

***TITLE V PERMIT RENEWAL
AND MODIFICATION PERMIT APPLICATION
EVALUATION AND REGULATORY REVIEW***

**SONOCO PRODUCTS COMPANY
Source No. 00290
Title V Operating Permit No. 00290-01TV**

February 2021

**SHELBY COUNTY HEALTH DEPARTMENT
AIR POLLUTION CONTROL SECTION
MAJOR SOURCES BRANCH**

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**CONSTRUCTION PERMIT APPLICATION
EVALUATION AND REGULATORY REVIEW**

Introduction

This narrative was prepared to assist the reviewer in understanding the facility and sources being permitted, and the content, the regulatory basis, and decisions made in preparing this modification. This document was also prepared to meet the requirements for the statement of basis in 40 CFR § 70.7(a)(5). This document will become a part of the permanent facility record maintained by the Pollution Control Section of the Shelby County Health Department.

I. SOURCE INFORMATION

Facility Name: Sonoco Products Company
Facility Address: 2755 Harbor Avenue
Memphis, Tennessee 38113

Facility Mailing Address: Same as above

Facility Owner: Sonoco Products Company
Owner Address: One North Second Street
Hartsville, South Carolina 29550

Responsible Official: Michael Neff, Plant Manager
Responsible Official Address: Post Office Box 13423
Memphis, Tennessee 38113

Telephone: (901) 774-6321

Billing Contact: Same as above
Billing Address: Same as above

Corporate Environmental Contact: Peggi Davis
Telephone: (843) 383-7991

Owner's Registered Agent: United Agent Group, Inc.
Registered Agent's Address: 205 Powell Place
Brentwood, TN 37027-7522

Facility's Primary Activity: Manufacturer of Composite Can Metal Ends
SIC Code(s): 3469, 2655
NAICS (Code(s)): 332119

Existing Permits: 00290-01TV

II. APPLICATION INFORMATION

Application Received: January 25, 2021 (*Streamlined Title V operating permit renewal application*)

Application Dated: January 20, 2021 (*Streamlined Title V operating permit renewal application*)

Completeness Determination: February 8, 2021 (*Streamlined Title V operating permit renewal application*)

Public Notice: PENDING
Surrounding States Notice: PENDING
Public Hearing: PENDING
Comments Received: PENDING

To EPA for Review: PENDING
EPA Comments: PENDING

Initial Title V Operating Permit Issue Date: June 10, 1999
1st Title V Operating Permit Renewal Issue Date: August 20, 2010
2nd Title V Operating Permit Renewal Issue Date: July 26, 2016
3rd Title V Operating Permit Renewal Issue Date: PENDING

Permit engineer: Gregg P. Fortunato

Type of permit:

- Construction
- Modification
- Permit renewal
- Change of location, name and/or ownership

- Emissions same
- Emissions increase
- Emissions decrease

Source classification:

- Major
- Synthetic Minor
- Minor
- NSPS
- NESHAP
- BACT
- MACT, GACT, CTG

III. SPECIFIC REASON for APPLICATION

Sonoco Products Company (Sonoco) has submitted a streamlined Title V operating permit renewal application to the Department in a timely manner. The only change from the previous permit is a Compliance Assurance Monitoring (CAM) Plan update. The setpoint temperature for the catalytic oxidizer associated with Process Emission Source No. 4 (PES-4) was changed in the CAM Plan based on performance testing completed in October 2019.

