



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

TIDEWATER REGIONAL OFFICE

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COMMONWEALTH OF VIRGINIA Department of Environmental Quality Tidewater Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Ball Metal Beverage Container Corporation
Williamsburg, Virginia
Permit No. TRO-60065

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Ball Metal Beverage Container Corporation has applied for a Title V Operating Permit for its Williamsburg, Virginia facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: _____
Troy D. Breathwaite
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Date: October 26, 2015

Regional Air Permits
Manager: _____
Troy D. Breathwaite

Date: October 26, 2015

Regional Director: _____
Maria R. Nold

Date: October 26, 2015

I. FACILITY INFORMATION

Permittee

Ball Metal Beverage Container Corporation
9300 W. 108th Circle
Broomfield, Colorado 80021-3682

Responsible Official

Wagner Ramsey
Plant Manager
(757) 888-1640

Facility

Ball Metal Beverage Container Corporation
James River Commerce Center
8935 Pocahontas Trail
Williamsburg, Virginia 23185

Contact Person

Bob Hall
Support Engineer
(303) 460-5445
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County-Plant Identification Number: 51-095-00008

SOURCE DESCRIPTION

NAICS Code: 332431 - Metal Can Manufacturing

Ball Metal Beverage Container Corporation operates four can lines designated as Line 2, Line 3, Line 4, and Line 5. The can line emission points include the internal coating process, the decorator process, and the basecoater process.

Can Manufacturing Process: The can manufacturing process begins by feeding a continuous aluminum sheet into a cupping press. The cupper forms the aluminum into short cups that are extruded into formed cans in the bodymakers. Cans are conveyed to a can washer to remove any lubricant used in the cupping and bodymaker processes and then to a drying oven. A small amount of sulfuric acid emissions are emitted from the washers; however, these emissions are considered insignificant. Hot water boilers are used to heat the water used to wash the cans. No emissions of criteria or hazardous air pollutants are associated with these processes other than the natural gas combustion emissions from the washer ovens and hot water boilers. **Note:** The plant's ovens use natural gas as the main fuel source; however, the plant operates an on-site propane fuel system in emergency situations.

From the can washers, cans are fed to the basecoater where the can exterior is coated with basecoat. The exterior coating is then cured in the basecoater ovens. Air emissions from the basecoater process are exhausted through the basecoater oven stacks.

An ultraviolet (UV) bottom coater and associated UV light curing oven are installed on Line 2, immediately following the washer. Cans are carried to the bottom coater where the rim on the bottom of each can is coated and then cured with UV light. The cans are then conveyed to the decorator or basecoater operation. An exemption letter was issued for this process on August 31, 2005.

From the basecoater ovens, cans are fed to printers, where thermally cured inks and water-based overvarnish are applied to the cans. Bottom coating is then applied to the cans prior to entering the decorator oven. Air emissions from the decorator process are exhausted through the decorator oven stacks.

After the decorated cans are cured, the cans are conveyed to the internal coating process where a thin layer of water-based, thermally cured coating is applied to the inside of the cans. Overspray emissions from this process are exhausted through a dedicated overspray stack. The cans also receive a small ink identification dot on the outside bottom of the cans while in the spray machine pocket for quality assurance purposes. The coated cans are then cured in natural gas-fired curing ovens. Criteria and hazardous air pollutants from the internal coating process are exhausted out of the overspray and curing oven stacks.

Cans exiting the internal coating ovens are conveyed to a waxer that applies a thin coat of lubricant to the outside top edge of the can in preparation for necking. This lubricant does not contain VOCs. The necker then reduces the diameter of the can opening while the necker and flanger roll back the top edge of the can to form a lip for attaching the can end or lid. The reprofiler makes final adjustments to the bottom of the can. Finished cans are palletized for shipment or storage. There are no air emissions associated with the waxing, necking, reprofiling, or palletizing processes.

Re-spray Process: The facility occasionally manufactures cans which have inside metal exposure, meaning the cans received an insufficient amount of internal coating. The defective cans are palletized and stored until they can be reprocessed at a later date. The facility performs re-spray operations on the defective cans using a reduced amount of internal coating. The re-sprayed cans are cured in the re-spray curing oven. The emissions from internal coating re-spray are accounted for in the material usage/emission reports.

