/hr total
B002	1.75 MMBtu/hr Fire Water Heater
B003	(3) 6.3 MMBtu/hr Boilers
B004	2.6 MMBtu/hr Water Heater
B005	Lines 1 – 4: Catalytic Oxidizer, 13.5 MMBtu/hr natural gas
B006	(21) Space Heaters, 2.5 MMBtu/hr total
E001	Emergency Fire Pump Engine, 310 HP diesel
P003	Lines 1 – 4: Can Washer Oven, 1.16 MMBtu/hr natural gas
P004	Lines 1 – 4: (3) Basecoaters and (3) Basecoater Ovens, 2.52 MMBtu/hr each natural gas
P005	Lines 1 – 4: (5) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P006	Lines 1 – 4: (5) Varnishers, (4) Inside Spray, Respray, and (4) Inside Spray Ovens, 3.43 MMBtu/hr each, natural gas

Emission Limitation:

- 1) Special Condition 2: Hydrocarbon emissions from the plant at capacity production shall not exceed 560 TPY.
- 2) Special Condition 4: Monthly hydrocarbon emissions are limited to
 - a) 46 tons for the months of February, April, June, and November.
 - b) 47 tons for the months of January, March, May, July, August, September, October, and December.

Monitoring/Recordkeeping:

- 1) Special Condition 5: Records shall be kept for five years of the monthly usage of each material containing an organic solvent, and the organic solvent content thereof. Such records shall be open to inspection by representatives of the Missouri Department of Natural Resources during regular business hours.
- 2) The permittee shall use Attachment C or an equivalent form approved by the Air Pollution Control Program to demonstrate compliance.
- 3) Records may be kept in either written or electronic form.

Reporting:

- 1) Special Condition 6: The permittee shall, within 60 days after the end of each calendar year, report to the Missouri Department of Natural Resources the following information:
 - a) The total number of beverage cans produced at its plant,
 - b) The total amount of coatings and solvents used at its plant, and

- c) The total amount of hydrocarbon emissions from its plant.
- 2) The permittee shall report to the Air Pollution Control Program’s Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
- 3) The permittee shall report any deviations from the emission limitation, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 002	
10 CSR 10-6.060 Construction Permits Required Construction Permit 0279-001, Issued February 1, 1979	
Emission Unit	Description
B005	Lines 1 – 4: Catalytic Oxidizer, 13.5 MMBtu/hr natural gas
P003	Lines 1 – 4: Can Washer Oven, 1.16 MMBtu/hr natural gas
P004	Lines 1 – 4: (3) Basecoaters and (3) Basecoater Ovens, 2.52 MMBtu/hr each natural gas
P005	Lines 1 – 4: (5) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P006	Lines 1 – 4: (5) Varnishers, (4) Inside Spray, Respray, and (4) Inside Spray Ovens, 3.43 MMBtu/hr each, natural gas

Operational Limitations:

- 1) The permittee shall control HAP emissions from their coating operations using a catalytic reactor. The catalytic reactor shall be operated at all times coating operations are being performed.
- 2) The permittee shall properly operate and maintain the catalytic reactor according to manufacturer’s specifications.
- 3) The temperature of the gas exiting the catalyst bed shall not exceed 1350°F.
- 4) The temperature of the gas entering the catalyst bed shall be greater than 650°F.

Monitoring/Recordkeeping:

- 1) The permittee shall record the inlet and outlet temperatures of the gases being routed to the catalytic reactor at least once each operating day. If the temperature rise across the catalyst is reduced by greater than ten percent from the previous days record, the permittee shall take appropriate corrective action to ensure the catalyst is properly functioning.
- 2) The permittee shall maintain a maintenance log for the catalytic reactor noting all inspections, malfunctions, and repairs using Attachment A or an equivalent form approved by the Air Pollution Control Program.
- 3) Records may be kept in either written or electronic form.
- 4) All records shall be kept for no less than five years and be made available immediately to Missouri Department of Natural Resources’ personnel upon request.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program’s Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which records indicate an exceedance of either of the HAP emission limitation.
- 2) The permittee shall report any deviations from the emission limitations, operational limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 003	
Inside Spray Machines and Bake Ovens	
10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	
Emission Unit	Description
P006	Line 1 Inside Spray Machine and Bake Oven
	Line 2 Inside Spray Machine and Bake Oven
	Line 3 Inside Spray Machine and Bake Oven
	Line 4 Inside Spray Machine and Bake Oven
P506	Line 5 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P606	Line 6 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas

Emission Limitation:

The permittee shall not emit volatile organic compounds (VOCs) in excess of 4.2 pounds per gallon of coating (minus water and non-VOC organic compounds) from can interior body spray coating operations.

Compliance Options:

- 1) The permittee shall adhere with one of the following compliance options:
 - a) The permittee shall only use coatings containing 4.2 pounds VOC per gallon of coating (minus water and non-VOC organic compounds) or less. The permittee shall retain Safety Data Sheets (SDS) on each coating to demonstrate compliance.
 - b) The permittee shall emit less than or equal to 4.2 pounds VOC per gallon of coating (minus water and non-VOC organic compounds) based upon a daily volume-weighted average. The daily volume-weighted average (DAVG_{vw}) of all coatings shall be calculated by the following formula:

$$DAVG_{vw} = \frac{\sum_{i=1}^n (A_i \times B_i)}{C}$$

Where:

A = daily usage of each coating in gallons (minus water and exempt solvents);

B = pounds of VOC per gallon of coating (minus water and exempt solvents);

C = total daily usage of all coatings in gallons (minus water and exempt solvents); and

n = the number of different coatings used.

The permittee shall retain SDS for each coating, their DAVG_{vw}, and all supporting calculations.

Recordkeeping:

- 1) The permittee shall retain the following records as necessary to determine compliance. Records kept should be appropriate for the facility, their products, and operations. These may include, as applicable, one (1) or more of the following:
 - a) Daily records of the type and the quantity of coatings used, utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program;
 - b) SDS or the coating manufacturer’s formulation data for each coating;
 - c) Daily records of the type and quantity of solvents for coating, thinning, purging and equipment cleaning used utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program;

- d) Any performance test results used to determine capture efficiency, control efficiency, transfer efficiency, or coating makeup;
 - e) Daily records of the type and quantity of waste solvents reclaimed or discarded, utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program; and
 - f) Daily records of the quantity of cans coated, utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program.
- 2) Records may be kept in either written or electronic form.
 - 3) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
 - 4) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitation, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 004	
Basecoaters and Varnishers	
10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations	
Emission Unit	Description
P004	(3) Basecoaters and (3) Basecoater Ovens
P006	Line 1 Varnisher
	Line 2 Varnisher
	Line 3 Varnisher
	Line 4 (2) Varnishers
P504	Line 5 Basecoater and Basecoater Oven, 2.52 MMBtu/hr
P505	Line 5 Varnisher and Decorator Oven, 2.52 MMBtu/hr natural gas
P605	Line 6 (2) Varnishers and (2) Decorator Ovens, 2.52 MMBtu/hr each natural gas

Emission Limitation:

The permittee shall not emit volatile organic compounds (VOCs) in excess of 2.8 pounds per gallon of coating (minus water and non-VOC organic compounds) from can exterior sheet basecoating operations.

Compliance Options:

- 1) The permittee shall adhere with one of the following compliance options:
 - a) The permittee shall only use coatings containing 2.8 pounds VOC per gallon of coating (minus water and non-VOC organic compounds) or less. The permittee shall retain Safety Data Sheets (SDS) on each coating to demonstrate compliance.
 - b) The permittee shall emit less than or equal to 2.8 pounds VOC per gallon of coating (minus water and non-VOC organic compounds) based upon a daily volume-weighted average. The daily volume-weighted average (DAVG_{vw}) of all coatings shall be calculated by the following formula:

$$\text{DAVG}_{\text{vw}} = \frac{\sum_{i=1}^n (A_i \times B_i)}{C}$$

Where:

A = daily usage of each coating in gallons (minus water and exempt solvents);

B = pounds of VOC per gallon of coating (minus water and exempt solvents);

C = total daily usage of all coatings in gallons (minus water and exempt solvents); and

n = the number of different coatings used.

The permittee shall retain SDS for each coating, their DAVG_{vw} , and all supporting calculations.

Recordkeeping:

- 1) The permittee shall retain the following records as necessary to determine compliance. Records kept should be appropriate for the facility, their products, and operations. These may include, as applicable, one (1) or more of the following:
 - a) Daily records of the type and the quantity of coatings used utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program;
 - b) SDS or the coating manufacturer's formulation data for each coating;
 - c) Daily records of the type and quantity of solvents for coating, thinning, purging and equipment cleaning used utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program;
 - d) Any performance test results used to determine capture efficiency, control efficiency, transfer efficiency, or coating makeup;
 - e) Daily records of the type and quantity of waste solvents reclaimed or discarded utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program; and
 - f) Daily records of the quantity of cans coated utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program.
- 2) Records may be kept in either written or electronic form.
- 3) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 4) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitation, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 005		
Printers		
10 CSR 10-5.340 Control of Emissions From Rotogravure and Flexographic Printing Facilities		
Emission Unit	Description	Control Device
P005	Line 1 Printer	CD06 Catalytic Reactor
	Line 2 Printer	
	Line 3 Printer	
	Line 4 (2) Printers	
P505	Line 5 Varnisher and Decorator Oven, 2.52 MMBtu/hr natural gas	
P605	Line 6 (2) Varnishers and (2) Decorator Ovens, 2.52 MMBtu/hr each natural gas	

Operational Limitations:

- 1) The permittee shall operate a catalytic reactor to control VOC emissions from each flexographic printer. The catalytic reactor shall remove, destroy, or prevent at least 60 percent of VOC emissions into the ambient air, indicated by weight of the uncontrolled VOC emissions on a daily weighted basis.
- 2) Low solvent technology may be used to achieve VOC emission reductions instead of a catalytic reactor. If low solvent technology is used, the following limits shall be met for each press:
 - a) For waterborne inks, the volatile portion of the ink as applied to the substrate shall contain no more than 25 percent by volume of VOC; and
 - b) For water-based or high solids inks, the ink as applied to the substrate shall be at least 60 percent by volume non-VOC material.
- 3) The permittee shall not use or permit the use of any flexographic printing press that uses cleanup solvents containing VOCs unless—
 - a) The cleanup solvents are kept in tightly covered tanks or containers during transport and storage;
 - b) The cleaning cloths used with the cleanup solvents are placed in tightly closed containers when not in use and while awaiting off-site transportation. The cleaning cloths shall be properly cleaned and disposed of. The cloths, when properly cleaned or disposed of, shall be processed in a way that as much of the solvent as practicable is recovered for some further use or destroyed. Cleaning and disposal methods shall be approved by the Director; and
 - c) The permittee may use an alternate method for reducing cleanup solvent VOC emissions, including the use of low VOC cleanup solvents, if the permittee demonstrates that the emission reduction is equal to or greater than the two previous requirements. This alternate method shall be approved by the Director.

Performance Testing:

The permittee shall perform testing following the procedures contained in 10 CSR 10-6.030(14)(A) and 10 CSR 10-6.030(20) to verify the efficiency of the catalytic reactor within 180 days of issuance of this operating permit. The averaging time for these tests shall be three one-hour tests. These procedures shall determine control device capture efficiency and destruction efficiency. Inlet and outlet gas temperature rise across the catalytic reactor shall be used to determine daily compliance. The temperature monitoring device shall be accurate to within ± 0.75 percent.

Monitoring/Recordkeeping:

- 1) The following parameters shall be monitored and recorded if a control device is used to achieve compliance:
 - a) Temperature rise across the catalytic reactor on a continuous basis;
 - b) Results of all performance testing conducted on the catalytic reactor;

- c) Maintenance, repairs and malfunction of any air pollution control equipment when performed (see Attachment A).
- 2) The following shall be recorded for each flexographic printing press if low solvent technology is used to achieve compliance:
 - a) Volume-weighted ink VOC content in percent by volume for each ink formulation as applied on a monthly basis; and
 - b) Ink usage in gallons for each ink formulation as applied on a daily basis for each press;
 - c) Volume-weighted density of VOCs in ink in lbs/gallon for each ink formulation as applied on a daily basis;
 - d) Volume-weighted average of the VOC content of each ink formulation as applied in percent by volume for each press on a daily basis;
 - e) Ink water content in percent by volume for each ink formulation as applied on a daily basis for each press; and
 - f) Ink exempt solvent content in percent by volume for each ink formulation as applied on a daily basis for each press.
- 3) The permittee shall retain SDS or the manufacturer's formulation data for each ink used.
- 4) Records may be kept in either written or electronic form.
- 5) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 6) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
- 2) The permittee shall report any deviations from the operational limitations, performance testing, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 006 Respray Inside Spray Machine 10 CSR 10-5.330 Control of Emissions From Industrial Surface Coating Operations and 10 CSR 10-6.060 Construction Permits Required Construction Permit 0589-001A, Issued April 25, 2003	
Emission Unit	Description
P006	Respray Inside Spray Machine

Emission Limitation:

Special Condition 3: The permittee shall only use coatings in the respray process that comply with the 10 CSR 10-5.330 regulatory limit of 4.2 lb VOC/gallon coating minus water.

Operational Limitation:

Special Condition 5: The permittee shall not use this respray inside spray machine for normal initial inside spraying.

Recordkeeping:

- 1) Special Condition 4: The permittee shall maintain monthly records on-site, covering a period to include the previous running 60 month period, which show:
 - a) The can production rate for each month and the cumulative total for the previous 12 consecutive months from the respray operation;
 - b) The name and quantities, in gallons per month, of each respray coating used;
 - c) The VOC content, in lb VOC/gallon coating minus water, of each respray coating used;
 - d) The density, in lb/gallon, of each respray coating used;
 - e) The VOC fraction, by weight, of each respray coating used;
 - f) The total VOC emissions for the month and the cumulative total for the previous 12 running months from the respray operation based on the above data.
 - g) Each sheet of the above records shall include the following statement at the end of the sheet: "I (we) have entered the numbers on this record, and do hereby attest by my (our) signature(s) below that this record contains the actual correct and accurate information it portrays." This statement shall then be signed by all personnel involved with recording the numbers. These records shall be accessible to Missouri Air Pollution Control Program personnel. The above records will allow field inspection to verify compliance with the limit contained within Special Condition 3.
- 2) The permittee shall retain the following records as necessary to determine compliance. Records kept should be appropriate for the facility, their products, and operations. These may include, as applicable, one (1) or more of the following:
 - a) Daily records of the type and the quantity of coatings used utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program;
 - b) SDS or the coating manufacturer's formulation data for each coating;
 - c) Daily records of the type and quantity of solvents for coating, thinning, purging and equipment cleaning used utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program;
 - d) Any performance test results used to determine capture efficiency, control efficiency, transfer efficiency, or coating makeup;
 - e) Daily records of the type and quantity of waste solvents reclaimed or discarded utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program; and
 - f) Daily records of the quantity of cans coated utilizing Attachment S or an equivalent form approved by the Air Pollution Control Program.
- 3) Records may be kept in either written or electronic form.
- 4) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitation, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 007 Line 3 Inside Spray Machine 10 CSR 10-6.060 Construction Permits Required Construction Permit 0589-001A, Issued April 25, 2003	
Emission Unit	Description
P006	Line 3 Inside Spray Machine

Emission Limitation:

Special Condition 6: The permittee shall not emit volatile organic compounds in excess of 28.24 tons in any running 12-month period as a result of evaporative loss from the coatings used in the new inside spray operation on line #3.

Recordkeeping:

- 1) Special Condition 7: The permittee shall maintain monthly records on-site, covering a period to include the previous running 60 month period, which show:
 - a) The name and quantities, in gallons per month, of each inside spray coating used;
 - b) The density, in lb/gallon, of each inside spray coating used;
 - c) The VOC fraction, by weight, of each inside spray coating used;
 - d) The VOC capture efficiency for the inside spray operation;
 - e) The destruction efficiency of the thermal oxidizer for the inside spray operations;
 - f) The total VOC emissions for the month and the cumulative total for the previous 12 running months from the inside spray operation based on the above data (see Attachment I or an equivalent form approved by the Air Pollution Control Program).
 - g) Each sheet of the above records shall include the following statement at the end of the sheet: "I (we) have entered the numbers on this record, and do hereby attest by my (our) signature(s) below that this record contains the actual correct and accurate information it portrays." This statement shall then be signed by all personnel involved with recording the numbers. These records shall be accessible to Missouri Air Pollution Control Program personnel. The above records will allow field inspection to verify compliance with the limit contained within Special Condition 6.
- 2) The permittee shall retain SDS or the coating manufacturer's formulation data for each coating used within Line 3 Inside Spray Machine.
- 3) Records may be kept in either written or electronic form.
- 4) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitation, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 008 Line 3 and Respray Inside Spray Machine 10 CSR 10-6.060 Construction Permits Required Construction Permit 0589-001A, Issued April 25, 2003	
Emission Unit	Description
P006	Line 3 Inside Spray Machine
	Respray Inside Spray Machine

Emission Limitation:

Special Condition 9: These sources shall emit less than 40 tons of Volatile Organic Compounds (VOCs) in any consecutive 12-month period.

Monitoring/Recordkeeping:

- 1) The permittee shall retain Safety Data Sheets (SDS) for each coating used within these spray machines.
- 2) The permittee shall retain records of the amount of each coating used (lb/month) within these spray machines on a monthly basis.
- 3) The permittee shall use the monthly usage records and the VOC content from their SDS to calculate their monthly VOC emissions from these spray machines using Attachment I or an equivalent form approved by the Air Pollution Control Program.
- 4) The permittee shall retain a rolling 12-month total of VOC emissions from these spray machines.
- 5) Records may be kept in either written or electronic form.
- 6) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 7) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitation, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 009 Inside Spray Bake Ovens 10 CSR 10-6.060 Construction Permits Required Construction Permit 0789-003, Issued July 19, 1989		
Emission Unit	Description	Control Device
P006	Line 1 4.2 MMBtu/hr Inside Spray Bake Oven	Cartridge Filter
	Line 2 4.2 MMBtu/hr Inside Spray Bake Oven	
	Line 3 4.2 MMBtu/hr Inside Spray Bake Oven	
	Line 4 4.2 MMBtu/hr Inside Spray Bake Oven	

Emission Limitation:

Special Condition 2: The permittee shall emit less than 15 tons of PM₁₀ in any consecutive 12-month period from the inside spray bake ovens.