IV. EMISSION UNITS, POINTS and CONTROLS

Emission units from this Sonoco Products Company (Sonoco) facility are separated into five (5) Process Emission Source (PES) Groups as follows:

Process Emission Source Group	Emission Unit	Description	Control Equipment	Emission Point	Year Installed ¹
PES-1	EU-1.1	Conventional coater	Complete Enclosure/Thermal Oxidizer	EP-1.1 ²	1996
PES-2	EU-2.1	Sixteen (16) pre-1995 uncontrolled compounders associated with Double Die Presses (Compounders No. 1, 2, 5-7, 11, 15-17, U2A, U2B, U2O, U3O, U4A, U4B, and U5O)	None	EP-2.1 ³	1977-1992
	EU-2.2	Compounder No. 8	Enhanced Capture ³ /Induction Heater ⁴ /Catalytic Oxidizer	EP-2.2 ²	1992/1999 ⁵
	EU-2.3	Compounder No. 9	Enhanced Capture ³ /Induction Heater ⁴ /Catalytic Oxidizer	EP-2.3 ²	1992/1999 ⁵
	EU-2.4	Compounder No. 10	Enhanced Capture ³ /Induction Heater ⁴ /Catalytic Oxidizer	EP-2.4 ²	1992/1999 ⁵
	EU-2.5	Compounder No. 33	None	EP-2.5	April 2011
PES-3	EU-3.1	Compounders No. 23 and 24	Enhanced Capture ³ /Induction Heater ⁴ /Catalytic Oxidizer ⁴	EP-3.1 ²	1998
PES-4	EU-4.2	Compounders No. 29 through 32	Enhanced Capture ³ /Convection Oven ⁴ /Catalytic Oxidizer	EP-4.2 ²	1999
PES-5	EU-5.1	Compounders No. 34 and 35	Enhanced Capture ³ /Induction Heater ⁴ /Catalytic Oxidizer ⁴	EP-5.1 ²	2015

¹ Installed or last reconstructed

² The emission point for this emission unit is the control device exhaust

³ Enhanced capture includes localized VOC emissions capture for compounded end conveyance and a curing/degassing heater (oven) under negative pressure; all exhausting to a catalytic oxidizer.

⁴ Electrically powered

⁵ Originally installed in 1992; emission controls added in 1999

V. PROCESS DESCRIPTION

5.1 Process Emission Source Group (PES)-1: Conventional Coater Operations

Metal sheet is received at the facility in both coated and raw (uncoated) forms. The majority of metal received at the facility is uncoated and requires coatings to be applied by the conventional coater. Pre-cut sheet is fed into the conventional coater where various solvent-based coatings are applied and subsequently oven cured. The coater room is designed as a complete enclosure with all airflow directed through the coater oven to a thermal oxidizer.

5.2 PES-2, 3 and 5: Can End Stamping/Can End Sealant Application (Compounding) Operations

In the stamping/compounding process, metal sheets are fed into presses that stamp out can ends. No regulated air pollutants are generated from the stamping process. The stamped ends are then fed into compounders where a narrow ribbon of solvent-based sealant compound is applied (compounding). A solvent-based lubricant mist is sprayed on compounder nozzles to prevent residue build-up as sealant compound is applied.

The “wet” ends at EU-2.2, 2.3 2.4 (Compounders No. 8, 9 and 10), EU-3.1 (Compounders 23 and 24) and EU-5.1 (Compounders 34 and 35) are conveyed through an enclosed electrically powered induction curing/degassing heater (oven) to drive off VOCs and to dry the ends. The “dry” ends are then packed into sleeves and palletized.

VOCs captured along the end conveyance lines and in the enclosed heaters are exhausted through catalytic oxidizers for VOC emission control.

PES-2 consists of 17 uncontrolled and 3 controlled compounders servicing double-die presses, PES-3 consists of two controlled compounders servicing a multi-die press and PES-5 consists of two controlled compounders servicing a multi-die press.

5.3 PES-4: Formatec II (Compounders No. 29-32)

Double-die presses operate at a rate requiring a single compounder and multi-die presses operate at a rate requiring two (2) compounders. Due to the rate at which the Formatec press produces ends, it requires four (4) compounders. Although each phase of the end manufacturing process is generally the same as the other press lines, the design of the VOC emission control system at the Formatec lines differs due to the high rate of production. A large electrically powered convection oven is used to liberate VOCs from compounded ends, which travel through the oven in a serpentine manner. A natural gas-fired auxiliary burner further heats the VOC laden air stream prior to being oxidized over a catalytic bed.