The facility is a Title V major source of Volatile Organic Compounds and a synthetic minor (area) source of Hazardous Air Pollutants. This source is located in an attainment area for all pollutants, and is a PSD-sized major source (though the source is not permitted under a PSD permit). The facility is also permitted under a minor NSR permit dated August 17, 2010.

The source is subject to the Standards of Performance for the Beverage Can Surface Coating Industry (40 CFR 60, Subpart WW (NSPS WW)). These standards apply to the exterior base coating operation, the overvarnish coating operation, and the inside spray coating operation. The standards apply to the coating application stations, flashoff areas, and curing ovens.

The source is also subject to the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60, Subpart JJJJ (NSPS JJJJ)) and the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ (MACT ZZZZ)) for the natural-gas fired emergency generator.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, was conducted on March 28, 2014. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

II. EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Emergency Generator							
EG		Kohler Natural Gas Emergency Generator, Model 38RCL Manufacture Date: 12/2013 Installation Date: 5/2014	39 kW (75 hp)				12/18/2014 (Exemption Letter)
Inside Spray Coating Operation							
01	S010, S011, S020, S021, S022, S023, S024, S027, S028, S029, S030	Lines 2-5 Internal Coating Operations (including respray line)	84.2 gallons coating/hr				8/17/2010
01		Line 2 Internal Coating Oven	5.2 million Btu/hr				
01		Line 3 Internal Coating Oven	7.5 million Btu/hr				
01		Line 4/5 Combined Internal Coating Oven	10.0 million Btu/hr				
01/02		Internal Coating Respray Oven	2.4 million Btu/hr				

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Overvarnish Coating Operation							
02	S06, S019, S035, S036, S037, S038	Lines 2-5 Overvarnish Rim Coating Operations	32.8 gallons coating/hr				8/17/2010
02		Line 2 Decorator and Oven	5.0 million Btu/hr				
02		Line 3 Decorator and Oven	5.0 million Btu/hr				
02		Line 4 Decorator and Oven	7.0 million Btu/hr				
02		Line 5 Decorator and Oven	7.0 million Btu/hr				
02		UV Bottom Coater and Associated UV Light Curing Tunnel	0.15 gallons coating/hr				8/31/2005 (Exemption Letter)
Exterior Base Coating Operation							
03	S016, S017, S033, S034	Lines 2 and 4 Base Coating Operations	20.7 gallons coating/hr				8/17/2010
03		Line 2 Basecoat Oven	5.0 million Btu/hr				
03		Line 4 Basecoat Oven	6.0 million Btu/hr				

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
General Plant and Parts Cleaning Operations							
04		Parts cleaning machines (small dip tanks), general wipe cleaning, and video jet.	4,050 gallons/yr				
Can Marking Identification System							
05		Can Marking System	0.08 gallons/million cans (0.03 gallons coating/hr)				8/17/2010

Changes to the equipment list:

The headings for the coating operations have been revised to match the applicable categories in 40 CFR 60, Subpart WW (NSPS WW).

The hot water boilers (Emission Unit ID No. B1) have been moved to the list of Insignificant Emission Units. These units are insignificant under 9 VAC 5-80-720 C (fuel burning equipment with heat input levels less than 10 MMBtu/hr, using natural gas). There are no applicable requirements associated with these units.

The equipment list has been updated with the specifications for the new natural gas emergency generator (Emission Unit ID No. EG).

The washer ovens (Emission Unit ID Nos. W02, W03, and W04/05) have been moved to the list of Insignificant Emission Units. The ovens are natural gas-fired units less than 10 MMBtu/hr and are not subject to the requirements of NSPS WW. There are no applicable requirements associated with these units. **Note:** The source has replaced several of the burners in the washer ovens. The new MMBtu/hr ratings are listed in the Insignificant Emission Units list. The curing ovens will remain in the Significant Emission Units list. These ovens are included in the definitions of "coating operation" in NSPS WW and, therefore, are applicable units under this subpart.

The source has also replaced several of the burners in the Line 2 internal coating oven, the Line 3 internal coating oven, and the Line 4 basecoat oven. The changes to the burner ratings are outlined in the table below.