Operational Limitation:

Special Condition 1: The permittee shall employ a cartridge filter to control particulate emissions whenever the inside spray bake oven is in operation.

Monitoring/Recordkeeping:

- 1) The permittee shall retain Safety Data Sheets (SDS) for each coating baked within the inside spray bake ovens.
- 2) The permittee shall retain records of the quantity of each coating baked (lb/month) within the inside spray bake ovens on a monthly basis.
- 3) The permittee shall retain records of the quantity of natural gas combusted within the inside spray bake ovens.
- 4) The permittee shall use the monthly coating and natural gas usage records, the solids content from their SDS, and an emission factor of 7.6 lb PM₁₀/MMscf to calculate their monthly PM₁₀ emissions from the inside spray bake ovens using Attachment J or an equivalent form approved by the Air Pollution Control Program.
- 5) The permittee shall retain a rolling 12-month total of PM₁₀ emissions from the inside spray bake ovens.
- 6) Records may be kept in either written or electronic form.
- 7) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 8) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitation, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 010	
Line 4	
10 CSR 10-6.060 Construction Permits Required Construction Permit 0893-028, Issued July 15, 1993	
Emission Unit	Description
P005	Line 4 (2) Printers
	Line 4 (2) 1.3 MMBtu/hr Printer Ovens
P006	Line 4 (2) Varnishers
	Line 4 Inside Spray Machine
	Line 4 4.2 MMBtu/hr Inside Spray Bake Oven

Emission Limitation:

Special Condition 1: Emissions of Volatile Organic Compounds (VOCs) from Line 4 shall not exceed 68.4 tons in any consecutive 12-month period.

Monitoring/Recordkeeping:

- 1) The permittee shall retain Safety Data Sheets (SDS) for each coating used on Line 4.
- 2) The permittee shall retain records of the quantity of each coating used (lb/month) on Line 4 on a monthly basis.

- 3) The permittee shall use the monthly usage records and the VOC content from their SDS to calculate their monthly VOC emissions from Line 4 using Attachment K or an equivalent form approved by the Air Pollution Control Program.
- 4) The permittee shall retain a rolling 12-month total of VOC emissions from Line 4.
- 5) Records may be kept in either written or electronic form.
- 6) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 7) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitation, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 011	
10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants	
Emission Unit	Description
P001	(4) Cuppers
P002	(4) Wet Can Elevators and (28) Bodymakers
P502	7,200 gallon Inside Spray Tank
P602	7,200 gallon Inside Spray Tank
P506	Line 5 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P606	Line 6 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P509	Necker Process
P609	Necker Process

Emission Limitation:

- 1) The permittee shall not cause or permit to be discharged into the atmosphere from these emission sources any visible emissions with an opacity greater than 20 percent.
- 2) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period aggregating not more than six minutes in any 60 minutes air contaminants with an opacity up to 40 percent.

Monitoring:

- 1) The permittee shall conduct opacity readings on this emission source using the procedures contained in U.S. EPA Test Method 22. Readings are only required when the emission sources are operating and when the weather conditions allow. If no visible emissions are observed using these procedures, then no further observations are required. If visible emissions are observed, then the source representative shall conduct a Method 9 observation.
- 2) The following monitoring schedule shall be maintained:
 - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then
 - b) Observations shall be conducted once every two weeks for a period of eight weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then

- c) Observations shall be conducted once per month. If a violation is noted, monitoring reverts to weekly.
- d) If, at the issuance of this permit, the permittee has progressed in the monitoring schedule listed above, the permittee may continue to advance accordingly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

Recordkeeping:

- 1) The permittee shall maintain records of all Method 22 observation results using Attachment L, or an equivalent form approved by the Air Pollution Control Program, noting whether any air emissions (except for water vapor) were visible from the emission source.
- 2) The permittee shall maintain records of all Method 9 observation results using Attachment M, or an equivalent form approved by the Air Pollution Control Program, noting whether the visible emissions (except for water vapor) exceeded the opacity limit.
- 3) The permittee shall maintain records of any equipment malfunctions using Attachment A or an equivalent form approved by the Air Pollution Control Program.
- 4) Records may be kept in either written or electronic form.
- 5) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 6) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
- 2) The permittee shall report any deviations from the emission limitations, monitoring, recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION 012	
Back-Up Fire Pump	
10 CSR 10-6.075 Maximum Achievable Control Technology Regulations	
40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
Emission Unit	Description
E001	310 HP CI Emergency Back-Up Fire Pump

Operational Limitations:

- 1) At all times the permittee shall operate and maintain the affected engine in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available including review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the engine. [§63.6605(b)]
- 2) The permittee shall meet the following requirements (except during periods of engine startup): [§63.6603(a)]
 - a) Change the engine oil and oil filter every 500 hours of operation or annually, whichever comes first;

- b) Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first;
 - c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- 3) The permittee shall operate the emergency stationary RICE according to the requirements in §63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under MACT ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in §63.6640(f)(1) through (4), is prohibited. If the permittee does not operate the engine according to the requirements in §63.6640(f)(1) through (4), the engine will not be considered an emergency engine under MACT ZZZZ and shall meet all requirements for non-emergency engines. [§63.6640(f)]
- a) There is no time limit on the use of emergency stationary RICE in emergency situations. [§63.6640(f)(1)]
 - b) The permittee may operate the emergency stationary RICE for any combination of the purposes specified in §63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by §63.6640(f)(4) counts as part of the 100 hours per calendar year allowed by this paragraph. [§63.6640(f)(2)]
 - i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [§63.6640(f)(2)(i)]
 - c) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in §63.6640(f)(2). Except as provided in §63.6640(f)(4)(ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [§63.6640(f)(4)]
 - i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [§63.6640(f)(4)(ii)]
 - (1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator. [§63.6640(f)(4)(ii)(A)]
 - (2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [§63.6640(f)(4)(ii)(B)]
 - (3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [§63.6640(f)(4)(ii)(C)]
 - (4) The power is provided only to the facility itself or to support the local transmission and distribution system. [§63.6640(f)(4)(ii)(D)]

- (5) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [§63.6640(f)(4)(ii)(E)]
- 4) If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required above, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee shall report any failure to perform the management practice on the schedule required and the Federal, State, or local law under which the risk was deemed unacceptable [§63.6603(a)]
- 5) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirements of this condition. The oil analysis shall be performed at every 500 hours of operation or annually. The analysis program shall at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee shall change the oil within two business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within two business days or before commencing operation, whichever is later. The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program shall be part of the maintenance plan for the engine. [§63.6625(i)]
- 6) The permittee shall install a non-resettable hour meter on this engine if one is not already installed. [§63.6625(f)]

Fuel Specifications:

If the emergency CI stationary RICE operates for the purpose specified in §63.6640(f)(4)(ii), the permittee shall use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [§63.6604(b)]

Recordkeeping:

- 1) The permittee shall retain the following records for this engine: [§63.6655(a)]
 - a) Records of the occurrence and duration of each malfunction of process equipment or any air pollution control and monitoring equipment and actions taken during periods of malfunction to minimize emissions including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [§63.6655(a)(2) and §63.6655(a)(5)]
 - b) Records of all required maintenance performed on the air pollution control and monitoring equipment. [§63.6655(a)(4)]

- c) Records that the engine was operated and maintained according to the manufacturer's emission-related operation and maintenance instructions or that a maintenance plan has been developed to provide for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [§63.6655(e)]
- d) The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(4)(ii), the permittee shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.: [§63.6655(f)]
- 2) Records shall be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
- 3) As specified in §63.10(b)(1), the permittee shall keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§63.6640(b)]
- 4) The permittee shall keep each record readily accessible in hard copy or electronic form for at least five years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). [§63.6660(c)]

Reporting:

- 1) The permittee shall report each instance in which you did not meet the requirements in Table 8 to MACT ZZZZ that apply. [§63.6640(e)]
- 2) If the emergency stationary RICE operates for the purpose specified in §63.6640(f)(4)(ii), the permittee shall submit an annual report according to the requirements in §63.6640(h)(1) through (3). [§63.6640(h)]
 - a) The report must contain the following information: [§63.6640(h)(1)]
 - i) Company name and address where the engine is located. [§63.6640(h)(1)(i)]
 - ii) Date of the report and beginning and ending dates of the reporting period. [§63.6640(h)(1)(ii)]
 - iii) Engine site rating and model year. [§63.6640(h)(1)(iii)]
 - iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. [§63.6640(h)(1)(iv)]
 - v) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report shall also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. [§63.6640(h)(1)(vii)]
 - vi) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period. [§63.6640(h)(1)(viii)]
 - vii) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken. [§63.6640(h)(1)(ix)]
 - b) The first annual report shall cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. [§63.6640(h)(2)]
- 3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to

MACT ZZZZ is not available in CEDRI at the time that the report is due, the written report shall be submitted to the Administrator at EPA Region 7, 11201 Renner Boulevard, Lenexa, Kansas 66219.

PERMIT CONDITION 013	
E001 Back-Up Fire Pump	
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds ¹	
Emission Unit	Description
E001	Back-Up Fire Pump

Emission Limitations:

- 1) The permittee shall not allow emissions from any new source operation to contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- 2) The permittee shall not allow stack gasses to contain more than 35 milligrams (mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 3) The permittee shall not cause nor permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Operational Limitation/Equipment Specifications:

The permittee shall accept, no later than January 1, 2017, only ultra-low sulfur distillate fuel oil with a maximum fuel sulfur content of 15 ppm, for delivery. [10 CSR 10-6.261(3)(D)] By complying with this operational limitation found in Permit Condition 012, the facility will be in compliance with this rule.

Monitoring/Recordkeeping/Reporting:

By complying with the monitoring, recordkeeping and reporting in Permit Condition 012, the facility will be considered in compliance with this permit condition.

PERMIT CONDITION 014	
E001 Back-Up Fire Pump	
10 CSR 10-6.261 Control of Sulfur Dioxide Emissions	
Emission Unit	Description
E001	Back-Up Fire Pump

Operational Limitation:

The permittee shall accept, no later than January 1, 2017, only ultra-low sulfur distillate fuel oil with a maximum fuel sulfur content of 15 ppm, for delivery. [10 CSR 10-6.261(3)(D)]

Monitoring/Recordkeeping:

- 1) The permittee shall demonstrate compliance using— [10 CSR 10-6.261(3)(E)3]
 - a) Fuel delivery records; or
 - b) Fuel sampling and analysis;
- 2) The permittee shall maintain a list of modifications to the source’s operating procedures or other routine procedures instituted to prevent or minimize the occurrence of any excess SO₂ emissions

¹This regulation was rescinded on November 30, 2015, but remains an applicable requirement as it remains in Missouri’s SIP. This regulation is federally enforceable only.

- 3) The permittee shall maintain a record of data, calculations, results, records, and reports from any SO₂ emissions fuel deliveries, and/or fuel sampling tests
- 4) The permittee shall maintain the fuel supplier certification information to certify all fuel deliveries. Bills of lading and/or other fuel delivery documentation containing the following information for all fuel purchases or deliveries are deemed acceptable to comply with the requirements of this rule:
 - a) The name, address, and contact information of the fuel supplier;
 - b) The type of fuel (bituminous or subbituminous coal, diesel, #2 fuel oil, etc.);
 - c) The sulfur content or maximum sulfur content expressed in percent sulfur by weight or in ppm sulfur; and
 - d) The heating value of the fuel
- 5) The permittee shall follow the requirements, for sources using fuel sampling and analysis, for compliance found in 10 CSR 10-6.261(5)(D). [10 CSR 10-6.261(4)(D)]
- 6) The permittee shall make all records available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 7) The permittee shall keep records in either written or electronic form for a minimum of five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
- 2) The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.
- 3) The permittee shall report any excess emissions other than startup, shutdown, and malfunction excess emissions already required to be reported under 10 CSR 10-6.050 to the staff director for each calendar quarter within 30 days following the end of the quarter. In all cases, the notification shall be a written report and shall include, at a minimum, the following: [10 CSR 10-6.261(4)(A)1]
 - a) Name and location of source;
 - b) Name and telephone number of person responsible for the source;
 - c) Identity and description of the equipment involved;
 - d) Time and duration of the period of SO₂ excess emissions;
 - e) Type of activity;
 - f) Estimate of the magnitude of the SO₂ excess emissions expressed in the units of the applicable emission control regulation and the operating data and calculations used in estimating the magnitude;
 - g) Measures taken to mitigate the extent and duration of the SO₂ excess emissions; and
 - h) Measures taken to remedy the situation which caused the SO₂ excess emissions and the measures taken or planned to prevent the recurrence of these situations.

PERMIT CONDITION 015	
P001 and P002	
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes	
Emission Unit	Description
P001	(4) Cuppers
P002	(4) Wet Can Elevators and (28) Bodymakers
P502	7,200 gallon Inside Spray Tank
P602	7,200 gallon Inside Spray Tank

Emission Limitations:

- 1) The permittee shall not emit particulate matter in excess of 13.47 lb/hr combined from P001 (4) Cuppers and 13.41 lb/hr combined from P002 (4) Wet Can Elevators and (28) Bodymakers.
- 2) The permittee shall not cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Monitoring/Recordkeeping:

- 1) The permittee shall maintain an operating and maintenance log for each emission unit using Attachment A or an equivalent form approved by the Air Pollution Control Program. The record shall be maintained in hard copy or electronic form. The log(s) shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc; and
- 2) The permittee shall retain a copy of the manufacturer's specifications.
- 3) Attachment N contains calculations documenting that the permittee is in compliance with the particulate matter emission limits without the aid of a control device.
- 4) Records may be kept in either written or electronic form.
- 5) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 6) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
- 2) The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 016		
P004, P005, and P006		
10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes		
Emission Unit	Description	Control Device
P004	(3) Basecoaters	CD05 Cartridge Filter
P005	(5) Printers	
	(5) Varnishers	
P006	(5) Inside Spray Machines	CD07 Baghouse

Emission Limitations:

- 1) The permittee shall not emit particulate matter in excess of 0.33 lb/hr combined from P004 (3) Basecoaters, 0.23 lb/hr combined from P005 (5) Printers, 0.85 lb/hr combined from P005 (5) Varnishers, and 1.48 lb/hr combined from P006 (5) Interior Spray Machines.
- 2) The permittee shall not cause, allow or permit the emission of particulate matter from any source in a concentration in excess of 0.30 grain per standard cubic foot of exhaust gases.

Operational Limitations:

- 1) The permittee shall control particulate emissions from these emission units using the specified control devices. The control device shall be equipped with a gauge or meter, which indicates the pressure drop across the filter medium. The gauge or meter shall be located such that Department of Natural Resources' employees may easily observe them. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
- 2) The permittee shall maintain and operate the control devices according to the manufacturer's specifications and recommendations.
- 3) The control devices shall be operated such that the minimum pressure drop across the control device is greater than or equal to 0.5" of water column.
 - a) Exception: Due to a lack of cake on the filter medium, the permittee is not restricted to a minimum pressure drop across the control device for the first 24 hours after replacement of a filter.

Monitoring/Recordkeeping:

- 1) The permittee shall monitor and record the operating pressure drop across the control devices at least once each operating day while the unit is operating. The operating pressure drop range shall be specified based on normal operation and manufacturer's recommendations.
- 2) The permittee shall maintain an operating and maintenance log for each control device using Attachment A or an equivalent form approved by the Air Pollution Control Program. The record shall be maintained in hard copy or electronic form. The log(s) shall include the following:
 - a) Incidents of malfunction, with impact on emissions, duration of the event, probable cause of the event, and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions, and replacements, etc; and
 - c) Dates and times of all filter replacements.
- 3) The permittee shall retain a copy of the manufacturer's specifications.
- 4) Attachment N contains calculations documenting that the permittee is in compliance with the particulate matter emission limits while the specified control devices are being properly maintained and operated.
- 5) Records may be kept in either written or electronic form.