EU-4.1 includes Compounders No. 25-28, an electric convection oven and an associated catalytic oxidizer.

VI. POTENTIAL TO EMIT (PTE) EVALUATION

6.1 VOC

Facility-wide PTE for VOCs is above the PSD threshold (100 tpy for non-attainment and 250 tpy for attainment with the ozone NAAQs standard). Allowable VOC emissions at this facility are 374 tpy. Potential VOC emissions at this facility are substantially higher as follows

PES-1:

This group consists of a conventional coater and curing oven within a complete enclosure that exhausts to a thermal oxidizer. Potential uncontrolled VOC emissions from the conventional coater were calculated in a Sonoco permit application, dated July 23, 1996 (page A-11) as 127 lbs/hr.

$PTE \text{ for VOCs} = 127 \text{ lbs/hr} \times 8,760 \text{ hrs/yr} / 2,000 \text{ lbs/ton} = 556 \text{ tpy}$

PES-2, 3, 4 and 5 (28 Compounders):

PES-2 consists of 17 uncontrolled and 3 controlled (catalytic oxidation) compounding operations servicing multiple double-die presses.

PES-3 consists of 2 controlled (catalytic oxidation) compounding operations servicing a multi-die press.

PES-4 consists of 4 controlled (catalytic oxidation) compounding operations servicing a Formatec press.

PES-5 consists of 2 controlled (catalytic oxidation) compounding operations servicing a multi-die press.

Potential to emit VOCs from each compounder was calculated within the permit application, dated March 11, 2015 (page 13), for PES-5. The PTE for the 2 compounders totaled 82.25 tpy.

Compounding operation PTE varies based on can end dimensions, sealant type used and the associated can end press speed, but for the purpose of this PTE calculation all are assumed to be similar to those in PES-5. Review of historic permit applications for compounders indicates that this PTE rate is a reasonable conservative assumption.

$PTE \text{ for VOCs} = 41.125 \text{ tons/compounder/year} \times 28 \text{ compounders} = 1,151.5 \text{ tpy}$

6.2 NO_x, CO, SO₂ and PM

Emissions of these pollutants are solely from the combustion of natural gas from the thermal oxidizer and catalytic oxidizers at this facility. All ovens are electrically powered. The total heat input of all combustion units at this facility is as follows:

Process Emission Source Group	Emission Unit	Fuel Burning Source Description	Heat Input Capacity
PES-1	EU-1.1	Thermal Oxidizer Burner	12.5 MM Btu/hr
PES-2	EU-2.1	Catalytic Oxidizer Burner	0.8 MM Btu/hr
	EU-2.2	Catalytic Oxidizer Burner	0.8 MM Btu/hr
	EU-2.3	Catalytic Oxidizer Burner	0.8 MM Btu/hr
PES-3	EU-3.1	Catalytic Oxidizer Burner (electrically powered)	Not applicable
PES-4	EU-4.1	Out of service	Not applicable
	EU-4.2	Catalytic Oxidizer Burner	1.4 MM Btu/hr
PES-5	EU-5.1	Catalytic Oxidizer Burner (electrically powered)	Not applicable
TOTAL			16.3 MM Btu/hr

The PTE is calculated using EPA's Compilation of Air Pollutant Emission Factors, AP-42, 5th Edition, Section 1.4 and assumes 8,760 hours per year and 1,020 Btu per cubic foot of natural gas (~140.0 MM ft³/yr). Emissions limits for NO_x, CO, VOC, and SO₂ are the same as the PTE as shown in the following table.

AP-42 Emission Factors (<100 MM btu/hr)			Maximum (PTE) Annual Emissions		
TSP	7.6	lbs/MM cu.ft.	TSP	0.53	tons/yr
SO ₂	0.6	lbs/MM cu.ft.	SO ₂	0.04	tons/yr
NO _x	100	lbs/MM cu.ft.	NO _x	7.00	tons/yr
CO	84	lbs/MM cu.ft.	CO	5.88	tons/yr
VOC	5.5	lbs/MM cu.ft.	VOC	0.38	tons/yr

6.3 Greenhouse Gases (GHGs)

The heating capacity of all natural gas combustion sources at this Sonoco facility totals 16.3 MM Btu/hr. Maximum potential CO₂e from these fuel burning sources, calculated using the USEPA GHG Calculator and assuming 1,020 Btu per cubic foot of natural gas (~140.0 MM ft³/yr), is ~7,630 metric tonnes and ~8,411 U.S. tons per year.