Emission Unit	Previous Burner Rating	New Burner Rating
Line 2 Internal Coating Oven	6.0 MMBtu/hr	5.2 MMBtu/hr
Line 3 Internal Coating Oven	4.5 MMBtu/hr*	7.5 MMBtu/hr
Line 4 Basecoat Oven	7.0 MMBtu/hr	6.0 MMBtu/hr

* **Note:** The ratings listed in the 11/22/10 Title V permit for the Line 4 basecoat oven was incorrect. The actual rating was 7.5 MMBtu/hr. The burners were replaced with new burners of the same size.

EMISSIONS INVENTORY

A copy of the 2014 emissions report is attached. Emissions are summarized in the following table.

2014 Actual Emissions

	2014 Criteria Pollutant Emission in Tons/Year				
	VOC	CO	SO₂	PM₁₀	NO_x
Total	339.36	7.02	0.05	2.00	9.08

III. Natural Gas Emergency Generator Applicable Requirements - (Emission Unit ID No. EG)

Limitations

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5-50-400	EPA New Source Performance Standards: General
9 VAC 5-50-410	EPA New Source Performance Standards: Designated Standards of Performance
9 VAC 5-60-90	EPA Maximum Achievable Control Technology Standards: General
9 VAC 5-60-100	EPA Maximum Achievable Control Technology Standards: Designated Emission Standards)

The following Codes of Federal Regulations have been determined to be applicable:

40 CFR 60, Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
40 CFR 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Condition 1 has been revised to include the phrase "periodic maintenance checks and readiness testing," as allowed under 40 CFR 60, Subpart JJJJ (at §60.4243(d)). The NSPS JJJJ citation has also been included.

The applicable requirements from 40 CFR 63, Subpart ZZZZ (MACT ZZZZ) for the new emergency generator are included in Condition 2. The generator was installed in May 2014 (replacing an existing unit installed in 1985), thus it is considered a new stationary RICE under the MACT. Per §63.6590(c)(1), because the unit is a new stationary RICE located at an area source of HAP, the permittee is required to meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ. No further requirements apply under the MACT.

Condition 3 includes all applicable requirements from 40 CFR 60, Subpart JJJJ (NSPS JJJJ), including emission standards, monitoring, compliance, notification, reporting, and recordkeeping requirements. All requirements are included in one condition for ease of reference.

Note: The source is not subject to the performance testing requirements of NSPS JJJJ, as outlined in 60.4243(a)(1) and 60.4243(e), as follows:

Per 60.4243(a):

If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the requirements specified in (a)(1) and (2) of this section.

(1) If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance.

60.4243(e):

Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.

The source burns primarily natural gas, but burns propane or a natural gas/propane mixture during natural gas curtailments. The specification sheet for the Kohler 38RCL emergency generator includes the following statement: "The 60 Hz generator set engine is certified by the Environmental Protection Agency (EPA) to conform to the New Source Performance Standard (NSPS) for stationary spark-ignited emissions." In addition, the specification sheet indicates that the engine features a "simple field conversion between natural gas and LP vapor fuels while maintaining emission certification."

The language regarding the 100 hours per year limit for operation on propane is included in Condition 3; however, the language regarding performance testing has been omitted, as this requirement does not apply to the emergency generator.

Monitoring

As mentioned above, the applicable monitoring requirements from NSPS JJJJ are included in Condition 3.

The permit does not include a periodic monitoring requirement for opacity from the emergency generator. The generator is small (39 kW) and is used only for emergency purposes and for no more than 500 hours per year. Furthermore, the generator is fueled by natural gas and/or propane. No visible emissions are expected from combusting these fuels.

Recordkeeping

Condition 4 includes requirements for maintaining records of the annual hours of operation of the natural gas emergency generator, as required in Condition 1. As mentioned above, the applicable recordkeeping requirements from NSPS JJJJ are included in Condition 3.