- 6) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 7) All records shall be maintained for five years.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.
- 2) The permittee shall report any deviations from the emission limitations, monitoring/recordkeeping, and reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 017		
Basecoaters, Varnishers, Inside Spray Machines, and Ovens		
10 CSR 10-6.070 New Source Performance Regulations		
40 CFR Part 60, Subpart WW – Standards of Performance for the Beverage Can Surface Coating Industry		
Emission Unit	Description	Control Device
P004	(3) Basecoaters	CD06 Catalytic Reactor
	(3) 1.3 MMBtu/hr Basecoater Ovens	
P005	(5) 1.3 MMBtu/hr Printer Ovens	
P006	(5) Varnishers	
	(5) Inside Spray Machines	
	(4) 4.2 MMBtu/hr Inside Spray Bake Ovens	

Emission Limitations:

- 1) The permittee shall not discharge or cause the discharge of VOC emissions to the atmosphere that exceed the following volume-weighted calendar-month average emissions: [§60.492]
 - a) 0.29 kilogram of VOC per litre of coating solids from each two-piece can exterior base coating operation, except clear base coat; [§60.492(a)]
 - b) 0.46 kilogram of VOC per litre of coating solids from each two-piece can clear base coating operation and from each overvarnish coating operation; and [§60.492(b)]
 - c) 0.89 kilogram of VOC per litre of coating solids from each two-piece can inside spray coating operation. [§60.492(c)]

Demonstrating Compliance:

- 1) The permittee shall conduct a performance test each calendar month for each coating operation. [§60.493(b)]
- 2) Section 60.8(d) does not apply to monthly performance tests and §60.8(f) does not apply to the performance test procedures required by this subpart. [§60.493(a)]

Test Methods/Procedures:

- 1) The reference methods in 40 CFR Part 60 Subpart WW Appendix A, except as provided in §60.8, shall be used to conduct performance tests: [§60.496(a)]
 - a) Method 24, an equivalent or alternative method approved by the Administrator, or manufacturers' formulation data from which the VOC content of the coatings used for each affected facility can be calculated. In the event of a dispute, Method 24 data shall govern. When

VOC content of water-borne coatings, determined from data generated by Method 24, is used to determine compliance of affected facilities, the results of the Method 24 analysis shall be adjusted as described in Section 12.6 of Method 24. [§60.496(a)(1)]

- i) The coating sample shall be a one-litre sample collected in a one-litre container at a point where the sample will be representative of the coating material. [§60.496(b)]
- b) Method 25 or an equivalent or alternative method for the determination of the VOC concentration in the effluent gas entering and leaving the control device for each stack equipped with an emission control device. The permittee shall notify the Missouri Air Pollution Control Program at least 30 days in advance of any test using Method 25. The following reference methods are to be used in conjunction with Method 25: [§60.496(a)(2)]
 - i) Method 1 for sample and velocity traverses [§60.496(a)(2)(i)]
 - ii) Method 2 for velocity and volumetric flow rate [§60.496(a)(2)(ii)]
 - iii) Method 3 for gas analysis [§60.496(a)(2)(iii)]
 - iv) Method 4 for stack gas moisture. [§60.496(a)(2)(iv)]
 - v) For Method 25, the sampling time for each of three runs shall be at least one hour. The minimum sample volume shall be 0.003 dscm except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Administrator. The Administrator will approve the sampling of representative stacks on a case-by-case basis if the permittee can demonstrate to the satisfaction of the Administrator that the testing of representative stacks would yield results comparable to those that would be obtained by testing all stacks. [§60.496(c)]

Recordkeeping/Reporting:

- 1) Following the initial performance test, the permittee shall identify, record, and submit quarterly reports to the Administrator of each instance in which the volume-weighted average of the total mass of VOC per volume of coating solids, is greater than the limit specified under §60.492. If no such instances occur during a particular quarter, a report stating this shall be submitted to the Administrator semiannually. [§60.495(b)]
- 2) The permittee shall maintain at the source, for a period of at least five years, records of all data and calculations used to determine VOC emissions from each affected facility in the initial and monthly performance tests. [§60.495(d)]
- 3) Records may be kept in either written or electronic form.
- 4) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 5) All records shall be maintained for five years.
- 6) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 7) The permittee shall report any deviations from the emission limitations, demonstrating compliance, test methods/procedures, monitoring, and recordkeeping/reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 018 10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart WW – Standards of Performance for the Beverage Can Surface Coating Industry 10 CSR 10-6.060 Construction Permits Required Construction Permit 122016-007, Issued December 21, 2016	
Emission Unit	Description
B504	Line 5 Water Heater, 2.6MMBtu/hr, Natural Gas
B604	Line 6 Water Heater, 2.6MMBtu/hr, Natural Gas
B508	Line 5 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
B608	Line 6 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
P503	Line 5 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P603	Line 6 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P504	Line 5 Basecoater and Basecoater Oven, 2.52 MMBtu/hr
P505	Line 5 Varnisher and Decorator Oven, 2.52 MMBtu/hr natural gas
P605	Line 6 (2) Varnishers and (2) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P506	Line 5 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P606	Line 6 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P508	Line 5 Rinser Oven, 0.4 MMBtu/hr natural gas
P608	Line 6 Rinser Oven, 0.4 MMBtu/hr natural gas
F001	Lines 5 and 6 Cleanup Solvents
F002	Lines 5 and 6 Coders
T501	7,200 gallon Varnish Tank
T601	7,200 gallon Varnish Tank
T502	7,200 gallon Inside Spray Tank
T602	7,200 gallon Inside Spray Tank
-	Formaldehyde Formation in Ovens

Emission Limitations:

- 1) Special Condition 5C: The permittee shall emit less than 169.67 tons of VOC in any consecutive 12-month rolling period from Lines 5 and 6.
- 2) Special Condition 5A: The permittee shall not discharge VOC emissions to the atmosphere from the RTOs that exceed the following limitations:
 - a) 0.11 kilogram of VOC per liter of coating solids from each basecoat material.
 - b) 0.35 kilogram of VOC per liter of coating solids from each varnish material.
 - c) 0.20 kilogram of VOC per liter of coating solids from each inside spray material.
- 3) Special Condition 8A: The permittee shall calculate the potential emissions of all individual hazardous air pollutants for each alternate material and combine those potential emissions with all other potential emissions of that individual HAP associated with Lines 5 and 6 when considering switching to an alternative material for Lines 5 and 6 that is different from the materials listed in Construction Permit 122016-007, Issued December 21, 2016.
- 4) Special Condition 8B: The permittee shall seek approval from the Air Pollution Control Program prior to using an alternative material if the potential individual HAP emissions from Lines 5 & 6 combined while using the alternative material are greater than or equal to the SMAL. A listing of SMALs can be obtained at: <http://dnr.mo.gov/env/apcp/docs/cp-hapraltbl6.pdf>.

Demonstrating Compliance:

- 1) The permittee shall conduct a performance test each calendar month for each coating operation. [§60.493(b)(2)]
 - a) The permittee shall use the following procedures for each affected facility that uses a capture system and a control device that destroys VOC (e.g., incinerator) to comply with the emission limit specified under §60.492.
 - i) Determine the overall reduction efficiency (R) for the capture system and control device. For the initial performance test, the overall reduction efficiency (R) shall be determined as prescribed in paragraphs (b)(2)(i) (A), (B), and (C) of this section. In subsequent months, the owner or operator may use the most recently determined overall reduction efficiency for the performance test providing control device and capture system operating conditions have not changed. The procedure in paragraphs (b)(2)(i), (A), (B), and (C) of this section, shall be repeated when directed by the Administrator or when the owner or operator elects to operate the control device or capture system at conditions different from the initial performance test.
 - (1) Determine the fraction (F) of total VOC used by the affected facility that enters the control device using the following equation:

$$F = S_e H_e + S_h H_h, \text{ (5) } [\text{§60.493(b)(2)(i)(A)}]$$

where H_e and H_h shall be determined by a method that has been previously approved by the Administrator. The owner or operator may use the values of S_e and S_h specified in table 1 or other values determined by a method that has been previously approved by the Administrator.

Table 1—Distribution of VOC Emissions

Coating operation	Emission distribution	
	Coater/flashoff (S_e)	Curing oven (S_h)
Two-piece aluminum or steel can:		
Exterior base coat operation	0.75	0.25
Overvarnish coating operation	0.75	0.25
Inside spray coating operation	0.80	0.20

- (2) Determine the destruction efficiency of the control device (E) using values of the volumetric flow rate of each of the gas streams and the VOC content (as carbon) of each of the gas streams in and out of the device by the following equation:

$$E = \frac{\sum_{i=1}^n Q_{bi} C_{bi} - \sum_{j=1}^m Q_{aj} C_{aj}}{\sum_{i=1}^n Q_{bi} C_{bi}} \text{ (6) } [\text{§60.493(b)(2)(i)(B)}]$$

Where:

- n = the number of vents before the control device, and
- m = the number of vents after the control device.

(3) Determine overall reduction efficiency (R) using the following equation:

$$R = EF (7) [\S60.493(b)(2)(i)(C)]$$

ii) Calculate the volume-weighted average of the total mass of VOC per volume of coating solids (G) used during the calendar month for the affected facility using the following three equations [§60.493(b)(2)(ii)]:

$$M_o + M_d = \sum_{i=1}^n L_{ci} D_{ci} W_{oi} + \sum_{j=1}^m L_{dj} D_{dj} (1)$$

$\Sigma L_{dj} D_{dj}$ will be zero if no VOC solvent is added to the coatings, as received.

Where:

n = the number of different coatings used during the calendar month

m = the number of different diluent VOC-solvents used during the calendar month.

[§60.493(b)(1)(i)(A)]

Calculate the total volume of coating solids used (L_s) in the calendar month for the affected facility by the following equation:

$$L_s = \sum_{i=1}^n L_{ci} V_{si} (2)$$

Where:

n = the number of different coatings used during the calendar month.

[§60.493(b)(1)(i)(B)]

Calculate the volume-weighted average mass of VOC per volume of solids used (G) during the calendar month for the affected facility by the following equation:

$$G = \frac{M_o + M_d}{L_s} (3) [\S60.493(b)(1)(i)(C)]$$

iii) Calculate the volume-weighted average of VOC emissions discharged to the atmosphere (N) during the calendar month by the following equation:

$$N = G x [1 - R] (8) [\S60.493(b)(2)(iii)]$$

iv) If the volume-weighted average of mass of VOC emitted to the atmosphere for the calendar month (N) is equal to or less than the applicable emission limit specified under §60.492, the affected facility is in compliance.

2) Section 60.8(d) does not apply to monthly performance tests and §60.8(f) does not apply to the performance test procedures required by this subpart. [§60.493(a)]

Test Methods/Procedures:

1) The reference methods in 40 CFR Part 60 Subpart WW Appendix A, except as provided in §60.8, shall be used to conduct performance tests: [§60.496(a)]

- a) Method 24, an equivalent or alternative method approved by the Administrator, or manufacturers' formulation data from which the VOC content of the coatings used for each affected facility can be calculated. In the event of a dispute, Method 24 data shall govern. When VOC content of water-borne coatings, determined from data generated by Method 24, is used to determine compliance of affected facilities, the results of the Method 24 analysis shall be adjusted as described in Section 12.6 of Method 24. [§60.496(a)(1)]
 - i) The coating sample shall be a one-litre sample collected in a one-litre container at a point where the sample will be representative of the coating material. [§60.496(b)]
- b) Method 25 or an equivalent or alternative method for the determination of the VOC concentration in the effluent gas entering and leaving the control device for each stack equipped with an emission control device. The permittee shall notify the Missouri Air Pollution Control Program at least 30 days in advance of any test using Method 25. The following reference methods are to be used in conjunction with Method 25: [§60.496(a)(2)]
 - i) Method 1 for sample and velocity traverses [§60.496(a)(2)(i)]
 - ii) Method 2 for velocity and volumetric flow rate [§60.496(a)(2)(ii)]
 - iii) Method 3 for gas analysis [§60.496(a)(2)(iii)]
 - iv) Method 4 for stack gas moisture. [§60.496(a)(2)(iv)]
 - v) For Method 25, the sampling time for each of three runs shall be at least one hour. The minimum sample volume shall be 0.003 dscm except that shorter sampling times or smaller volumes, when necessitated by process variables or other factors, may be approved by the Administrator. The Administrator will approve the sampling of representative stacks on a case-by-case basis if the permittee can demonstrate to the satisfaction of the Administrator that the testing of representative stacks would yield results comparable to those that would be obtained by testing all stacks. [§60.496(c)]

Recordkeeping/Reporting:

- 1) Following the initial performance test, the permittee shall identify, record, and submit quarterly reports to the Administrator of each instance in which the volume-weighted average of the total mass of VOC per volume of coating solids, is greater than the limit specified under §60.492. If no such instances occur during a particular quarter, a report stating this shall be submitted to the Administrator semiannually. [§60.495(b)]
- 2) Where compliance with §60.492 is achieved through the use of thermal incineration, each 3-hour period when cans are processed, during which the average temperature of the device was more than 28 °C below the average temperature of the device during the most recent performance test at which destruction efficiency was determined as specified under §60.493. [§60.495(c)(1)]
- 3) The permittee shall maintain at the source, for a period of at least five years, records of all data and calculations used to determine VOC emissions from each affected facility in the initial and monthly performance tests. [§60.495(d)]
- 4) Special Condition 5D: Attachment G or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program shall be used to demonstrate compliance with the VOC emission limitations.
- 5) Special Condition 8C: Attachment H or an equivalent form, such as an electronic forms, approved by the Air Pollution Control Program shall be used to demonstrate compliance with any alternative Inks/Coatings/Solvents/Cleaning materials utilized that are different from those materials listed in the Application for Authority to Construct under Construction Permit, 122016-007, Issued December 21, 2016
- 6) Records may be kept in either written or electronic form.

- 7) These records shall be made available immediately for inspection to Department of Natural Resources' personnel upon request.
- 8) All records shall be maintained for five years.
- 9) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 10) The permittee shall report any deviations from the emission limitations, demonstrating compliance, test methods/procedures, monitoring, and recordkeeping/reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 019		
10 CSR 10-6.060 Construction Permits Required		
Lowest Achievable Emission Rate (LAER) Capture Requirements		
Construction Permit 122016-007, Issued December 21, 2016		
Emission Unit	Description	Control Device
P504	Line 5 Basecoater and Basecoater Oven 2.52 MMBtu/hr	Line 5 Regenerative Thermal Oxidizer 2.2 MMBtu/hr natural gas
P505	Line 5 Varnisher and Decorator Oven 2.52 MMBtu/hr natural gas	Line 5 Regenerative Thermal Oxidizer 2.2 MMBtu/hr natural gas
P605	Line 6 (2) Varnishers and (2) Decorator Ovens 2.52 MMBtu/hr each natural gas	Line 6 Regenerative Thermal Oxidizer 2.2 MMBtu/hr natural gas
P506	Line 5 Inside Spray and Inside Spray Oven 3.43 MMBtu/hr natural gas	Line 5 Regenerative Thermal Oxidizer 2.2 MMBtu/hr natural gas
P606	Line 6 Inside Spray and Inside Spray Oven 3.43 MMBtu/hr natural gas	Line 6 Regenerative Thermal Oxidizer 2.2 MMBtu/hr natural gas

Emission Limitations:

- 1) Special Condition 3A: The permittee shall design, construct, operate, and maintain equipment to capture VOC and HAP emissions from P504 Basecoater and Basecoater Oven, P505 Printer, Varnisher, and Decorator Oven, P605 Printers, Varnishers, and Decorator Ovens, P506 Inside Spray and Inside Spray Oven, and P606 Inside Spray and Inside Spray Oven.
- 2) Special Condition 3B: The permittee shall maintain an overall capture efficiency of Line 5 greater than or equal to 74.6%.
- 3) Special Condition 3C: The permittee shall maintain an overall capture efficiency of Line 6 greater than or equal to 75.1%.

Operational Limitations:

Special Condition 3D: The permittee shall determine the overall capture efficiency of each line during each RTO destruction efficiency test according to the performance testing requirements in Permit Condition 020.

Monitoring/Recordkeeping:

- 1) Special Condition 3E: The permittee shall create an operating and maintenance manual for the capture systems. The operating and maintenance manual shall:
 - a) Identify each capture system pickup point;
 - b) List all maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
 - c) List all SSM hours, with date, start time, end time, and duration of event.

- 2) Special Condition 3F: The permittee shall install static pressure monitoring devices at each of the capture system pick-up points. Measurements shall be taken at least once every 15 minutes. The permittee shall record each measurement. The static pressure shall be negative at each pickup point.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program’s Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitations, demonstrating compliance, test methods/procedures, monitoring, and recordkeeping/reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit

PERMIT CONDITION 020 Regenerative Thermal Oxidizers (RTOs) 10 CSR 10-6.060 Construction Permits Required Lowest Achievable Emission Rate (LAER) Control Device Requirements Construction Permit 122016-007, Issued December 21, 2016	
Emission Unit	Description
B508	Line 5 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
B608	Line 6 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
P504	Line 5 Basecoater and Basecoater Oven, 2.52 MMBtu/hr
P505	Line 5 Varnisher and Decorator Oven, 2.52 MMBtu/hr natural gas
P605	Line 6 (2) Varnishers and (2) Decorator Ovens 2.52 MMBtu/hr each natural gas
P506	Line 5 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P606	Line 6 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas

Emission Limitations:

- 1) Special Condition 4B: The destruction efficiency of each of the regenerative thermal oxidizers shall be greater than or equal to 98%.²

Operational Limitations:

- 1) Special Condition 4A: The permittee shall control VOC and HAP emissions from P504 Basecoater and Basecoater Oven, P505 Printer, Varnisher, and Decorator Oven, P605 Printers, Varnishers, and Decorator Ovens, P506 Inside Spray and Inside Spray Oven, and P606 Inside Spray and Inside Spray Oven using regenerative thermal oxidizers as specified in Construction Permit 122016-007.
- 2) The permittee shall determine the overall capture efficiency of each line during each RTO destruction efficiency test according to the performance testing requirements.

Performance Testing

- 1) Special Condition 11A: The permittee shall conduct performance testing to determine the destruction

² In cases of insufficient loading to an RTO, compliance with a high destruction efficiency is unachievable. If such a situation exists, the Permittee may comply with an alternative standard of less than or equal to 30 ppm VOC in the ROT outlet exhaust stream.

efficiency of the RTOs (for compliance with Special Condition 4.B) and to establish the minimum three-hour rolling average RTO operating temperature (for Special Condition 4.D). Initial testing shall occur no later than 60 days after achieving maximum production of each line, but no later than 180 days after the initial startup of each line. Subsequent testing shall occur once per year no later than 365 days after the most recent test.