VII. REGULATORY ANALYSIS (See Appendix A for a full regulatory applicability overview)

7.1 New Source Review (NSR/PSD)

- **Non-attainment New Source Review (NSR):**

The United States Environmental Protection Agency designated Shelby County as in attainment of the national ambient air quality standard for ozone within the Federal Register (effective July 25, 2016). Shelby County is in attainment for all NSR pollutants at this time; therefore, NSR is not applicable to this permit action.

- **Prevention of Significant Deterioration of Ambient Air Quality (PSD)**

Under PSD an affected source is a facility with allowable emissions exceeding 250 tons per year of any regulated NSR pollutants, or allowable emissions exceeding 100 tons per year of any regulated NSR pollutants at sources in specific categories.

This facility is categorized as a PSD source for Ozone based on allowable VOC emissions exceeding 250 tons per year. There are no changes affecting emission limits within this renewal; therefore, PSD review is not applicable.

7.2 New Source Performance Standards (NSPS) - 40 CFR Part 60

- **Subpart TT-Standards of Performance for Metal Coil Surface Coating**

The provisions of this subpart apply to metal coil surface coating operations where an organic coating is applied to the surface of any continuous metal strip with thickness of 0.15 millimeters (0.006 inches.) or more that is packaged in a roll or coil.

The metal sheet coated at this facility meets neither of the requirements of this subpart because it has a thickness <0.006 inches and is not packaged in a roll or coil.

- **Subpart WW-Standards of Performance for the beverage Can Surface Coating Industry**

The provisions of this subpart apply to the following affected facilities in beverage can surface coating lines: each exterior base coat operation, each over-varnish coating operation, and each inside spray coating operation.

The can ends made at this facility are not for use as part of a beverage can, therefore, end sealant application is not affected by this subpart. A “beverage can” under this subpart is defined as any two-piece steel or aluminum container in which soft drinks or beer, including malt liquor, are packaged.

7.3 National Emission Standards for Hazardous Air Pollutants (NESHAP) - 40 CFR Part 61

None of the 7 hazardous air contaminants regulated by this part are emitted at this Sonoco facility.

7.4 NESHAP - 40 CFR Part 63

There are no applicable major source or area source NESHAPs applicable to this Sonoco facility. Sonoco has accepted federally enforceable facility-wide emission limits below HAP major source thresholds.

- < 10 tpy for any individual HAP; and
- < 25 tpy for combined HAPs

Sonoco monitors sealant compound usage and HAP content to assure compliance.

7.5 40 CFR Part 64 - Compliance Assurance Monitoring (CAM)

CAM is applicable to the following emission units at this facility.

- PES-1 - Sheet coating operations (Enclosure and thermal oxidizer) and;
- PES-4 - Can end compounding operations (Enhanced capture and catalytic oxidizers)

Although the Department acknowledges that compounding operations within PES-2 (EU-2.2, 2.3 and 2.4), PES-3 and PES-5 are not subject to 40 CFR part 64 requirements, based on Sonoco calculations; the Department requires enhanced monitoring of these units and inclusion in the facility CAM plan. This is due to the NSR/PSD avoidance nature of the associated VOC emission limits and the use of control equipment to achieve compliance.

7.6 Greenhouse Gas (GHG) (40 CFR Parts 51, 52, 70, 71 and 98)

The heating capacity of all natural gas combustion sources at this Sonoco facility totals 16.3 MM Btu/hr. Maximum potential CO₂e from these fuel burning sources, calculated using the USEPA GHG Calculator and assuming 1,020 Btu per cubic foot of natural gas (~140.0 MM ft³/yr), is ~7,630 metric tonnes and ~8,411 U.S. tons per year.