IV. Fuel Burning Equipment Applicable Requirements - (Line 4/5 Combined Internal Coating Oven)

Limitations

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5-40-900	Existing Source Emission Standards for Fuel Burning Equipment: Standard for Particulate Matter (Rule 4-8)
9 VAC 5-40-930	Existing Source Emission Standards for Fuel Burning Equipment: Standard for Sulfur Dioxide (Rule 4-8)
9 VAC 5-50-20	Special Provisions for New and Modified Stationary Sources: Compliance
9 VAC 5-50-80	Standard for Visible Emissions for New and Modified Stationary Sources

The natural gas hot water boilers (Emission Unit ID No. B1) have been removed from this section. The 11/22/10 Title V permit included two (2) 12.553 MMBtu/hr Cleaver Brooks hot water boilers, installed in 1972. These boilers have been replaced with two (2) UNILUX hot water boilers rated at 4.3 MMBtu/hr (installed 3/2015) and 9.99 MMBtu/hr (installed 5/2015). The new boilers are insignificant by size under Title V and have, therefore, been moved to the list of Insignificant Emission Units in Section VIII.

The approved fuels for the Line 4/5 combined internal coating oven are included in Condition 5. The source burns primarily natural gas, but burns propane or a natural gas/propane mixture during natural gas curtailments. The unit is permitted to burn natural gas and/or propane. (**Note:** The phrase "natural gas and/or propane" has been added to Condition 5 for clarity. The condition previously read "natural gas with propane backup.")

The PM emission standards from Rule 4-8 are included in Condition 6.

The SO₂ emission standards from Rule 4-8 are included in Condition 7.

Rule 4-8 does not apply to fuel burning equipment using gaseous fuel with a maximum heat input of less than 10 MMBtu/hr, thus this rule does not apply to the new natural gas-fired hot water boilers. The lb/MMBtu and lbs/hr emission limits in Conditions 6 and 7 have been re-calculated to cover only the Line 4/5 combined internal coating oven, as follows:

Total MMBtu/hr Rating: 10.0 MMBtu/hr

PM Emission Ratio: $E = 1.0906H^{-0.2594}$, where H is the total capacity in MMBtu/hr
 $E = 1.0906(10.0)^{-0.2594}$
 $E = 0.60$

PM Emission Limit: $PM = 10.0 \text{ MMBtu/hr} \times 0.60$
PM = 6.0 lbs/hr

SO₂ Emission Limit: $SO_2 = 2.64K$, where K is the heat input at total capacity in MMBtu/hr
 $SO_2 = 2.64 \times 10.0$
SO₂ = 26.4 lbs/hr

The 20/30% new source opacity standard is included in Condition 8. Conditions III.A.4 and 5 of the 11/22/10 Title V permit have been combined into new Condition 8 to include all opacity requirements in one condition. The maintenance/operating procedures requirements from 9 VAC 5-50-20 E are included in Condition 9.

The fugitive dust/emissions requirements (Condition III.A.7 of the Title V 11/22/10 permit) have been removed. These requirements are not relevant for natural gas combustion. In addition, the requirement was not an underlying NSR permit condition.

The new boilers were evaluated for applicability to 40 CFR 63, Subpart JJJJJJ (MACT JJJJJJ: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers, Area Sources), but were deemed inapplicable. Per § 63.11195(e), gas-fired boilers are not subject to the requirements of this subpart.

Monitoring

The permit does not include a periodic monitoring (stack testing) requirement to demonstrate compliance with the PM and SO₂ limits.

Based on calculations using EPA AP-42 emission factors and the capacity of the equipment, the likelihood of exceeding the standards is very low. The calculations below demonstrate that the source cannot exceed the hourly emission limits when firing the Line 4/5 combined internal coating oven on either natural gas or propane.

AP 42, Table 1.4-2 emission factor for natural gas combustion for PM (total) = 7.6 lb/MMft³
AP 42, Table 1.4-2 emission factor for propane combustion for PM (total) = 0.7 lb/1,000 gal

AP 42, Table 1.4-2 emission factor for natural gas combustion for SO₂ = 0.6 lb/MMft³
AP 42, Table 1.4-2 emission factor for propane combustion for SO₂ = 0.10S lb/1,000 gal, where S = sulfur content of the fuel in gr/100 ft³

The Line 4/5 combined internal coating oven is rated at 10.0 MMBtu/hr
Heating value for natural gas = 1,050 Btu/ft³
Heating value for propane = 91.5 MMBtu/1,000 gal
Sulfur content of propane = 0.54 gr/100 ft³

PM emissions for the Line 4/5 combined internal coating oven using AP-42 emission factors are as follows:

PM emissions from natural gas combustion:
 $(10.0 \text{ MMBtu/hr}) / (1,050 \text{ Btu/ft}^3) = 0.009524 \text{ MMft}^3/\text{hr}$ burned maximum
 $(0.009524 \text{ MMft}^3/\text{hr}) \times (7.6 \text{ lb/MMft}^3) = \mathbf{0.07 \text{ lbs/hr}}$ PM for the Line 4/5 combined internal coating oven
Title V permit limitation = **6.0 lbs/hr**

PM emissions from propane combustion:
 $(10.0 \text{ MMBtu/hr}) / (91.5 \text{ MMBtu/1,000 gal}) = 0.1093 \text{ 1,000 gal/hr}$ burned maximum
 $(0.1093 \text{ 1,000gal/hr}) \times (0.7 \text{ lb/1,000 gal}) = \mathbf{0.08 \text{ lbs/hr}}$ PM for the Line 4/5 combined internal coating oven
Title V permit limitation = **6.0 lbs/hr**

SO₂ emissions for the Line 4/5 combined internal coating oven using AP-42 emission factors are as follows:

SO₂ emissions from natural gas combustion:

$$(10.0 \text{ MMBtu/hr}) / (1,050 \text{ Btu/ft}^3) = 0.009524 \text{ MMft}^3/\text{hr burned maximum}$$

$$(0.009524 \text{ MMft}^3/\text{hr}) \times (0.6 \text{ lb/MMft}^3) = \mathbf{0.006 \text{ lbs/hr}} \text{ SO}_2 \text{ for the Line 4/5 combined internal coating oven}$$

Title V permit limitation = **26.4 lbs/hr**

SO₂ emissions from propane combustion:

$$(10.0 \text{ MMBtu/hr}) / (91.5 \text{ MMBtu/1,000 gal}) = 0.1093 \text{ 1,000 gal/hr burned maximum}$$

$$(0.1093 \text{ 1,000gal/hr}) \times (0.10 \times 0.54) = \mathbf{0.006 \text{ lbs/hr}} \text{ PM for the Line 4/5 combined internal coating oven}$$

Title V permit limitation = **26.4 lbs/hr**

The permit does not include a periodic monitoring requirement for opacity from the Line 4/5 combined internal coating oven. This unit is fueled by natural gas and/or propane. No visible emissions are expected from combusting these fuels.

Recordkeeping

Condition 10 includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

- a. DEQ-approved, pollutant-specific emission factors and equations used for actual emissions calculations.

Streamlined Requirements

The requirement to maintain records of the type of fuel combusted in the boilers and the Line 4/5 combined internal coating oven (Condition III.B.1.a of the November 22, 2010 Title V permit) has been removed. The boilers have been moved to the list of Insignificant Emission Units in Section VIII and the supporting calculations outlined above for the Line 4/5 combined internal coating oven have been revised to demonstrate that the source cannot exceed the lbs/hr PM and SO₂ emission limits, whether firing natural gas or propane (previously, the calculations only addressed natural gas). The records in new Condition 10a (emission factors and equations for emissions calculations) should be sufficient to demonstrate compliance with the emission limits.

V. Process Equipment Applicable Requirements - (Emission Unit ID Nos. 01, 02, 03 and 05)

Limitations

The following limitations are derived from the New Source Review permit dated August 17, 2010:

- Condition 11 (NSR Condition 3): VOC Emission Controls
- Condition 12 (NSR Condition 4): VOC Emission Limits
- Condition 13 (NSR Condition 5): Emission Limits - Exterior White Base Coating Operations (NSPS Limitation)
- Condition 14 (NSR Condition 6): Emission Limits - Overvarnish/Clear Base Coating Operations (NSPS Limitation)
- Condition 15 (NSR Condition 7): Emission Limits - Internal Coating Operations (NSPS Limitation)
- Condition 16 (NSR Condition 8): Requirements by Reference - NSPS WW

The emission limits in Condition 12 were calculated as follows:

Coating	Max. gal/hr Usage	Max. gal/yr Usage	Max. lb/gal VOC Content	NSPS Limit (lb/gal)	Emissions	
					lb/hr	tons/yr
10/28/91 NSR Permit Calcs:						
White Basecoat	44.3	180,022	1.081	2.42	47.89	97.30
Overvarnish/Clear Basecoat	33.2	169,898	1.271	3.84	42.19	107.95
Internal Coating	65.9	371,928	1.267	7.43	83.46	235.52
TOTAL					173.5	440.8
Limits:					174.7	450.8
7/23/03 NSR Permit Calcs:						
Ink Dot Ink	0.03	260	6.96	N/A	0.21	0.90
Limits:					174.9	451.7