- 2) Special Condition 11B: The permittee shall conduct performance testing to verify that the average formaldehyde emission rate from both RTOs combined does not exceed 1.18×10^{-6} lb/can. If the average formaldehyde emission rate exceeds 1.18×10^{-6} lb/can, the permittee shall apply for an amendment to Construction Permit 122016-007 no later than 180 days after the stack test date. The amendment application shall include formaldehyde modeling demonstrating that formaldehyde emissions from Lines 5 and 6 combined do not exceed Missouri's formaldehyde RAL.
- 3) Special Condition 11C: During each RTO performance test, the permittee shall determine the capture efficiency of each capture system (for compliance with Special Conditions 3.B and 3.C) by:
 - a) Determining the potential uncontrolled VOC emissions (lb/hr) from each lines' basecoater, printers, varnishers, and inside spray machines by:
 - i) Recording the amount of each material used by each basecoater, printer, varnisher, and inside spray machine during each RTO performance test run.
 - ii) Calculating the potential uncontrolled VOC emissions during each RTO performance test run using the VOC contents from the SDS for each material used.
 - b) Determine the capture efficiency of the line by dividing the RTO inlet VOC emissions by the sum of all potential uncontrolled VOC emissions from the lines' basecoater, printer(s), varnisher(s), and inside spray machine.
 - c) The average capture efficiency for each line from all three performance test runs shall be used to determine compliance.
- 4) Special Condition 11D: The permittee shall determine the appropriate EPA test method for determining their VOC emissions by conducting a pre-survey using Method 18, Method 207, or other approved test method, to ensure that the ratio of known VOC peak area to total VOC peak area is at least 95%.
- 5) Special Condition 11E: A completed Proposed Test Plan Form shall be submitted to the Air Pollution Control Program 30 days prior to the proposed test date so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and shall be approved by the Director prior to conducting the required emission testing.
- 6) Special Condition 11F: One electronic report of the performance test results shall be submitted to the Director within 30 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one sample run.
- 7) Special Condition 11G: The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations, including:
 - a) The quantity of cans produced by each line during each performance test run.

Monitoring/Recordkeeping:

- 1) Special Condition 4C: The permittee shall monitor and record the combustion chamber operating temperature of each RTO at least once every 15 minutes. The combustion chamber temperature shall be monitored in the firebox of the thermal oxidizer. Each temperature measurement device shall be installed, calibrated, and maintained according to the manufacturer's specifications. The device shall

have an accuracy of 0.75% of the temperature being measured, expressed in degrees Celsius, or $\pm 2.5^{\circ}\text{C}$, whichever is greater.

- 2) Special Condition 4D: The permittee shall maintain the three-hour rolling average operating temperature at a value greater than or equal to the three-hour average operating temperature during the most recent Air Pollution Control Program approved stack test.
- 3) Special Condition 4E: The permittee shall maintain an operating and maintenance log for the regenerative thermal oxidizers which shall include the following:
 - a) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.; and
 - b) SSM hours, with date, start time, end time, and duration of event.
- 4) Attachment G or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program shall be used to demonstrate compliance with the VOC limitations.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program’s Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitations, demonstrating compliance, test methods/procedures, monitoring, and recordkeeping/reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit

PERMIT CONDITION 021 Control Device Requirements – Mist Eliminators 10 CSR 10-6.060 Construction Permits Required Construction Permit 122016-007, Issued December 21, 2016		
Emission Unit	Description	Control Device
P502	Line 5 Bodymaker Process	Mist Eliminator
P602	Line 6 Bodymaker Process	Mist Eliminator

Operational Limitations:

- 1) Special Condition 6A: The permittee shall control particulate emissions from P502 Bodymaker Process and P602 Bodymaker Process using mist eliminators.
- 2) Special Condition 6B: The permittee shall operate and maintain the mist eliminators in accordance with the manufacturer’s specifications. The mist eliminators shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. The gauges/meters shall be located such that the Department of Natural Resources’ employees may easily observe them.
- 3) Special Condition 6C: The permittee shall keep replacement mesh pads on hand at all times. The mesh pads shall be made of fibers appropriate for operating conditions expected to occur, such as temperature limits, acidic and alkali resistance and abrasion resistance.

Monitoring/Recordkeeping:

- 1) Special Condition 6D: The permittee shall monitor and record the operating pressure drop across the mist eliminators at least once every 24 hours. The operating pressure drop shall be maintained at great than or equal to 0.2 in H₂O. If the operating pressure drop is less than 0.2 in. H₂O, the permittee shall take corrective action within eight hours. Corrective action may include any of the following:
 - a) Filter replacement and/or;

- b) Repair leaks in hoses and drain lines
- 2) Special Condition 6E: The permittee shall maintain an operating and maintenance log for the mist eliminators which shall include the following:
 - a) Incidents of malfunction, with impacts on emissions, duration of event, probably cause and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions and replacements.

Reporting:

The permittee shall report any deviations from the emission limitations, demonstrating compliance, test methods/procedures, monitoring, and recordkeeping/reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit

PERMIT CONDITION 022 Control Device Requirements – Baghouses 10 CSR 10-6.060 Construction Permits Required Construction Permit 122016-007, Issued December 21, 2016		
Emission Unit	Description	Control Device
P506	Line 5 Inside Spray and Inside Spray Oven 3.43 MMBtu/hr natural gas	Baghouse
P606	Line 6 Inside Spray and Inside Spray Oven 3.43 MMBtu/hr natural gas	Baghouse
P508	Line 5 Rinser Oven, 0.4 MMBtu/hr natural gas	Baghouse
P608	Line 6 Rinser Oven, 0.4 MMBtu/hr natural gas	Baghouse

Operational Limitations:

- 1) Special Condition 7A: The permittee shall control particulate emissions from P506 Inside Spray Process, P606 Inside Spray Process, P508 Necker Process, and P608 Necker Process using baghouses as specified in Construction Permit 122016-007.
- 2) Special Condition 7B: The permittee shall operate and maintain the mist baghouses in accordance with the manufacturer’s specifications. The baghouses shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. The gauges/meters shall be located such that the Department of Natural Resources’ employees may easily observe them.
- 3) Special Condition 7C: The permittee shall keep replacement filters on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur, such as temperature limits, acidic and alkali resistance and abrasion resistance.

Monitoring/Recordkeeping:

- 1) Special Condition 7D: The permittee shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained at great than or equal to 0.2 in H₂O. Attachment O or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program shall be used to demonstrate compliance with the operating pressure drop requirements. . If the operating pressure drop is less than 0.2 in. H₂O, the permittee shall take corrective action within eight hours. Corrective action may include any of the following:
 - a) Baghouse replacement
 - b) Component replacement (if plugged or worn)
 - c) Repair leaks in housing, ducts, and hoods

- d) Repair fan
- 2) Special Condition 7E: The permittee shall maintain an operating and maintenance log for the baghouses which shall include the following:
 - a) Incidents of malfunction, with impacts on emissions, duration of event, probable cause and corrective actions;
 - b) Maintenance activities, with inspection schedule, repair actions and replacements.
 - c) Attachment A or equivalent forms such as electronic forms, approved by the Air Pollution Control Program shall be used for the operating and maintenance log for the baghouses.

PERMIT CONDITION 023 Fuel Restriction 10 CSR 10-6.060 Construction Permits Required Lowest Achievable Emission Rate (LAER) Capture Requirements Construction Permit 122016-007, Issued December 21, 2016	
Emission Unit	Description
B504	Line 5 Water Heater, 2.6MMBtu/hr, Natural Gas
B604	Line 6 Water Heater, 2.6MMBtu/hr, Natural Gas
B508	Line 5 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
B608	Line 6 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
P503	Line 5 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P603	Line 6 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P504	Line 5 Basecoater and Basecoater Oven, 2.52 MMBtu/hr
P505	Line 5 Varnisher and Decorator Oven, 2.52 MMBtu/hr natural gas
P605	Line 6 (2) Varnishers and (2) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P506	Line 5 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P606	Line 6 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P508	Line 5 Rinser Oven, 0.4 MMBtu/hr natural gas
P608	Line 6 Rinser Oven, 0.4 MMBtu/hr natural gas

Operational Limitations:

Special Condition 13: The permittee shall exclusively combust pipeline-grade natural gas in the water heaters (B504 & B604), thermal oxidizers (B508 & B608), can washer ovens (P503 & P603), basecoater oven (P504), decorator ovens (P505 & P605), inside spray ovens (P506 & P606), and rinser ovens (P508 & P608).

Reporting:

The permittee shall report any deviations from the emission limitations, demonstrating compliance, test methods/procedures, monitoring, and recordkeeping/reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit.

PERMIT CONDITION 024	
10 CSR 10-5.300 Control of Emissions From Solvent Metal Cleaning	
Emission Unit	Description
F001	Lines 5 and 6 Cleanup Solvents

Emission Limitations:

The permittee shall ensure that the parts washer associated with F001 Cleanup Solvents uses a solvent that has a vapor pressure of less than or equal to 1.0 mmHg at 20°C.

Operational Limitations:

- 1) The permittee shall ensure that each cold cleaner has a cover which prevents the escape of solvent vapors from the solvent bath while in the closed position or an enclosed reservoir which limits the escape of solvent vapors from the solvent bath whenever parts are not being processed in the cleaner.
- 2) The permittee shall affix a permanent conspicuous label summarizing the operating procedures to the equipment or in a location readily visible during operation of the equipment.
- 3) The permittee shall ensure that each cold cleaner has an internal drainage facility so that parts are enclosed under the cover while draining.
- 4) The permittee shall ensure that cleaned parts will be drained in the freeboard area for at least fifteen (15) seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner.
- 5) The permittee shall shut down the cold cleaner system immediately and it shall remain shut down until operation is restored to meet the rule operating requirements whenever a cold cleaner fails to perform within the rule operating requirements.
- 6) The permittee shall repair solvent leaks immediately or the cold cleaner shall be shut down until the leaks are repaired.
- 7) The permittee shall dispose of any waste material removed from a cold cleaner by one (1) of the following methods or an equivalent method approved by the director and EPA:
 - a) Reduction of the waste material to less than twenty percent (20%) VOC solvent by distillation and proper disposal of the still bottom waste;
 - b) or stored in closed containers for transfer to
 - i) A contract reclamation service; or
 - ii) A disposal facility approved by the director and EPA.
- 8) The permittee shall store waste solvent in closed containers only
- 9) The permittee shall ensure that only persons trained in at least the operational and equipment requirements specified in this condition for their particular solvent metal cleaning process shall be permitted to operate the equipment.
- 10) The permittee shall ensure that any person who supervises any person who operates solvent cleaning equipment subject to this condition shall receive equal or greater operational training than the operator.
- 11) The permittee shall complete a procedural review to all solvent metal cleaning equipment operators at least once every twelve (12) months.

Recordkeeping:

- 1) The permittee shall keep records of all types and amounts of solvents containing waste material from cleaning or degreasing operations transferred either to a contract reclamation service or to a disposal

- facility and all amounts distilled on the premises by utilizing Attachment P or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program.
- 2) The permittee shall also maintain records of all maintenance and any repair logs for both the degreaser and any associated control equipment utilizing Attachment A or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program
 - 3) The permittee shall maintain records which include for each purchase of cold cleaning solvent by utilizing Attachment Q or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program and ensuring the form includes the following information:
 - a) The name and address of the solvent supplier;
 - b) The date of purchase;
 - c) The type of solvent; and
 - d) The vapor pressure of the solvent in mmHg at twenty degrees Celsius (20 °C) (sixty-eight degrees Fahrenheit (68 °F))
 - 4) The permittee shall keep records of all solvent metal cleaning training by utilizing Attachment R or an equivalent form, such as an electronic form, approved by the Air Pollution Control Program.
 - 5) The permittee shall keep all records current and make them available for review on a monthly basis.
 - 6) The permittee shall retain all records for five (5) years and they shall be made available to the director upon request.

Reporting:

- 1) The permittee shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after records indicate an exceedance of the emission limit.
- 2) The permittee shall report any deviations from the emission limitations, demonstrating compliance, test methods/procedures, monitoring, and recordkeeping/reporting requirements of this permit condition in the semi-annual monitoring report and compliance certification required by Section V of this permit

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following are only excerpts from the regulation or code, and are provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information to the director in writing at least ten days prior to any maintenance, start-up or shutdown activity which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, notice shall be given as soon as practicable prior to the activity.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. The permittee shall retain the most current operating permit issued to this installation on-site. The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos

The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

10 CSR 10-6.100 Alternate Emission Limits

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.110 Reporting of Emission Data, Emission Fees and Process Information

- 1) The permittee shall submit a Full Emissions Report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 3) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.165 Restriction of Emission of Odors

This requirement is not federally enforceable.

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

10 CSR 10-6.170

Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

Emission Limitation:

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

Monitoring:

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
 - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
 - b) If a violation is noted, monitoring reverts to weekly.
 - c) Should no violation of this regulation be observed during this period then-

- i) The permittee may observe once per month.
 - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Recordkeeping:

The permittee shall document all readings on Attachment L, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether equipment malfunctions contributed to an exceedance.
- 3) Any violations and any corrective actions undertaken to correct the violation.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees.

10 CSR 10-6.280 Compliance Monitoring Usage

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at an installation:
 - a) Monitoring methods outlined in 40 CFR Part 64;

- b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited

No owner or operator shall operate applicable hand-fired fuel burning equipment unless the owner or operator meets the conditions set forth in 10 CSR 10-5.040. This regulation shall apply to all hand-fired fuel-burning equipment at commercial facilities including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing or to other equipment exempted under 10 CSR 10-5.040. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

10 CSR 10-5.060 Refuse Not to be Burned in Fuel Burning Installations (Rescinded on February 11, 1979, Contained in State Implementation Plan)

No person shall burn or cause or permit the burning of refuse in any installation which is designed for the primary purpose of burning fuel.

10 CSR 10-5.120 Information on Sales of Fuels to be Provided and Maintained

Every delivery of coal or residual fuel oil when first delivered to a consumer or wholesaler in the St. Louis metropolitan area must be accompanied by a ticket prepared in triplicate and containing at least the name and address of the seller and the buyer; the grade of fuel; ash content of coal, the source of the fuel, which must be an approved source, and such other information as the Air Conservation Commission may require. One copy of each ticket shall be kept by the person delivering the fuel and be retained for one year; one copy is to be given to the recipient of the fuel to be retained for one year; and, upon request, within 30 days after delivery of the fuel, the delivering party shall mail one copy to the Air Conservation Commission.

10 CSR 10-5.130 Certain Coals to be Washed

The permittee shall not import, sell, offer for sale, expose for sale, exchange, deliver or transport for use and consumption in the St. Louis metropolitan area or use or consume in the said area any coal which as mined containing in excess of 2.0% sulfur or 12.0% ash calculated as described in 10 CSR 10-5.110, unless it has been cleaned by a process known as "washing" so that it shall contain no more than 12.0% ash on a dry basis. The term "washing" is meant to include purifying, cleaning, or removing impurities from coal by mechanical process, regardless of cleaning medium used.

40 CFR Part 82 Protection of Stratospheric Ozone (Title VI)

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to 40 CFR §82.106.
 - b) The placement of the required warning statement must comply with the requirements of 40 CFR §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements of 40 CFR §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in 40 CFR §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B of 40 CFR Part 82:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices described in 40 CFR §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment described in 40 CFR §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the record keeping requirements of 40 CFR §82.166. ("MVAC-like" appliance as defined at 40 CFR §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to 40 CFR §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements contained in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82.*

V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements

- 1) Record Keeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program, Compliance and Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - c) Each report shall identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
 - ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
 - iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.

- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

If the installation is required to develop and register a risk management plan pursuant to Section 112(R) of the Act, the permittee will verify that it has complied with the requirement to register the plan.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

The permittee may switch coatings at any time provided that the new coatings still achieve compliance with the VOC lb/gallon emission limitations and their percent solids do not exceed those stated in Attachment N.

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
 - c) Whether compliance was continuous or intermittent;
 - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
 - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
 - a) The applicable requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
 - a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
 - c) The applicable requirements of the acid rain program,
 - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
 - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an

emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the APCP shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the APCP as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the APCP as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the permit, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide contemporaneous written notice of the change to the Air Pollution Control Program, Compliance and Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3 of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
 - d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)34 Responsible Official

The application utilized in the preparation of this permit was signed by Ms. Cheryl Rogers, Plant Manager. On October 6, 2016, the Air Pollution Control Program was informed that Mr. Thomas Yanske, Plant Manager is now the responsible official. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification

shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) MDNR or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire;
or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit;
or
- 5) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

VI. Attachments

Attachments follow.

Attachment C
 Construction Permit 0279-001 Lines 1 – 4 VOC Emissions

Emission Unit	Description	Chemical Stored/Used (Name and CAS No.)¹	Monthly Usage (1000 gallons)	Emission Factor^{2,3,4} (lb/1000 gallons)	VOC Emissions (lb/month)	
T001	(4) 10,000 gallon Tanks					
T002						
T003						
T004						
T008	(3) 3,000 gallon Tanks					
Diesel Tanks	1,000 gallon Tank					
	900 gallon Tank					
T002A	(6) 500 gallon Tanks					
T003A						
T004A						
			(gallons)	(lb/gallon)	(lb/month)	
P004	Basecoating					
P005	Printing					
P006	Varnishing					
	Inside Spray					
F001	Clean-Up Solvent					
			(1000 gallons)	(lb/1000 gallons)	(lb/month)	
E001	Diesel Combustion			49.3		
			(MMscf)	(lb/MMscf)	(lb/month)	
B001 – B006 and P003 – P006	Natural Gas Combustion			5.5		
Lines 1 - 4 Monthly SSM Emissions (lb/month): ⁵						
Lines 1 – 4 VOC Emissions (lb/month):⁶						

¹The permittee shall document the chemical stored/used during the reporting period.

²Tank emission factors shall be obtained from EPA's TANKS 4.0 for the chemical stored/used.

³P004, P005, P006, and F001 emission factors shall be calculated based upon the density and VOC wt% obtained from SDS as follows: Uncontrolled Emission Factor = Density (lb/gallon) x VOC wt%. %. If the specific gravity is provided, density (lb/gal) = specific gravity x 8.33.

⁴The permittee may include a capture efficiency of 80% to the basecoating and inside spray emission factors. The permittee may include a capture efficiency of 50% to the printing and varnishing emission factors. The permittee may include a destruction efficiency of 90% to the basecoating, printing, varnishing, and inside spray emission factors. The controlled emission factor shall be calculated as follows:
$$\text{Controlled Emission Factor} = \text{Uncontrolled Emission Factor} \times \left(1 - \frac{\% \text{ Captured}}{100}\right) \times \left(1 - \frac{\% \text{ Destroyed}}{100}\right)$$

⁵As reported to the Air Pollution Control Program's Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050.

⁶Lines 1 – 4 VOC Emissions (lb/month) = the sum of each individual emission unit's VOC Emissions (lbs/month) + Lines 1 – 4 Monthly SSM Emissions (lb/month).

Attachment C Continued
 Construction Permit 0279-001 VOC Emissions

Tank Standing Losses				
Emission Unit	Chemical Stored/Used (Name and CAS No.)¹	Tank Capacity (1000 gallons)	Emission Factor (lb/1000 gallon-year)²	VOC Emissions (ton/year)
T001		10		
T002		10		
T003		10		
T004		10		
T008		3		
		3		
		3		
Diesel Tanks		1		
		0.9		
T002A		0.5		
T003A		0.5		
		0.5		
T004A		0.5		
		0.5		
		0.5		
Tank Standing Losses (ton/year):				

¹The permittee shall document the chemical stored/used during the reporting period.

²Tank emission factors shall be obtained from EPA's TANKS 4.0 for the chemical stored/used.

Month and Year	Monthly VOC Emissions (ton/month)³	12-Month Rolling Total VOC Emissions (ton/year)⁴

$$^3\text{Monthly VOC Emissions (ton/month)} = \frac{\text{VOC Emissions (lb/month) from Attachment C}}{2000 \text{ lb/ton}} + \frac{\text{Tank Standing Losses (ton/yr)}}{12 \text{ month/yr}}$$

⁴12-Month Rolling Total VOC Emissions (ton/yr) = The sum of the most recent 12 Monthly VOC Emissions (tons/month)

Attachment D
 Installation-wide Combined HAP Compliance Worksheet

This sheet covers the month of _____ in the year of _____.

Storage Tanks – Working Losses					
Emission Point	Description	Name of Material Stored	Monthly Usage (Mgal)	Emission Factor³ (lb/Mgal)	HAP Emissions⁴ (lb/month)
T002	10,000 gallon Basecoat Bulk Tank				
T003	10,000 gallon Varnish Bulk Tank				
T004	10,000 gallon Inside Spray Bulk Tank				
Diesel Tanks	1,000 gallon Tank				
	900 gallon Tank				
T002A	500 gallon Basecoat Day Tank				
T003A	(2) 500 gallon Varnish Day Tanks				
T004A	(3) 500 gallon Inside Spray Day Tanks				
T501	7,200 gallon Varnish Tank			7.99E-04	
T601	7,200 gallon Varnish Tank			7.99E-04	
Storage Tanks – Breathing Losses					
Emission Point	Description	Name of Material Stored	HAP Emissions³ (lb/yr)	HAP Emissions⁵ (lb/month)	
T002	10,000 gallon Basecoat Bulk Tank				
T003	10,000 gallon Varnish Bulk Tank				
T004	10,000 gallon Inside Spray Bulk Tank				
Diesel Tanks	1,000 gallon Tank				
	900 gallon Tank				
T002A	500 gallon Basecoat Day Tank				
T003A	(2) 500 gallon Varnish Day Tanks				
T004A	(3) 500 gallon Inside Spray Day Tanks				
T501	7,200 gallon Varnish Tank		1.48E-02		
T601	7,200 gallon Varnish Tank		1.48E-02		

³Tank emission factors shall be obtained from EPA’s TANKS 4.0.9d for the chemical stored/used. The permittee shall maintain a copy of the TANKS 4.0.9d detailed annual emissions report printout for each tank so that the emission factors can be verified.

⁴HAP Emissions (lb/month) = Monthly Usage (Mgal) x HAP Emission Factor (lb/Mgal).

⁵HAP Emissions (lb/month) = HAP Emissions (lb/yr) / 12 (months/yr)

	Production (Mcan)	Factor ¹² (lb/Mcan)	(%)	(% of operating time)	Emissions ¹⁴ (lb/month)
1		0.0214			
2		0.0214			
3		0.0214			
4		0.0214			
5		0.0214			
6		0.0108			
Diesel Combustion					
Emission Point	Description	Monthly Fuel Usage (Mgal)	HAP Emission Factor ¹⁵ (lb/Mgal)	HAP Emissions ¹⁶ (lb/month)	
E001	Fire Pump Engine		0.53068		
Natural Gas Combustion					
Emission Points		Monthly Fuel Usage (MMscf)	HAP Emission Factor ¹⁷ (lb/MMscf)	HAP Emissions ¹⁸ (lb/month)	
B001, B002, B003, B004, B504 B604, B005, B006, B508, B608, P003, P503, P603, P004, P504, P005, P505, P605, P006, P506, P606, P508, & P608			1.8885		
Installation-wide Monthly HAP Emissions¹⁹ (lb/month):					
Installation-wide Monthly HAP Emissions²⁰ (tons/month):					
Installation-wide 12-Month Rolling Total HAP Emissions²¹ (tons):					

¹³ As obtained from the most recent Air Pollution Control Program approved stack test. The currently approved destruction efficiency for Lines 1 - 4 is 90%. The currently approved destruction efficiency for Lines 5 and 6 is 98%.

¹² This emission factor is obtained from stack testing. Lines with basecoaters shall use the formaldehyde emission factor obtained from Line 5 stack test results. Lines without basecoaters or lines not operating their basecoater shall use the formaldehyde emission factor obtained from Line 6 stack test results.

¹⁴ HAP Emissions (lb/month) = Monthly Production (Mcan) x Formation Factor (lb/Mcan) x [1 – Destruction Efficiency (%) x (1 – SSM Time (% of operating time))]

¹⁵ Sum of Individual HAP emission factors in AP-42 Table 3.3-2 (October 1996) and a diesel heating value of 137 MMBtu/Mgal from AP-42 Appendix A (September 1985).

¹⁶ HAP Emissions (lb/month) = Monthly Fuel Usage (Mgal) x HAP Emission Factor (lb/Mgal).

¹⁷ Sum of Individual HAP emission factors in AP-42 Tables 1.4-2, 1.4-3, and 1.4-4 (July 1998).

¹⁸ HAP Emissions (lb/month) = Monthly Fuel Usage (MMscf) x HAP Emission Factor (lb/MMscf).

¹⁹ Installation-wide Monthly HAP Emissions (lb/month) = the sum of all HAP Emissions (lb/month) from storage tank working and breathing losses, surface coating operations, formaldehyde formation, diesel combustion, and natural gas combustion.

²⁰ Installation-wide Monthly HAP Emissions (tons/month) = Installation-wide HAP Emissions (lb/month) x 0.0005 (ton/lb).

²¹ Installation-wide 12-Month Rolling Total HAP Emissions (tons) = the sum of the 12 most recent Installation-wide Monthly HAP Emissions (tons/month). **Installation-wide 12-Month Rolling Total HAP Emissions of less than 25.0 tons indicates compliance with Special Condition 2.A of Construction Permit 122016-007.**

Attachment E
 Installation-wide Individual HAP Compliance Worksheet

This sheet covers the month of _____ in the year of _____.

HAP Name: _____ CAS No.: _____

Storage Tanks – Working Losses					
Emission Point	Description	Name of Material Stored	Monthly Usage (Mgal)	Emission Factor²² (lb/Mgal)	HAP Emissions²³ (lb/month)
T002	10,000 gallon Basecoat Bulk Tank				
T003	10,000 gallon Varnish Bulk Tank				
T004	10,000 gallon Inside Spray Bulk Tank				
Diesel Tanks	1,000 gallon Tank				
	900 gallon Tank				
T002A	500 gallon Basecoat Day Tank				
T003A	(2) 500 gallon Varnish Day Tanks				
T004A	(3) 500 gallon Inside Spray Day Tanks				
Storage Tanks – Breathing Losses					
Emission Point	Description	Name of Material Stored	HAP Emissions²² (lb/yr)	HAP Emissions²⁴ (lb/month)	
T002	10,000 gallon Basecoat Bulk Tank				
T003	10,000 gallon Varnish Bulk Tank				
T004	10,000 gallon Inside Spray Bulk Tank				
Diesel Tanks	1,000 gallon Tank				
	900 gallon Tank				
T002A	500 gallon Basecoat Day Tank				
T003A	(2) 500 gallon Varnish Day Tanks				
T004A	(3) 500 gallon Inside Spray Day Tanks				

²² Tank emission factors shall be obtained from EPA's TANKS 4.0.9d for the chemical stored/used. The permittee shall maintain a copy of the TANKS 4.0.9d detailed annual emissions report printout for each tank so that the emission factors can be verified.

²³ HAP Emissions (lb/month) = Monthly Usage (Mgal) x HAP Emission Factor (lb/Mgal).

²⁴ HAP Emissions (lb/month) = HAP Emissions (lb/yr) / 12 (months/yr)

Formaldehyde Formation ³¹					
Line	Monthly Production (Mcan)	Formation Factor ³² (lb/Mcan)	Destruction Efficiency ³³ (%)	SSM Time ²⁹ (% of operating time)	HAP Emissions ³⁴ (lb/month)
1		0.0214			
2		0.0214			
3		0.0214			
4		0.0214			
5		0.0214			
6		0.0108			
Diesel Combustion					
Emission Point	Description	Monthly Fuel Usage (Mgal)	HAP Emission Factor ³⁵ (lb/Mgal)	HAP Emissions ³⁶ (lb/month)	
E001	Emergency Fire Pump Engine				
Natural Gas Combustion					
Emission Points		Monthly Fuel Usage (MMscf)	HAP Emission Factor ³⁷ (lb/MMscf)	HAP Emissions ³⁸ (lb/month)	
B001, B002, B003, B004, B504 B604, B005, B006, B508, B608, P003, P503, P603, P004, P504, P005, P505, P605, P006, P506, P606, P508, & P608					
Installation-wide Monthly HAP Emissions³⁹ (lb/month):					
Installation-wide Monthly HAP Emissions⁴⁰ (tons/month):					
Installation-wide 12-Month Rolling Total HAP Emissions⁴¹ (tons):					

³¹ Only complete this section for the individual HAP formaldehyde, for all other individual HAP leave this section blank.

³² This emission factor is based on testing conducted at a sister facility and shall be replaced with the formaldehyde emission factor obtained from stack testing required by Special Condition 11. Lines with basecoaters shall use the formaldehyde emission factor obtained from Line 5 stack test results. Lines without basecoaters or lines not operating their basecoater shall use the formaldehyde emission factor obtained from Line 6 stack test results.

³³ As obtained from the most recent Air Pollution Control Program approved stack test. The currently approved destruction efficiency for Lines 1 - 4 is 90%. The currently approved destruction efficiency for Lines 5 and 6 is 98%.

³⁴ HAP Emissions (lb/month) = Monthly Production (Mcan) x Formation Factor (lb/Mcan) x [1 - Destruction Efficiency (%) x (1 - SSM Time (% of operating time))]

³⁵ To be obtained from AP-42 Table 3.3-2 (October 1996). Use a diesel heating value of 137 MMBtu/Mgal from AP-42 Appendix A (September 1985) to convert the lb/MMBtu emission factor to lb/Mgal.

³⁶ HAP Emissions (lb/month) = Monthly Fuel Usage (Mgal) x HAP Emission Factor (lb/Mgal).

³⁷ To be obtained from AP-42 Tables 1.4-2, 1.4-3, and 1.4-4 (July 1998).

³⁸ HAP Emissions (lb/month) = Monthly Fuel Usage (MMscf) x HAP Emission Factor (lb/MMscf).

³⁹ Installation-wide Monthly HAP Emissions (lb/month) = the sum of all HAP Emissions (lb/month) from storage tank working and breathing losses, surface coating operations, formaldehyde formation, diesel combustion, and natural gas combustion.

⁴⁰ Installation-wide Monthly HAP Emissions (tons/month) = Installation-wide HAP Emissions (lb/month) x 0.0005 (ton/lb).

Attachment F
SSM Time Tracking Sheet

This sheet covers the month of _____ in the year of _____.

Production Line(s)	Monthly Hours of Operation	Control Device	Hours of SSM ⁴²	SSM Time ⁴³ (% of Operating Time)
1 – 4		B005 Catalytic Oxidizer		
5		B508 Regenerative Thermal Oxidizer		
6		B608 Regenerative Thermal Oxidizer		

⁴¹ Installation-wide 12-Month Rolling Total HAP Emissions (tons) = the sum of the 12 most recent Installation-wide Monthly HAP Emissions (tons/month). **Installation-wide 12-Month Rolling Total HAP Emissions of less than 10.0 tons indicates compliance with Special Condition 2.A of Construction Permit 122016-007 for this individual HAP.**

⁴² For the catalytic oxidizer, an hour is considered an SSM hour if any of the following conditions are met: the temperature of the gas entering the catalyst bed is less than or equal to 650°F, the temperature of the gas exiting the catalyst bed is greater than 1350°F, the catalytic oxidizer is bypassed/offline, or the capture equipment is malfunctioning. For the regenerative thermal oxidizers, an hour is considered an SSM hour if any of the following conditions are met: the three-hour average operating temperature of the RTO is below the three-hour average operating temperature during the most recent Air Pollution Control Program approved stack test, the RTO is bypassed/offline, or the capture equipment is malfunctioning.

⁴³ SSM Time (% of Operating Time) = $\frac{\text{Hours of SSM}}{\text{Hours of Operation}} \times 100\%$.

Attachment G
 Lines 5 and 6 VOC Compliance Worksheet

Metal Container Corporation
 Jefferson County, S28, T43N, R6E
 Project Number: 2016-02-047
 Installation ID Number: 099-0044
 Permit Number:

This sheet covers the month of _____ in the year of _____.

Storage Tanks – Working Losses					
Emission Point	Description	Name of Material Stored	Monthly Usage (Mgal)	Emission Factor ⁴⁴ (lb/Mgal)	VOC Emissions ⁴⁵ (lb/month)
T501	7,200 gallon Varnish Tank			6.48E-02	
T601	7,200 gallon Varnish Tank			6.48E-02	
T502	7,200 gallon Inside Spray Tank			1.33E-02	
T602	7,200 gallon Inside Spray Tank			1.33E-02	
Storage Tanks – Breathing Losses					
Emission Point	Description	Name of Material Stored	VOC Emissions ⁴⁴ (lb/yr)	VOC Emissions ⁴⁶ (lb/month)	
T501	7,200 gallon Varnish Tank		1.27		
T601	7,200 gallon Varnish Tank		1.27		
T502	7,200 gallon Inside Spray Tank		6.87E-01		
T602	7,200 gallon Inside Spray Tank		6.87E-01		

⁴⁴ Tank emission factors shall be obtained from EPA's TANKS 4.0.9d for the chemical stored/used. The permittee shall maintain a copy of the TANKS 4.0.9d detailed annual emissions report printout for each tank so that the emission factors can be verified.

⁴⁵ VOC Emissions (lb/month) = Monthly Usage (Mgal) x VOC Emission Factor (lb/Mgal).

⁴⁶ VOC Emissions (lb/month) = VOC Emissions (lb/yr) / 12 (months/yr)

Natural Gas Combustion			
Emission Points	Monthly Fuel Usage (MMscf)	VOC Emission Factor⁵⁶ (lb/MMscf)	VOC Emissions⁵⁷ (lb/month)
B504, B604, B508, B608, P503, P603, P504, P505, P605, P506, P606, P508, & P608		5.5	
Lines 5 & 6 Monthly VOC Emissions⁵⁸ (lb/month):			
Lines 5 & 6 Monthly VOC Emissions⁵⁹ (tons/month):			
Lines 5 & 6 12-Month Rolling Total VOC Emissions⁶⁰ (tons):			

⁵⁶ From AP-42 Table 1.4-2 (July 1998).

⁵⁷ VOC Emissions (lb/month) = Monthly Fuel Usage (MMscf) x VOC Emission Factor (lb/MMscf).

⁵⁸ Lines 5 & 6 Monthly VOC Emissions (lb/month) = the sum of all VOC Emissions (lb/month) from storage tank working and breathing losses, surface coating operations, formaldehyde formation, and natural gas combustion.

⁵⁹ Lines 5 & 6 Monthly VOC Emissions (tons/month) = Lines 5 & 6 VOC Emissions (lb/month) x 0.0005 (ton/lb).

⁶⁰ Lines 5 & 6 12-Month Rolling Total VOC Emissions (tons) = the sum of the 12 most recent Lines 5 & 6 Monthly VOC Emissions (tons/month). **Lines 5 & 6 12-Month Rolling Total VOC Emissions of less than 169.67 tons indicates compliance with Special Condition 5.C of Construction Permit 122016-007.**

Attachment H
 Alternative Coatings Worksheet

This sheet covers the month of _____ in the year of _____.

HAP Name: _____ CAS No.: _____

Storage Tanks – Working Losses				
Emission Point	Description	Name of Material Stored	Potential Annual Usage⁶¹ (Mgal)	HAP Emissions⁶² (lb/yr)
T501	7,200 gallon Varnish Tank			
T601	7,200 gallon Varnish Tank			
T502	7,200 gallon Inside Spray Tank			
T602	7,200 gallon Inside Spray Tank			
Storage Tanks – Breathing Losses				
Emission Point	Description	Name of Material Stored		HAP Emissions⁶² (lb/yr)
T501	7,200 gallon Varnish Tank			
T601	7,200 gallon Varnish Tank			
T502	7,200 gallon Inside Spray Tank			
T602	7,200 gallon Inside Spray Tank			

⁶¹ As input into TANKS 4.0.9d.