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

- 9 VAC 5-40-22 Special Provisions for Existing Stationary Sources: Interpretation of Emission Standards Based on Process Weight-Rate Tables
- 9 VAC 5-40-260 Existing Source Emission Standards for General Process Operations: Standard for Particulate Matter (Rule 4-4)
- 9 VAC 5-50-80 Standard for Visible Emissions for New and Modified Stationary Sources
- 9 VAC 5-50-400 EPA New Source Performance Standards: General
- 9 VAC 5-50-410 EPA New Source Performance Standards: Designated Standards of Performance

The following Code of Federal Regulations has been determined to be applicable:

- 40 CFR 60, Subpart WW Standards of Performance for the Beverage Can Surface Coating Industry

Conditions 17 through 24 outline the process weight rate limitations for these units. The requirements of Rule 4-4 apply to process operations with a process weight rate capacity greater than 100 lbs/hr. It does not apply to combustion units using gaseous fuels with a maximum heat input of less than 10 MMBtu/hr. Condition 20 clarifies that the facility wide process weight rate limitation for particulate matter shall be determined as the sum of the affected individual emission limitations.

Note: Units W02, W03, and W04/05 (washer ovens) are no longer listed in this section. These units are not applicable sources under NSPS WW and have no other applicable requirements associated with them. Rule 4-4 does not apply to these units because they are each rated at less than 10 MMBtu/hr. They have been moved to the list of Insignificant Emission Units.

Monitoring

Condition 25 includes continuing compliance requirements for compliance with NSPS WW. The source is required to perform monthly performance tests to determine the volume-weighted average of the total mass of VOC per volume of coating solids used.

The permit does not include a periodic monitoring requirement for opacity from these units. These are VOC-emitting operations; therefore, no visible emissions are expected. In addition, 40 CFR Part 60 Subpart WW does not specify an opacity requirement for the coating operations.

The source is subject to the process weight standard in 9 VAC 5-40-260; however, the permit does not include periodic monitoring or recordkeeping requirements to demonstrate ongoing compliance with this standard. Based on emissions calculations using source data, the likelihood of exceeding the standard is very low. Supporting calculations are found below.

Compliance Determination for Particulates			
Process Weight Rate Rule			
Material	Usage lbs/yr	Usage hrs/yr	Usage lbs/hr
Aluminum	87,927,010	8,760	10,037
Inside Coating	3,870,876	8,760	442
Total	91,797,886	8,760	10,479
Allowable Emission Rate from Table (9 VAC 5-40-260) =			11.2 lbs/hr
lb/lb solids Internal Coating	lbs Solids Sprayed / hr	% Solids Emitted	lbs Solids Emitted / hr
0.21	93.2	0.322%	0.3
This demonstrates compliance with permit conditions as particulate emission rates cannot be exceeded even with the absence of controls. Oil mist emissions are de minimis and therefore also comply with the above.			

Estimated emissions based on 2014 consumption data
0.322% emission rate of all solids sprayed is based on source test

Recordkeeping

Condition 26 includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

- a. An operating log of coating, ink, and clean-up solvent consumption. This log shall be maintained in a manner sufficient to calculate total monthly and annual emissions of Volatile Organic Compounds. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. Records of all data and calculations used in the monthly performance tests to determine the volume-weighted average of the total mass of VOC per volume of coating solids used, as required by 40 CFR 60.495(d).

Streamlined Requirements

The following statement has been removed from Condition 16: "All applicable requirements of 40 CFR 60 Subpart WW **are not** specifically listed in this permit. The permittee should refer to the applicable regulation for additional requirements not included in this permit." This language was pulled from the underlying NSR permit, but is not applicable. The Title V permit includes all applicable requirements.

VI. Parts Cleaning Applicable Requirements - (Emission Unit ID No. 04)

Limitations

The following Virginia Administrative Codes have specific emission requirements that have been determined to be applicable:

9 VAC 5-40-3280	Existing Source Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents: Standard for Volatile Organic Compounds (Rule 4-24)
9 VAC 5-40-3290	Existing Source Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents: Control Technology Guidelines (Rule 4-24)

Conditions 27 through 29 outline the parts cleaning operating requirements from Rule 4-24.

Monitoring

Condition 30 outlines the monitoring requirements from Rule 4-24. The source is required to inspect each parts cleaner at least once per calendar year to ensure the requirements of 9 VAC 5-40-3280 and 3290 are met.

Recordkeeping

Condition 31 includes requirements for maintaining records of all monitoring and testing required by the permit. These records include:

- a. Annual inspection results and any corrective actions taken;
- b. Methods of waste solvent disposal used.

VII. Facility Wide Applicable Requirements - (All Emission Units)

Limitations

The following Virginia Administrative Code has specific emission requirements that have been determined to be applicable:

9 VAC 5-80-100 Federal Operating Permits for Stationary Sources: Emission Caps

Condition 32 limits the source to 10 tons/yr of any individual HAP and 25 tons/yr for all HAPs. These limits synthetically limit the source to area source status for HAPs.

Recordkeeping

Condition 33 includes requirements for maintaining records of all monitoring and testing required by the permit. The source is required to maintain records of the tons/yr emissions of each individual HAP and all HAPs combined to demonstrate compliance with the limits in Condition 32.

Testing

Testing requirements are included in Conditions 34 and 35. If testing is conducted in addition to the monitoring specified in the permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

39-44. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.2-604 and §10.1-1185 of the *Code of Virginia*, and the "Department of Environmental Quality Agency Policy Statement No. 2-09".

This general condition cite(s) the Article(s) that follow(s):

Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources

This general condition cites the sections that follow:

9 VAC 5-80-80. Application
9 VAC 5-80-140. Permit Shield
9 VAC 5-80-150. Action on Permit Applications

50. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

This general condition cites the sections that follow:

9 VAC 5-40-50. Notification, Records and Reporting
9 VAC 5-50-50. Notification, Records and Reporting

54. Permit Modification

This general condition cites the sections that follow:

9 VAC 5-80-50. Applicability, Federal Operating Permit for Stationary Sources
9 VAC 5-80-190. Changes to Permits
9 VAC 5-80-260. Enforcement
9 VAC 5-80-1100. Applicability, Permits for New and Modified Stationary Sources

- 9 VAC 5-80-1605. Applicability, Permits for Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
- 9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

68-71. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Conditions 68-71 and General Condition 50. For further explanation see the comments on General Condition 50.

This general condition cites the sections that follow:

- 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction
- 9 VAC 5-80-110. Permit Content

75. Asbestos Requirements

The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains citations from the Code of Federal Regulations that follow:

- 40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.
- 40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.
- 40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

This general condition cites the regulatory sections that follow:

- 9 VAC 5-60-70. Designated Emissions Standards
- 9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State:

9 VAC 5, Chapter 50, Part II, Article 2: New and Modified Source Standards for Odor (Rule 5-2)

9 VAC 5, Chapter 60, Part II, Article 5: New and Modified Source Standards for Toxic Pollutants (Rule 6-5)

INAPPLICABLE REQUIREMENTS

Citation	Title of Citation	Description of Applicability
40 CFR 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators	This requirement does not apply to Emission Unit B1 (UNILUX Boilers). These units are each rated at less than 250 MMBtu/hr.
40 CFR 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	This requirement does not apply to Emission Unit B1 (UNILUX Boilers). These units are each rated at less than 100 MMBtu/hr.
40 CFR 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	This requirement does not apply to Emission Unit B1 (UNILUX Boilers). These units are each rated at less than 10 MMBtu/hr.
40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	This requirement does not apply to any of the tanks listed as insignificant. The tanks are either smaller in size than 75 m ³ (20,000 gallons) or were installed prior to the applicability date of July 23, 1984.
40 CFR 63, Subpart KKKK	National Emission Standards for Hazardous Air Pollutants: Surface Coating of Metal Cans	This requirement does not apply to this beverage can coating facility. The permit includes federally enforceable limits on facility-wide HAP emissions to ensure the source's status as a synthetic minor (area) source.
40 CFR 63, Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	This requirement does not apply to Emission Unit B1 (UNILUX Boilers). The permit includes federally enforceable limits on facility-wide HAP emissions to ensure the source's status as a synthetic minor (area) source.
40 CFR 63, Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers - Area Sources	This requirement does not apply to Emission Unit B1 (UNILUX Boilers). The hot water boilers are gas-fired and, therefore, are not subject to this subpart.