⁶² Tank emissions shall be obtained from EPA’s TANKS 4.0.9d for the chemical stored/used. The permittee shall maintain a copy of the TANKS 4.0.9d detailed annual emissions report printout for each tank so that the emission factors can be verified.

Formaldehyde Formation ⁶³							
Line	Potential Annual Production (Mcan)	Formation Factor ⁶⁴ (lb/Mcan)	Destruction Efficiency ⁶⁵ (%)	Average SSM Time ⁶⁶ (% of operating time)	HAP Emissions ⁶⁷ (lb/yr)		
5	693,792	0.0214					
6	693,792	0.0108					
Surface Coating Operations							
Emission Point ⁶⁸	Name of Material	Potential Annual Usage (gal)	Density ⁶⁹ (lb/gal)	HAP Content ⁷⁰ (wt%)	Overall Control Efficiency ⁷¹ (%)	Average SSM Time ⁶⁶ (% of operating time)	HAP Emissions ⁷² (lb/yr)

⁶³ Only complete this section for the individual HAP formaldehyde, for all other individual HAPs leave this section blank.

⁶⁴ This emission factor is based on testing conducted at a sister facility and shall be replaced with the formaldehyde emission factor obtained from stack testing required by Special Condition 11. Line 5 shall use the formaldehyde emission factor obtained from Line 5 stack test results for all periods of time during which basecoating is conducted. Line 5 may use the formaldehyde emission factor obtained from Line 6 stack test results during periods of time during which no basecoating is being conducted. Line 6 shall use the formaldehyde emission factor obtained from Line 6 stack test results.

⁶⁵ As obtained from the most recent Air Pollution Control Program approved stack test. The currently approved destruction efficiency for Lines 5 and 6 is 98%.

⁶⁶ Obtained as the average of the 12 most recent Monthly SSM Time (% of Operating Time) from Attachment F.

⁶⁷ HAP Emissions (lb/yr) = Potential Annual Production (Mcan) x Formation Factor (lb/Mcan) x [1 – Destruction Efficiency (%) x (1 – Average SSM Time (% of operating time))]

⁶⁸ The permittee shall use this section of the tracking sheet to calculate potential HAP emissions from each surface coating material used by P504 Basecoater; P505 Printer and Varnisher; P605 Printers and Varnishers; P506 Inside Spray; P606 Inside Spray; P507 Bottom Coater; P607 Bottom Coaters; F001 Cleanup Solvents; and F002 Coders.

⁶⁹ As obtained from the SDS for the material. If the specific gravity (s.g.) is listed, the density can be obtained from the following equation: Density (lb/gal) = specific gravity x 8.33 lb/gal.

⁷⁰ As obtained from the SDS for the material. If the HAP content is listed as a range of values, the highest value in the range shall be used to calculate the potential to emit.

⁷¹ As obtained from the most recent Air Pollution Control Program approved stack test. Emissions from P504, P505, P605, P506, and P606 are captured and routed to regenerative thermal oxidizers. The currently approved overall control efficiency for P504 is 63.7% (65% capture and 98% destruction), for P505 and P605 is 63.7% (65% capture and 98% destruction), and for P506 and P606 is 81.34% (83% capture and 98% destruction). Emissions from P507, P607, F001, and F002 are uncontrolled.

⁷² HAP Emissions (lb/yr) = Potential Annual Usage (gal) x Density (lb/gal) x HAP Content (wt%) x [1 – Overall Control Efficiency (%) x (1 – Average SSM Time (% of operating time))]

Natural Gas Combustion			
Emission Points	Potential Annual Fuel Usage (MMscf)	HAP Emission Factor⁷³ (lb/MMscf)	HAP Emissions⁷⁴ (lb/yr)
B504, B604, B508, B608, P503, P603, P504, P505, P605, P506, P606, P508, & P608	348.22		
Lines 5 & 6 Potential HAP Emissions⁷⁵ (lb/yr):			
Lines 5 & 6 Potential HAP Emissions⁷⁶ (tpy):			
SMAL⁷⁷ (tpy):			

⁷³ To be obtained from AP-42 Tables 1.4-2, 1.4-3, and 1.4-4 (July 1998).

⁷⁴ HAP Emissions (lb/yr) = Potential Annual Fuel Usage (MMscf) x HAP Emission Factor (lb/MMscf).

⁷⁵ Lines 5 & 6 Potential HAP Emissions (lb/yr) = the sum of all HAP Emissions (lb/yr) from storage tank working and breathing losses, surface coating operations, formaldehyde formation, and natural gas combustion.

⁷⁶ Lines 5 & 6 Potential HAP Emissions (tpy) = Lines 5 & 6 Potential HAP Emissions (lb/yr) x 0.0005 (ton/lb). The use of this alternative coating is approved if Lines 5 & 6 Potential HAP Emissions (tpy) are below the SMAL for this individual HAP.

⁷⁷ As obtained from: <http://dnr.mo.gov/env/apcp/docs/cp-hapraltbl6.pdf>

Attachment I
 Construction Permit 0589-001A VOC Emissions

Emission Unit	Description	Chemical Stored/Used (Name and CAS No.) ¹	Monthly Usage (gallons)	Emission Factor ^{2,3} (lb/gallon)	VOC Emissions (lb/month)
P006	Line 3 Inside Spray Machine				
Line 3 Inside Spray Machine VOC Emissions (lb/month):					
P006	Respray Inside Spray Machine				
Line 3 & Respray Inside Spray Machine Monthly SSM VOC Emissions (lbs):⁴					
Line 3 & Respray Inside Spray Machines VOC Emissions (lb/month):⁵					

¹The permittee shall document the chemical stored/used during the reporting period.

²Emission factors shall be calculated based upon the density and VOC wt% obtained from SDS as follows:

$$\text{Uncontrolled Emission Factor} = \text{Density (lb/gallon)} \times \text{VOC wt\%}$$

³The permittee may include a capture efficiency of 80% and a destruction efficiency of 90% to the emission factors. The controlled emission factor shall be calculated as follows:

$$\text{Controlled Emission Factor} = \text{Uncontrolled Emission Factor} \times \left(1 - \frac{\% \text{ Captured}}{100}\right) \times \left(1 - \frac{\% \text{ Destroyed}}{100}\right)$$

⁴As reported to the Air Pollution Control Program's Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050.

⁵Line 3 & Respray Inside Spray Machines VOC Emissions (lb/month) = the sum of each emission unit's VOC Emissions (lbs) + Line 3 & Respray Inside Spray Machine Monthly SSM VOC Emissions (lbs).

Month and Year	Line 3 Inside Spray Machine		Line 3 & Respray Inside Spray Machines	
	Monthly VOC Emissions (ton/month) ⁴	12-Month Rolling Total VOC Emissions (ton/year) ⁵	Monthly VOC Emissions (ton/month) ⁴	12-Month Rolling Total VOC Emissions (ton/year) ⁵

⁴Monthly VOC Emissions (ton/month) = $\frac{\text{VOC Emissions (lb/month)}}{2000 \text{ lb/ton}}$

⁵ 12-Month Rolling total VOC Emissions (ton/yr) = The sum of the most recent 12 Monthly VOC Emissions (ton/month)

The permittee is in compliance with Permit Condition 005 if 12-Month Rolling Total VOC Emissions from Line 3 Inside Spray Machine are less than 28.24 tons. The permittee is in compliance with Permit Condition 006 if 12-Month Rolling Total VOC Emissions from Line 3 & Respray Inside Spray Machines is less than 40 tons.

Attachment K
 Construction Permit 0893-028 VOC Emissions

Emission Unit	Description	Chemical Stored/Used (Name and CAS No.) ¹	Monthly Usage (gallons)	Emission Factor ^{2,3} (lb/gallon)	VOC Emissions (lb/month)
P005	Line 4 (2) Printers				
P006	Line 4 (2) Varnishers				
	Line 4 Inside Spray Machine				
			(MMscf)	(lb/MMscf)	
P005	Line 4 (2) Printer Ovens	Natural Gas Combustion		5.5	
P006	Line 4 Inside Spray Bake Ovens				
Line 4 Monthly SSM VOC Emissions (lbs) ⁴					
Line 4 VOC Emissions (lb/month):⁵					

¹The permittee shall document the chemical stored/used during the reporting period.

²Emission factors shall be calculated based upon the density and VOC wt% obtained from SDS as follows:

$$\text{Uncontrolled Emission Factor} = \text{Density (lb/gallon)} \times \text{VOC wt\%}$$

³The permittee may include a capture efficiency of 80% to the inside spray emission factors. The permittee may include a capture efficiency of 50% to the printing and varnishing emission factors. The permittee may include a destruction efficiency of 90% to the printing, varnishing, and inside spray emission factors. The controlled emission factor shall be calculated as follows:

$$\text{Controlled Emission Factor} = \text{Uncontrolled Emission Factor} \times \left(1 - \frac{\% \text{ Captured}}{100}\right) \times \left(1 - \frac{\% \text{ Destroyed}}{100}\right)$$

⁴As reported to the Air Pollution Control Program's Compliance/Enforcement Section according to the provisions of 10 CSR 10-6.050.

⁵Line 4 VOC Emissions (lb/month) = the sum of each emission unit's VOC Emissions (lbs) + Line 4 Monthly SSM VOC Emissions (lbs).

Month and Year	Monthly VOC Emissions (ton/month) ⁴	12-Month Rolling Total VOC Emissions (ton/year) ⁵

⁴Monthly VOC Emissions (ton/month) = $\frac{\text{Line 4 VOC Emissions (lb/month)}}{2000 \text{ lb/ton}}$

⁵12-Month Rolling Total VOC Emissions (ton/yr) = The sum of the most recent 12 Monthly VOC Emissions (ton/month)

The permittee is in compliance with Permit Condition 008 if 12-Month Rolling Total VOC Emissions from Line 4 is less than 68.4 tons.

Attachment M
 Method 9 Opacity Observations

Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Minute	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY

Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from _____ to _____ percent opacity.

Was the emission unit in compliance at the time of evaluation? _____
 YES NO Signature of Observer

Attachment N
10 CSR 10-6.400 Compliance Demonstration

This attachment may be used to demonstrate that the listed emission units are in compliance with 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter from Industrial Processes*.

Allowable PM emission limitation for sources having a process weight rate (P) of 30 ton/hr or less:

$$E = 4.1(P)^{0.67}$$

Potential PM Emission Rate = P (ton/hr) x PM Emission Factor (lb/ton)

Potential PM Concentration = $\frac{\text{Potential PM Emission Rate (lb/hr)} \times 7000 \text{ (gr/lb)}}{\text{Stack Flowrate (scf/min)} \times 60 \text{ (min/hr)}}$

Uncontrolled Calculations

Emission Unit(s)	P (ton/hr)	PM Emission Factor (lb/ton)	Potential PM Emission Rate (lb/hr)	PM Emission Rate Limit (lb/hr)	Potential PM Conc. (gr/scf)	PM Conc. Limit (gr/scf)	Potential PM Emissions (ton/yr)	Potential PM Emissions (tons/yr) per emission unit
P001 (4) Cuppers	5.9	1.0	5.9	13.47	0.05	0.3	25.84	6.46
P002 (4) Wet Elevators and (28) Bodymakers	5.9	1.16	6.82	13.41	0.03		29.87	0.93
P004 (3) Basecoaters	0.02	678	16.04	0.33	0.05		70.24	23.41
P005 (5) Printers	0.01	1051.1	14.67	0.23	0.83		64.27	12.85
P005 (5) Varnishers	0.1	636	60.35	0.85			264.35	52.87
P006 (5) Interior Spray Machines	0.22	248.4	54.4	1.48	0.20		238.27	47.65

The particulate emission factor for P001 was taken from OP2006-041. The cuppers have a combined stack flowrate of 14,748 scf/min. The cuppers are in compliance with both limits without the aid of control device; therefore, 40 CFR Part 64 *Compliance Assurance Monitoring* is not applicable.

The particulate emission factor for P002 is based upon stack testing results. P002 has a combined stack flowrate of 30,810 scf/min. P002 is in compliance with both limits without the aid of control device; therefore, 40 CFR Part 64 *Compliance Assurance Monitoring* is not applicable. Stack testing results were as follows:

Description	Oil Emission Rate (lb/hr)	Oil Solids Emission Rate (lb/hr) ¹	Emission Factor (lb/ton) ²
(3) Wet Can Elevators Lines 1 - 3	45.8	2.29	0.39
Wet Can Elevator Line 4	45.8	2.29	0.39
Bodymakers Lines 1 – 3	33.6	1.68	0.28
Bodymakers Line 4	11.2	0.56	0.10
P002 Total	136.4	6.82	1.16

¹The water content of the lubricant is 95% (i.e. 5% solids).

²The Oil Solids Emission Rate (lbs/hr) was divided by the maximum hourly design rate of 5.9 tons/hr to obtain the emission factor in lbs/ton.

Attachment N Continued
 10 CSR 10-6.400 Compliance Demonstration

The particulate emission factor for P004 is for the worst-case basecoat paint with 56.5 percent solids and a 40 percent transfer efficiency. The combined stack flowrate for all of the basecoaters is 38,056 scf/min. The basecoaters do not meet the particulate emission rate limit uncontrolled. Potential uncontrolled annual emissions for each basecoater are below the major source threshold of 100 ton/yr; therefore, 40 CFR Part 64 *Compliance Assurance Monitoring* is not applicable.

The particulate emission factor for P005 Printers is for the worst-case ink with 87.59 percent solids and a 40 percent transfer efficiency. The particulate emission factor for P005 Varnishers is for the worst-case varnish with 53 percent solids and a 40 percent transfer efficiency. The combined P005 stack flowrate is 10,527 scf/min. P005 operations do not meet the particulate emission limits uncontrolled. Potential uncontrolled annual emissions for each emission unit reported under P005 are below the major source threshold of 100 ton/yr; therefore, 40 CFR Part 64 *Compliance Assurance Monitoring* is not applicable.

The particulate emission factor for P006 Interior Spray Machines is for the worst-case interior spray with 20.7 percent solids and a 40 percent transfer efficiency. The combined P006 stack flowrate is 31,597 scf/min. P006 operations do not meet the particulate emission limits uncontrolled. Potential uncontrolled annual emissions for each emission unit reported under P006 are below the major source threshold of 100 ton/yr; therefore, 40 CFR Part 64 *Compliance Assurance Monitoring* is not applicable.

Controlled Calculations

Emission Unit	Control Device Efficiency	Potential PM Emission Rate (lb/hr)	PM Emission Limit (lb/hr)	Potential PM Conc. (gr/scf)	PM Conc. Limit (gr/scf)
P004 (3) Basecoaters	97.9	0.33	0.33	0.001	0.3
P005 (5) Printers	98.4	0.23	0.23	0.01	
P005 (5) Varnishers	98.6	0.85	0.85		
P006 (5) Interior Spray Machines	97.3	1.48	1.48	0.005	

P004 Basecoaters, P005 Printers, and P005 Varnishers were given 97.9 percent, 98.4 percent, and 98.6 percent control efficiencies, respectively, for cartridge filters. The permittee is in compliance with the PM emission rate limits while the cartridge filters are being properly maintained and operated.

P006 Interior Spray Machines were given a 97.3 percent control efficiency for a baghouse. The permittee is in compliance with the PM limits while the baghouse is being properly maintained and operated.

STATEMENT OF BASIS

INSTALLATION DESCRIPTION

Metal Container Corporation produces two-piece aluminum beverage can and bottle bodies in Arnold, Missouri. Operations include can forming, coating, drying, and curing. Coating operations include basecoat, ink, over varnish, bottom varnish, and inside spray. The installation has four can lines producing identical twelve ounce cans and two lines producing sixteen ounce aluminum bottles. The installation is a major source of Volatile Organic Compounds (VOCs). The installation is a synthetic minor source of Hazardous Air Pollutants (HAPs) and Glycol Ethers (CAS No. 20-10-0).

Updated Potential to Emit for the Installation

Pollutant	Potential to Emit (ton/yr) ^{1,2}
CO	60.53
NH ₃	1.74
NO _x	85.83
PM ₁₀	34.02
PM _{2.5}	24.74
SO _x	1.62
VOC	1142.78
HAPs	10/25
Glycol Ethers (20-10-0)	10

¹Potential to Emit values were taken from Construction Permit 122016-007, Issued December 21, 2016.

²Potential emissions are based upon 8,760 hours of uncontrolled annual operation unless otherwise noted:

- The installation is limited by Permit Condition PW002 to:
 - Less than 10 tons of any individual HAPs from the entire installation during any consecutive 12 month period.
 - Less than 25 tons of HAPs in aggregate from the entire installation during any consecutive 12 month period.

Reported Air Pollutant Emissions, tons per year

Pollutants	2015	2014	2013	2012	2011
Particulate Matter ≤ Ten Microns (PM ₁₀)	1.87	1.82	2.75	2.59	2.50
Particulate Matter ≤ 2.5 Microns (PM _{2.5})	1.87	1.82	2.75	2.59	2.50
Sulfur Oxides (SO _x)	0.09	0.09	0.08	0.07	0.07
Nitrogen Oxides (NO _x)	14.57	14.71	12.93	11.31	10.85
Volatile Organic Compounds (VOC)	137.37	122.09	101.51	105.04	92.21
Carbon Monoxide (CO)	8.84	8.90	10.84	9.48	9.09
Ammonia (NH ₃)	0.17	0.17	0	0	0
Hazardous Air Pollutants (HAPs)	25.56	22.42	20.56	22.00	20.56
Ethylbenzene (100-41-4)	0.21	0.26	0.18	0.3012	0.23
Ethylene Glycol (107-21-1)	2.21	1.92	1.59	1.61	1.74
Isomers of Xylene (1330-20-7)	0.94	1.15	0.81	1.36	1.032
Chromium Compounds (20-06-4)	0.48	0.31	0.31	0.17	0.16
Glycol Ethers (20-10-0) ¹	21.65	18.70	17.64	18.51	17.37
Formaldehyde (50-00-0)	0.033	0.032	0.028	0.030	0.015
Methyl Alcohol	0.001	0.00048	0.00048	0.00023	0.00022
Hydrogen Fluoride (7664-39-3)	0.034	0.041	0.014	0.022	0.019

¹The facility has been incorrectly reporting all glycol ethers as hazardous air pollutants rather than just ethylene glycol ethers and diethylene glycol ethers. The totals within this table are the values reported within the installation's Missouri Emissions Inventory Questionnaire.

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received June 6, 2016
- 2) 2015 Emissions Inventory Questionnaire, received April 29, 2016;

- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
- 4) Operating Permit 2011-057, Issued December 1, 2011
- 5) Construction Permit 0279-001, Issued February 1, 1979
- 6) Construction Permit 0486-001, Issued January 26, 1986
- 7) Construction Permit 0287-001, Issued February 2, 1987
- 8) Construction Permit 0589-001, Issued May 5, 1989
- 9) Construction Permit 0589-001A, Issued November 7, 1989
- 10) Clarification of Construction Permit 0589-001A, Issued April 25, 2003
- 11) Construction Permit 0789-003, Issued July 19, 1989
- 12) Construction Permit 1291-001, Issued December 3, 1991
- 13) Construction Permit 0893-028, Issued July 15, 1993
- 14) Construction Permit 0494-010, Issued March 31, 1994
- 15) Construction Permit 0495-018, Issued April 11, 1995
- 16) Temporary Construction Permit No. 099-0044-025, Issued September 30, 1997:
- 17) Construction Permit No. 052012-016, Issued May 24, 2012
- 18) Construction Permit No. 032014-003, Issued March 13, 2014
- 19) Construction Permit 032014-003A, Issued April 23, 2015
- 20) Construction Permit 122016-007, Issued December 21, 2016

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

10 CSR 10-6.405 *Restriction of Particulate Matter Emissions From Fuel Burning Equipment Used For Indirect Heating* is applicable to the installation but has not been applied within this permit. The following particulate emission sources are considered to be in compliance as they combust natural gas and have no monitoring/recordkeeping/reporting at this time. [10 CSR 10-6.405(1)(C)]

Emission Unit	Description
B001	(9) Make-Up Air Units
B002	Fire Water Heater
B003	(3) Boilers
B004	Water Heater
B006	(21) Space Heaters

10 CSR 10-5.300 *Control of Emissions From Solvent Metal Cleaning* is applicable to the installation and has been applied within this permit. The installation does use a cold cleaner with the new parts washer and this rule has been applied in Permit Condition 024.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-5.442 *Control of Emissions from Lithographic Printing Operations* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to offset lithographic printing presses in City of St. Louis and Jefferson, St. Charles, Franklin and St. Louis Counties. [10 CSR 10-5.442(2)(A)] 10 CSR 10-5.442(2)(C) exempts installations that print on metal.

10 CSR 10-5.455 *Control of Emission from Solvent Cleanup Operations* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to sources emitting 500 lb/day or more of cleaning solvent VOCs. [10 CSR 10-5.455(2)(B)] Potential cleaning solvent VOC emissions from the installation are estimated to be 96 lb/day.

10 CSR 10-5.500 *Control of Emission From Volatile Organic Liquid Storage* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to 40,000 gallon capacity or greater volatile organic liquid storage containers. [10 CSR 10-5.500(1)(B)] The installation's largest tanks are only 10,000 gallons in capacity.

10 CSR 10-5.570 *Control of Sulfur Emissions From Stationary Boilers* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to industrial boilers and process heaters having a nameplate capacity greater than 50 MMBtu/hr. [10 CSR 10-5.570(1)(A)] The installation's largest boilers/process heaters are only 6.3 MMBtu/hr.

Construction Permit History

Construction Permit 0279-001, Issued February 1, 1979:

- ◆ This PSD permit is for the installation of three can production lines consisting of a natural gas fired exterior basecoat drying oven, a natural gas fired ink drying oven, a natural gas fired inside and end coating drying oven, a natural gas fired inside respray drying oven, three wax necker lubricant application processes, three natural gas fired can washer drying ovens, a 0.5 MMBtu/hr natural gas fired hot water heater, three 1.667 MMBtu/hr natural gas fired make up air units, a 1.67 MMBtu/hr natural gas fired fire water heater, nine natural gas fired space heaters with a total heat input of 6.1 MMBtu/hr, and cleaning solvent usage.
- ◆ Special Conditions 1 and 3 contained hydrocarbon emission offset provisions. Hydrocarbon emission offsets have already been established and approved; therefore, these special conditions are no longer applicable.
- ◆ Special Conditions 2, 4, 5, and 6 have been applied within this permit (see Permit Condition PW001).

Construction Permit 0486-001, Issued January 26, 1986:

- ◆ This PSD permit is for the addition of a fourth beverage can production line at the installation. The production line can produce 1.5 billion beer cans and 600 million soft drink cans annually. The beverage line is subject to NSPS WW.
- ◆ Special Conditions 1, 2, and 3 require the installation to comply with 40 CFR Part 60, Subpart WW Standards of Performance for the Beverage Can Surface Coating Industry. 40 CFR Part 60, Subpart WW requirements can be found within Permit Condition 009.
- ◆ Special Conditions 4, 5, 6, and 7 contain performance testing requirements. This performance testing has already been conducted, the permittee should refer to these special conditions should the Missouri Air Pollution Control Program request new performance tests be conducted.
- ◆ Special Condition 8 has been applied within this permit (see Permit Condition PW002).

- ◆ Special Condition 9 contains hydrocarbon emission offset provisions. Hydrocarbon emission offsets have already been established and approved; therefore, this special condition is no longer applicable.

Construction Permit 0287-001, Issued February 2, 1987:

- ◆ This PSD permit is for the addition of a fifth beverage can production line at the installation. The production line can produce 1400 cans per minute, 84,000 cans per hour, and 735.84 million cans per year. The beverage line is subject to NSPS WW.
- ◆ This production line was never constructed. The effective period of this construction period has passed; therefore, the installation must obtain a new construction permit prior to the installation of a fifth production line.

Construction Permit 0589-001, Issued May 5, 1989:

Construction Permit 0589-001A, Issued November 7, 1989:

Clarification of Construction Permit 0589-001A, Issued April 25, 2003:

- ◆ This de minimis construction permit is for the replacement of an inside spray machine on beverage can line #3, the respray machine has a maximum production rate of 350 cans/min. 80 percent of VOC emissions from the inside spray machine are routed to the catalytic reactor. VOC emissions from the respray machine are not captured.
- ◆ Special Conditions 1 and 2 were nullified April 25, 2003.
- ◆ Special Conditions 3, 4, 5 have been applied within this permit (see Permit Condition 004).
- ◆ Special Conditions 6, 7 have been applied within this permit (see Permit Condition 005).
- ◆ Special Condition 8 requires Line 3 Inside Spray Machine to comply with 40 CFR Part 60, Subpart WW Standards of Performance for the Beverage Can Surface Coating Industry. 40 CFR Part 60, Subpart WW requirements can be found within Permit Condition 009.
- ◆ Special Condition 9 has been applied within this permit (see Permit Condition 006).
- ◆ Special Conditions 10 and 11 require notification of anticipated and actual start up. These notifications have already been submitted; therefore, the special conditions have not been included within this permit.

Construction Permit 0789-003, Issued July 19, 1989:

- ◆ This de minimis construction permit is for the installation of cartridge filters on the inside spray ovens. The cartridge filters have an exit air flow rate of 29,800 ft³/minute and provide 99.9 percent particulate control.
- ◆ Special Conditions 1 and 2 have been applied within this permit (see Permit Condition 007).
- ◆ Special Conditions 3 and 4 require notification of anticipated and actual start up. These notifications have already been submitted; therefore, the special conditions have not been included within this permit.

Construction Permit 1291-001, Issued December 3, 1991:

- ◆ This de minimis construction permit is for the installation of 2,080 ft³ lime storage silo. The silo has a maximum hourly design rate of 15 tons per hour and employs a filter collecting 95 percent of particulate emissions.
- ◆ This construction permit does not contain any special conditions.

Construction Permit 0893-028, Issued July 15, 1993:

- ◆ This de minimis construction permit is for the installation of two inside spray machines and one oil mist eliminator to line #4 increasing line #4's maximum production rate to 2,400 cans/minute. The oil mist eliminator controls VOC emissions from the can bodymakers.
- ◆ Special Condition 1 has been applied within this permit (see Permit Condition 008).
- ◆ Special Condition 2 requires the permittee to demonstrate, to the satisfaction of the Director, that the limitation in Special Condition 1 has been met. Monitoring/recordkeeping requirements sufficient to demonstrate compliance have been added to Permit Condition 008.
- ◆ Special Conditions 3 and 4 require Line 4 to comply with 40 CFR Part 60, Subpart WW Standards of Performance for the Beverage Can Surface Coating Industry. 40 CFR Part 60, Subpart WW requirements can be found within Permit Condition 009.
- ◆ Special Conditions 5, 6, and 7 contain performance testing requirements. This performance testing has already been conducted. The permittee should refer to these special conditions should the Missouri Air Pollution Control Program request new performance tests be conducted.

Construction Permit 0494-010, Issued March 31, 1994:

- ◆ This de minimis construction permit is for miscellaneous equipment constructed without a permit after April 11, 1980. The permitted equipment includes a 10,000 gallon bulk varnish storage tank, two 500 gallon varnish day tanks, can washer exhaust, can washer vacuum, an inker cleaner tank, and a 900 gallon diesel storage tank.
- ◆ This construction permit does not contain any special conditions.

Construction Permit 0495-018, Issued April 11, 1995:

- ◆ This de minimis construction permit is for the installation of an ink dot identification system to existing inside spray operations. The ink dots will be used for product quality control purposes.
- ◆ This construction permit does not contain any special conditions.

Temporary Construction Permit 099-0044-025, Issued September 30, 1997:

- ◆ This temporary construction permit is for the installation and testing of a biofiltration control technology.
- ◆ This temporary construction permit expired September 1, 1998.

Construction Permit 052012-016, Issued May 24, 2012

Construction Permit 032014-003, Issued March 13, 2014

Construction Permit 032014-003A, Issued April 23, 2015

Construction Permit 122016-007, Issued December 21, 2016

- ◆ This major source review construction permit is for increasing production Lines 5 and 6 and removal of permanent total enclosures around the basecoater, printers, varnishers and inside spray machines and their associated ovens. The following special conditions have been applied within this permit.
- ◆ Special Condition 1 supersedes all special conditions found in Construction Permits 052012-016, 032014-003 and 032014-003A.
- ◆ Special Condition 2 limits HAP emissions to less than 10 tons for each individual HAP and 25 tons combined in any consecutive 12-month rolling period from the entire installation.
- ◆ Special Condition 3 establishes Lowest Achievable Emission Rate (LAER) Capture Requirements.
- ◆ Special Condition 4 establishes LAER Control Device Requirements for the Regenerative Thermal Oxidizers.
- ◆ Special Condition 5 establishes LAER VOC Limitations
- ◆ Special Condition 6 lists the Control Device Requirement for the Mist Eliminators.

- ◆ Special Condition 7 lists the Control Device Requirements for the Baghouses.
- ◆ Special Conditions 8 and 9 list the operational requirements and alternatives for changing Inks, Solvents and Cleaning Materials
- ◆ Special Conditions 10 and 11 list Performance Testing, Record Keeping and Reporting Requirements.
- ◆ Special Conditions 12 and 13 list VOC Offset Requirements and Fuel Restrictions.

New Source Performance Standards (NSPS) Applicability

40 CFR Part 60, Subparts D, Da, Db, and Dc – *Standards of Performance for Steam Generating Units* are not applicable to the installation and have not been applied within this permit. Subparts D and Da are only applicable to steam generating units with a heat input rate greater than 250 MMBtu/hr. [§60.40(a) and §60.40a(a)] Subpart Db is only applicable to steam generating units with a heat input rate greater than 100 MMBtu/hr. [§60.40b(a)] Subpart Dc is only applicable to steam generating units with a heat input rate greater than 10 MMBtu/hr. [§60.40c(a)] The installation's largest steam generating units, B003 (3) Boilers, are only 6.3 MMBtu/hr each.

40 CFR Part 60, Subparts K, Ka, and Kb – *Standards of Performance for Storage Vessels* are not applicable to the installation and have not been applied within this permit. Subparts K and Ka are only applicable to storage vessels greater than 40,000 gallons in capacity. [§60.110(a) and §60.110a(a)] Subpart Kb is applicable to storage vessels greater than 75 m³ (19,812 gallons) in capacity. [§60.110b(a)] The installation's largest storage tanks - T001 D& I Lube Bulk Tank, T002 Basecoat Bulk Tank, T003 Varnish Bulk Tank, and T004 Inside Spray Bulk Tank – are each only 10,000 gallons in capacity.

40 CFR Part 60, Subpart WW – *Standards of Performance for the Beverage Can Surface Coating Industry* is applicable to the installation and has been applied within this permit (see Permit Condition 009).

40 CFR Part 60, Subpart IIII - *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to owners and operators of stationary CI ICE constructed after July 11, 2005. [§60.4200(a)(2)] E001 Back-Up Fire Pump is the only RICE at the installation and was constructed prior to 2005.

Maximum Achievable Control Technology (MACT) Applicability

The installation has accepted a voluntary condition (see Permit Condition PW002) to become a synthetic minor (area) source of Hazardous Air Pollutants (HAPs).

40 CFR Part 63, Subpart T – *National Emission Standards for Halogenated Solvent Cleaning* is not applicable to the installation and has not been applied within this permit. This regulation applies to individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machines that use any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than five percent by weight, as a cleaning and/or drying agent. [§63.460(a)] The installation does not operate any solvent cleaning machines as defined within §63.461.

40 CFR Part 63, Subpart KKKK – *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans* is not applicable to the installation and has not been applied within this permit. This regulation applies to surface coating of metal cans and ends at major HAP sources. [§63.3481(a) and (b)] The installation is a synthetic minor (area) source of HAPs (see Permit Condition PW002).

40 CFR Part 63, Subpart ZZZZ – *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* is applicable to the installation and has been applied within this permit (see Permit Condition 012).

40 CFR Part 63, Subpart HHHHHH – *National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources* is not applicable to the installation and has not been applied within this permit. This regulation is applicable to area sources using methylene chloride (75-09-2) to remove paint and to area sources that spray apply coatings containing Chromium (Cr), Lead (Pb), Manganese (Mn), Nickel (Ni), or Cadmium (Cd). [§63.11169(a) and (c)]

40 CFR Part 63, Subpart JJJJJJ – *National Emission Standards for Hazardous Air Pollutants for Industrial Commercial, and Institutional Boilers Area Sources* is not applicable to the installation and has not been applied within this permit. This regulation applies to coal, biomass, and oil boilers located at area sources. [§63.11194(a)(1)] The boilers at the installation, B003 (3) 6.3 MMBtu/hr Boilers, are all “gas-fired boilers” as defined by §63.11237.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

40 CFR Part 61, Subpart M – *National Emission Standards for Asbestos* is applicable to the installation and has been applied within this permit (see Section IV. Core Permit Requirements).

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

The facility is exempt from the CAM requirements under §64.2(b)(1)(vi) as Construction Permit 122016-007, Issued December 21, 2016 requires the facility to continuously monitor and record the combustion chamber operating temperature of each regenerative thermal oxidizer.

Greenhouse Gas Emissions

Note that this source is subject to the Greenhouse Gas Reporting Rule. However, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 permits operating permits at this time. In addition, Missouri regulations do not require the installation to report CO₂ emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation’s CO₂ emissions were not included within this permit. The applicant is required to report the data directly to EPA. The public may obtain CO₂ emissions data for this installation by visiting <http://epa.gov/ghgreporting/ghgdata/reportingdatasets.html>.

Other Regulatory Determinations

The permittee uses their catalytic reactor to control HAP emissions from their coating operations and comply with their voluntary 10/25 HAP limits (see Permit Condition PW002); therefore, the requirement to maintain and operate their catalytic reactor has been added to this permit.

10 CSR 10-5.330 *Control of Emissions From Industrial Surface Coating Operations* is applicable to the installation and has been applied within this permit (see Permit Conditions 001, 002, and 004). P005 Printers are exempt from this regulation per 10 CSR 10-5.330(1)(D)12 as they are subject to and complying with 10 CSR 10-5.340 (see Permit Condition 003).