VIII. INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
B1	UNILUX hot water boiler, Model ZF400W Manufactured: 2014 Installed: 3/2015	9 VAC 5-80-720 C		4.3 MMBtu/hr
	UNILUX hot water boiler, Model ZF1000W Manufactured: 2007 Installed: 5/2015	9 VAC 5-80-720 C		9.99 MMBtu/hr
W02	Line 2 Washer Oven	9 VAC 5-80-720 C		3.0 MMBtu/hr
W03	Line 3 Washer Oven	9 VAC 5-80-720 C		3.0 MMBtu/hr
W04/05	Line 4/5 Combined Washer Oven	9 VAC 5-80-720 C		2.5 MMBtu/hr
OV Tank	Overvarnish Coating Tank 12,000 gallons	9 VAC 5-80-720 B	VOC	
IC Tank	Internal Coating Tank 12,000 gallons	9 VAC 5-80-720 B	VOC	
BC Tank	Basecoat Tank 12,000 gallons	9 VAC 5-80-720 B	VOC	
GO	Grieve Oven for Drying Internal Coating Paste (not currently in use)	9 VAC 5-80-720 B	VOC	
Evap	Propane to NG Evaporator	9 VAC 5-80-720 B	N/A	
WTS	Wastewater Treatment System	9 VAC 5-80-720 B	VOC	
UO Tank	Used Oil Tank 10,000 gallons	9 VAC 5-80-720 B	VOC	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (5-80-720 B)	Rated Capacity (5-80-720 C)
BO1	Bulk Oil Tank #1 10,000 gallons	9 VAC 5-80-720 B	VOC	
BO2	Bulk Oil Tank #2 10,000 gallons	9 VAC 5-80-720 B	VOC	
P1	Propane Tank 30,000 gallons	9 VAC 5-80-720 B	VOC	
P2	Propane Tank 30,000 gallons	9 VAC 5-80-720 B	VOC	
TT	Trabon Lube Tank 2,000 gallons	9 VAC 5-80-720 B	VOC	
MC1	Mist Collector for Lines 4 & 5 15,750 ACFM	9 VAC 5-80-720 B	VOC and PM	
MC2	Mist Collector for Lines 2 & 3 15,750 ACFM	9 VAC 5-80-720 B	VOC and PM	
Fork	Propane Powered Fork / Lift Trucks and Equipment	9 VAC 5-80-720 A		
Heat	Natural Gas Comfort Space Heating Units	9 VAC 5-80-720 A		
Water	Natural Gas Hot Water Heaters	9 VAC 5-80-720 B	SO ₂ , NO _x , CO, PM, VOC	
06	Can Washers 0.470 million cans/hr	9 VAC 5-80-720 B	Sulfuric Acid Mist	

¹The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

Changes to the Insignificant Emission Units list:

The new hot water boilers (Emission Unit ID No. B1) have been added to the list of Insignificant Emission Units. These units are insignificant under 9 VAC 5-80-720 C (fuel burning equipment with heat input levels less than 10 MMBtu/hr, using natural gas). There are no applicable requirements associated with these units.

The washer ovens (Emission Unit ID Nos. W02, W03, and W04/05) have been moved to the list of Insignificant Emission Units. The ovens are natural gas-fired units less than 10 MMBtu/hr and are not subject to the requirements of NSPS WW. There are no applicable requirements associated with these units. **Note:** The source has replaced several of the burners in the washer ovens. The changes to the burner ratings are outlined in the table below.

Emission Unit	Previous Burner Rating	New Burner Rating
Line 2 Washer Oven (W02)	3.5 MMBtu/hr	3.0 MMBtu/hr
Line 3 Washer Oven (W03)	3.5 MMBtu/hr	3.0 MMBtu/hr
Line 4/5 Combined Washer Oven (W04/05)	2.7 MMBtu/hr	2.5 MMBtu/hr

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The proposed permit will be placed on public notice in the Daily Press from **Tuesday, September 8, 2015** to **Thursday, October 8, 2015**.