10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants* is applicable to the installation and has been applied within this permit (see Permit Condition 011). The regulation is applicable to the following visible emission sources; however, as potential particulate emissions for these sources is less than 0.5 lb/hr they are assumed to be in compliance and have no monitoring/recordkeeping/reporting at this time:

Emission Unit	Description	Particulate Emission Rate (lb/hr)
M001	Grinder	0.02

10 CSR 10-6.220(1)(A) exempts stationary internal combustion engines such as E001 Back-Up Fire Pump.

10 CSR 10-6.220(1)(K) exempts any unit burning only natural gas, landfill gas, propane, liquefied petroleum gas, or refinery gas and using proper combustion techniques. The following units are fueled exclusively by natural gas and are exempt from 10 CSR-6.220:

Emission Unit	Description
B001	(9) Make-Up Air Units, 40.9 MMBtu/hr total
B002	1.75 MMBtu/hr Fire Water Heater
B003	(3) 6.3 MMBtu/hr Boilers
B004	2.6 MMBtu/hr Water Heater
B504	Line 5 Water Heater, 2.6 MMBtu/hr natural gas
B604	Line 6 Water Heater, 2.6 MMBtu/hr natural gas
B005	Lines 1 – 4: Catalytic Oxidizer, 13.5 MMBtu/hr natural gas
B006	(21) Space Heaters, 2.5 MMBtu/hr total
B508	Line 5 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas
B608	Line 6 Regenerative Thermal Oxidizer, 2.2 MMBtu/hr natural gas

P003	Lines 1 – 4: Can Washer Oven, 1.16 MMBtu/hr natural gas
P503	Line 5 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P603	Line 6 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P004	Lines 1 – 4: (3) Basecoaters and (3) Basecoater Ovens, 2.52 MMBtu/hr each natural gas
P504	Line 5 Basecoater and Basecoater Oven, 2.52 MMBtu/hr
P005	Lines 1 – 4: (5) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P505	Line 5 Varnisher and Decorator Oven, 2.52 MMBtu/hr natural gas
P605	Line 6 (2) Varnishers and (2) Decorator Ovens, 2.52 MMBtu/hr each natural gas
P006	Lines 1 – 4: (5) Varnishers, (4) Inside Spray, Respray, and (4) Inside Spray Ovens, 3.43 MMBtu/hr each, natural gas
P503	Line 5 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P603	Line 6 Can Washer Oven, 1.16 MMBtu/hr each natural gas
P506	Line 5 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P606	Line 6 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr natural gas
P508	Line 5 Rinser Oven, 0.4 MMBtu/hr natural gas
P608	Line 6 Rinser Oven, 0.4 MMBtu/hr natural gas

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds* and 10 CSR 10-6.261 *Control of Sulfur Dioxide Emissions* are applicable to the installation and have been applied within this permit (see Permit Conditions 012 and 013). The following sulfur compound emission sources are exempt under 10 CSR 10-6.260(1)(A)2 and 10 CSR 10-6.261(1)(A) as they exclusively combust pipeline grade natural gas:

Emission Unit	Description
B001	(9) Make-Up Air Units, 40.9 MMBtu/hr
B002	1.75 MMBtu/hr Fire Water Heater
B003	(3) 6.3 MMBtu/hr Boilers
B004	2.6 MMBtu/hr Water Heater
B005	13.5 MMBtu/hr Catalytic Oxidizer
B006	(21) Space Heaters, 2.5 MMBtu/hr
P003	Can Washer Ovens, 6.6 MMBtu/hr
P004	(3) 1.3 MMBtu/hr Basecoater Ovens
P005	(5) 1.3 MMBtu/hr Printer Ovens
P006	(4) 4.2 MMBtu/hr Inside Spray Bake Ovens

10 CSR 10-6.400 *Restriction of Emission of Particulate Matter from Industrial Processes* is applicable to the installation and has been applied within this permit (see Permit Conditions 014 and 015). The following particulate emission sources are exempt as they combust liquid/gaseous fuel not fitting the definition of process weight in 10 CSR 10-6.400(2)(A):

Emission Unit	Description
B001	(9) Make-Up Air Units, 40.9 MMBtu/hr
B002	1.75 MMBtu/hr Fire Water Heater
B003	(3) 6.3 MMBtu/hr Boilers
B004	2.6 MMBtu/hr Water Heater
B005	13.5 MMBtu/hr Catalytic Oxidizer
B006	(21) Space Heaters, 2.5 MMBtu/hr
E001	Back-Up Fire Pump

P003	Can Washer Ovens, 6.6 MMBtu/hr
------	--------------------------------

M001 Grinder is exempt under 10 CSR 10-6.400(1)(B)12 as it has potential uncontrolled particulate emissions below 0.5 lb/hr.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the APCP's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Response to Public Comments

On May 12, 2017, Mr. Mark A. Smith, Chief of the Air Permitting and Compliance Branch of the Environmental Protection Agency submitted eighteen comments regarding the draft operating permit for Metal Container Corporation, Project 2016-06-013. The comments are addressed in the order in which they appear within the letter(s).

Comment #: 01

Plant Wide Permit Condition PW002 incorporates certain special conditions from Permit to Construct #122016-007 issued December 21, 2016, which apply to all HAP (hazardous air pollutant) emission sources at Metal Container Corporation, as shown in Table 1 of Permit to Construct #122016-007. The emission limitation, in Plant Wide Permit Condition PW002, references Special Condition 2A, however, Table 1 (All HAP Emission Sources at Metal Container Corporation) is not carried forward from the construction permit to the operating permit. It appears, to EPA, that 10 CSR 10-6.065(6)(C)l.A intended for the complete requirement, of the special condition, be included in the operating permit; so, therefore, EPA recommends MDNR consider including Table 1, from Special Condition 2A in Permit to Construct #122016-007, within Permit Condition PW002.

Response to Comment: Table 1 from Construction Permit #122016-007, Issued December 21, 2016, has been added into the conditions listed in PW002 as recommended.

Comment #: 02

Permit Condition 001 incorporates certain special conditions from Permit to Construct #0279-001, issued February 1, 1979, authorizing the construction of the MCC-Arnold facility Line 1 through 4. Emission limitation 1), in Permit Condition 001, establishes a "hydrocarbon" emission limit, from the plant at capacity production, not to exceed 560 tpy. Permit Condition 001 identifies eleven (11) emission units which comprise the "plant," whose "hydrocarbons" are capped at 560 tpy. These same eleven (11) emission units are subject to the HAP emission limits in Plant Wide Permit Condition PW002. Permit Condition 001 requires the permittee to use Attachment C, or equivalent, to demonstrate compliance and Attachment C is identified as "Construction Permit 0279-001 Lines 1-4 VOC Emissions." However, Permit to Construct 0279-001 does not identify the "hydrocarbons" and "hydrocarbons" may be more than just volatile organic compounds (VOC). "Hydrocarbons" might also include HAPs and as such, these HAPs are then subject to the limitations of Plant Wide Permit Condition PW002. This creates a situation where these eleven (11) emission units might be subject to two (2) different emission limitations. EPA recommends MDNR and MCC-Arnold consider parsing the hydrocarbons being limited by Permit Condition 001 into VOCs to be tracked and HAP to be tracked by Plant Wide Permit Condition PW002.

Response to Comment: This facility is located in a non-attainment area for ozone. In order to make any adjustments to the permit limits established by this construction permit, the permittee would need to go through the construction permit modification process.

Comment #: 03

Emission Unit P006, described in Section I (Emission Units with Limitations) as "Lines 1-4: (5) Varnishers, (4) Inside Spray, Respray and (4) Inside Spray Ovens, 3.43 MMBtu/hr each natural

gas;" is subject to Permit Condition 001, Permit Condition 003, Permit Condition 004, Permit Condition 006, Permit Condition 007, Permit Condition 008, Permit Condition 010 and Permit Condition 017. Each of these eight (8) separate permit conditions limit the emissions of volatile organic compounds (VOC) at a different maximum level, for emission unit P006.

- Permit Condition 001 limits hydrocarbons, tracked as VOC, to 560 tpy from eleven (11) emission units; one of which is P006;
- Permit Condition 003 limits VOC from emission unit P006, emission unit P506 and emission unit P606 to 4.2 #VOC/gallon of interior body spray coating;
- Permit Condition 004 limits VOC from emission unit P006, along with emission units P004, P504, P505, and P506 to 2.8 #VOC/gallon of exterior sheet base coating;
- Permit Condition 006 limits VOC from emission unit P006 to 4.2 #VOC/gallon of respray coating;
- Permit Condition 007 limits the VOC from emission unit P006 to 28.24 tons in any 12-month running period;
- Permit Condition 008 limits VOC from emission unit P006 to less than 40 tons of VOC in any consecutive 12-month period;
- Permit Condition 010 limits VOC from emission unit P006, along with emission units P005, to less than 68.4 tons in any consecutive 12-month period; and
- Permit Condition 017 establishes new source performance standards for emission unit P006, along with emission units P004 and P005.

EPA's concern is that with eight different emission limits for one emission unit, MCC-Arnold will be challenged to verify permit condition compliance at any given point in time.

On a smaller scale, emission unit:

- P005 (Lines 1-4: (5) Decorator Ovens, 2.52 MMBtu/hr, each, natural gas) is subject to VOC limitations in four (4) separate permit conditions (Permit Condition 001, Permit Condition 005, Permit Condition 010 and Permit Condition 017);
- P004 (Lines 1-4: (3) Basecoaters and (3) Basecoater Ovens, 2.52 MMBtu/hr each, natural gas) is subject to VOC limitations in three (3) separate permit conditions (Permit Condition 001, Permit Condition 004, and Permit Condition 017);
- P506 (Line 5 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr, natural gas) is subject to VOC limitations in three (3) separate permit conditions (Permit Condition 003, Permit Condition 004 and Permit Condition 018);
- P606 (Line 6 Inside Spray and Inside Spray Oven, 3.43 MMBtu/hr, natural gas) is subject to VOC limitations in three (3) separate permit conditions (Permit Condition 003, Permit Condition 004 and Permit Condition 018);
- P504 (Line 5 Basecoater and Base Coater Oven, 2.52 MMBtu/hr, natural gas) is subject to VOC limitations in two (2) separate permit conditions (Permit Condition 004 and Permit Condition 018);
- P505 (Line 5 Varnisher and Decorator Oven, 2.52 MMBtu/hr, natural gas) is subject to VOC limitations in two (2) separate permit conditions (Permit Condition 005 and Permit Condition 018); and
- P605 (Line 6 (2) Varnishers and (2) Decorator Ovens, 2.52 MMBtu/hr each, natural gas) is subject to VOC limitations in two (2) separate permit conditions (Permit Condition 005 and Permit Condition 018).

Here again, EPA is concerned that MCC-Arnold will be challenged to verify compliance at any given point in time. It appears to EPA that it might be of some benefit to MCC-Arnold in

considering a plant wide applicability limit (PAL) for their VOC emissions and EPA suggests MDNR investigate any interest on the part of MCC-Arnold.

Response to Comment: The different emission limits for these units were established for different types of coatings and processes completed at these emission units. This facility is in a non-attainment area for Ozone. For the permittee to make any changes or adjustments to limits established in construction permits they would need to go through the construction permit modification process to ensure that the facility meets all emission limitations for this area.

Comment #04: Permit Condition 002 incorporates applicable conditions from Permit to Construct 0279-001 issued February 1, 1979. Permit Condition 002 identifies eleven (11) emission units subject to the Operational Limitations and Monitoring / Record keeping and Reporting requirements. Operational Limitation 1) requires the permittee to control HAP emissions from "their coating operation" using a catalytic reactor. In review of the eleven (11) emission units, it is unclear which are subject to the use of a catalytic reactor for control and EPA suggests MDNR consider using emission unit numbers, in lieu of the term "coating operation."

Response to Comment: Corrected to more accurately reflect Construction Permit 0279-001.

Comment #: 05

Also, Operational Limitation 3) requires the permittee to "install temperature monitoring devices on the catalytic reactor before and after the catalyst bed, if temperature monitoring devices have not been installed." This requirement arises from a construction permit issued in 1979, so EPA expects temperature monitoring has been in place for some period of time and this requirement may no longer be applicable.

Response to Comment: The permittee confirmed that temperature monitoring devices on the catalytic reactor before and after the catalyst bed have been installed, so this requirement has been removed from the permit.

Comment #: 06

Additionally, Monitoring / Record keeping requirement 1) has the permittee recording the inlet and outlet temperature of gas being routed to the catalytic reactor "at least once per operating day." Gas temperature is a parameter which lends itself to a continuous monitoring scheme, so EPA suggests MDNR consider continuous temperature monitoring across the catalyst bed.

Response to Comment: The permittee has confirmed that they have continuous monitoring across the catalyst bed.

Comment #: 07

Record keeping requirement 1) d), in both Permit Condition 003 and Permit Condition 004 require the permittee to retain any performance test results used to determine capture efficiency, control efficiency, transfer efficiency or coating makeup. However, neither Permit Condition 003 nor Permit Condition 004 include any performance testing requirements to determine capture, control or transfer efficiencies. EPA recommends MDNR consider additional clarification regarding this record keeping requirement.

Response to Comment: Clarified record keeping requirements to correspond with 10 CSR 10-5.330.

Comment #: 08

Permit Condition 009 references Permit to Construct #0789-003 and the Operational requirement says the permittee "shall employ a baghouse to control particulate emissions." However, Permit to Construct #0789-003 indicates the control device is an aspirated cartridge filter. EPA recommends MDNR rectify this apparent discrepancy.

Response to Comment: The permittee has confirmed that they have cartridge filters installed as stated in Construction Permit 0789-003. The permit condition has been updated to reflect the correct control device.

Comment #: 09

The Operational Limitation in Permit Condition 019 requires the permittee to "determine the overall capture efficiency of each line during each RTO destruction efficiency test according to the performance testing requirements in Permit Condition 019." Based on EPA review of this draft operating permit, the performance testing requirements appear to be in Permit Condition 020. MDNR may want to make this reference correction.

Response to Comment: Corrected.

Comment #: 10

The "banner" for Permit Condition 012 includes a "header note" 1, which does not appear to be defined in Permit Condition 012. EPA suggests MDNR may wish to add clarification as to what the "header note" 1 signifies.

Response to Comment: The reference in Permit Condition 012 regarding the header note 1 has been removed.

Comment #: 11

MDNR's conventional practice is to include permittee compliance verification data collection examples as attachments to the operating permit for public review and comment. However, there does not appear to be any record keeping examples attached for Permit Condition 005 and Permit condition 006 and EPA suggests MDNR follow their conventional practice and include record keeping example for Permit Conditions 005 and 006.

Response to Comment: Added Attachment S for daily recordkeeping as required by 10 CSR 10-5.330.

Comment #: 12

Permit Condition 007 establishes a volatile organic compound emission limit of 28.24 tons in any running 12-month period for emission unit P006 as a result of evaporation loss from the coating used on the inside spray operation on line #3. Permit Condition 008 establishes a VOC limit of less than 40 tons in any consecutive 12-month period from emission unit P006; Line 3 Inside Spray Machine. It appears that these two (2) separate permit conditions conflict, and EPA

recommends MDNR might consider adding clarification as to why two separate permit conditions control the same emission unit at two different levels.

Response to Comment: Permit Condition 007 refers to P006 Line 3 Inside Spray Machine, while Permit Condition 008 refers to the Line 3 Inside Spray Machine as well as the Respray Inside Machine. Both of these are listed under P006. The emission units each limit pertains to are listed under the Permit Condition Header in the Emission Unit List for each Permit Condition in Section III. Because P006 contains various processes, P006 is broken down further by process in each list.

Comment #: 13

Permit Condition 015 establishes limitations against Emission Unit P001, Emission Unit P002, Emission Unit P502 and Emission Unit P602. However, all four (4) of these emission units are not listed in Section I, of this draft Part 70 operating permit, as "Emission Units with Limitations."

Response to Comment: Added to the Emission Unit with Limitation List

Comment #: 14

Also, Permit Condition 018 establishes limitations against Emission Unit F001, Emission Unit F002, Emission Unit T501, Emission Unit T601, Emission Unit T502 and Emission Unit T602. Again, these six (6) emission units do not appear in the list of "Emission Units with Limitations, in Section I. Finally, Permit Condition 021 also establishes limitations against Emission Unit P502 and Emission Unit P602, neither of which are listed in Section I as "Emission Units with Limitations; and Permit Condition 024 establishes limitations against Emission Unit F001 which, as stated above, is not listed as an "Emission Unit with Limitations" in Section I. EPA recommends MDNR consider reevaluating the status of MCC-Arnold's emission units.

Response to Comment: Added to the Emission Unit with Limitation List

Comment #: 15

The Demonstrating Compliance section, in Permit Condition 017, requires the permittee to conduct a performance test each calendar month for each coating operation. Paragraph a) goes on to require the permittee to use "the following procedures for each affected facility that does not use a capture system and a control device to comply with the emission limit." It appears from review of the Title V Permit Renewal Application, submitted by MCC-Arnold in May 2016, that the emission units, subject to Permit Condition 017, all have installed and operating air pollution control devices. Therefore, EPA suggest MDNR consider a re-look at the requirements in Permit Condition 017 and verify applicability.

Response to Comment: Removed procedures for facility that does not use a capture system and control device.

Comment #: 16

The Test Method / Procedures section of Permit Condition 017 refers to "the reference methods in Appendix A to this part." The Test Method/ Procedures section of Permit Condition 018 includes the identical language. However, this draft Part 70 operating permit has no "Appendix A;" so EPA suggests MDNR adding clarification to these instructions.

Response to Comment: Corrected

Comment #: 17

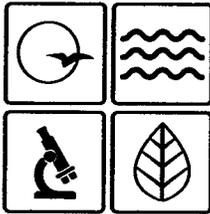
Footnote 12, on Attachment D requires the permittee to replace the formaldehyde emission factor, based on testing at a sister facility, with emission factor required by "Special Condition 11." There is no "Special Condition 11" in this draft operating permit, however, based on review of this draft operating permit, the formaldehyde emission factor appears to be determined by the requirements of Permit Condition 020. If so, EPA recommends MDNR consider correcting the reference in Footnote 12 of Attachment D.

Response to Comment: Corrected

Comment #: 18

The Maximum Achievable Control Technology (MACT) Applicability section in the Statement of Basis, indicates the 40 CFR Part 63, Subpart ZZZZ applicable requirements are included in Permit Condition 010. Based on review of this draft permit, 40 CFR Part 63, Subpart ZZZZ requirements are presented in Permit Condition 012. MDNR may want to change this reference in the Statement of Basis.

Response to Comment: Corrected



Missouri Department of

dnr.mo.gov

NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

JUL 12 2017

Mr. Thomas Yanske
Metal Container Corporation
42 Tenbrook Industrial Park
Arnold, MO 63010

Re: Metal Container Corporation, 099-0044
Permit Number: OP2017-055

Dear Mr. Yanske:

Enclosed with this letter is your Part 70 operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

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 <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

You may appeal this permit to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.078.16 and 621.250.3. If you choose to appeal, you must file a petition with the AHC 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 AHC.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.
Operating Permit Unit Chief

MJS:kbj

Enclosures

c: PAMS File: 2016-06-013



Recycled paper