- 40 CFR Parts 51, 52, 70, and 71

The GHG Tailoring Rule sets the threshold for both Title V permitting and PSD applicability at 100,000 tons per year. These parts are not applicable to this facility because potential CO₂e emissions are less than 100,000 tons annually.

- U.S. Supreme Court Decision in *Utility Air Regulatory Group v. EPA*

On June 23, 2014, the U.S. Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA* (No. 12-1146). The Court said that EPA may not treat greenhouse gases as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or title V permit. The Court also said that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on greenhouse gases emissions based on the application of Best Available Control Technology (BACT).

- Mandatory Greenhouse Gas Reporting (40 CFR Part 98)

Sonoco does not have the potential to emit CO₂e greater than the annual 25,000 metric tonnes applicability threshold within this rule, therefore, this facility is not subject to this requirement.

7.7 Other Requirements (includes SIP) (See Appendix A)

- City of Memphis Code Section 16-77 (Construction and Operating Permits):

This chapter contains applicable requirements for the facility.

Rule 1200-3-9-.01(5)(b)2.(ii); Growth Policy:

All minor stationary sources, and minor modifications proposing to construct in a non-attainment area shall utilize best available control technology (BACT) for the non-attainment pollutant as specified by the Technical Manager at the time of the completed permit application, but all major stationary sources and major modifications are required to install LAER in non-attainment areas for the non-attainment pollutant.

Growth Policy BACT is applicable to PES-5 compounding operations (EU-5.1) because it was installed during a period of non-attainment with the ozone NAAQS. The enhanced capture mechanism and catalytic oxidizer associated with this operation are sufficient to meet this requirement.

- City of Memphis Code Section 16-80 (Volatile Organic Compounds):
(Reference Rules and Regulations of Tennessee, Rule 1200-3-18)

Rule 1200-3-18-.06; Handling, Storage, Use, and Disposal of VOCs

This rule has several standards that are generally applicable on a facility-wide basis and are included in the Title V operating permit.

Rule 1200-3-18-.12; Can Coating

This rule applies to conventional coating and compounding operations at this facility. PES-1, PES-2, PES-3, PES-4 and PES-5 are subject to this rule.

Sheet basecoat VOC content is limited to 2.8 lbs/gal (PES-1) and can end sealing compound VOC content is limited to 3.7 lbs/gal (excluding water and exempt compounds) (PES-2, 3, 4 and 5).

Sonoco utilizes emission controls (catalytic oxidation) and compliant coatings to comply with this standard.

Rule 1200-3-18-.13; Coil Coating

This rule applies to any coil coating operation. For the purpose of this rule, the following definitions apply:

- a) "Coil" means any continuous metal strip with thickness of 0.15 millimeter (mm) (0.006 inches) or more that is packaged in a roll or coil.
- b) "Coil coating line" means a web coating line where coating is applied to coil.

The coil at this facility is cut into a sheet prior to coating and the metal has a thickness <0.006 inches; therefore, this rule is not applicable.

Rule 1200-3-18-.20; Coating of Miscellaneous Metal Parts

This rule applies to any miscellaneous metal parts and products coating line. This rule does not apply to the coating of metal parts and products that are covered by other rules of this chapter; therefore, conventional coating and compounding operations are not affected by this rule. These operations are subject to and affected by Rule 1200-3-18-.12.

Rule 1200-3-18-.79; Other Facilities That Emit VOCs of 100 Tons Per Year

This rule applies to any source that has potential VOC emissions of 100 tons or more per calendar year. Any sources subject to standards in Rules 1200-3-18-.11 through 1200-3-18-.77 of this chapter are excluded; therefore, conventional coating and compounding operations are not affected by this rule. These operations are subject to and affected by Rule 1200-3-18-.12.

VIII. FEES

Fees apply to this permit action as follows:

1) Modification fee (CAM Plan Update):	\$130.00
2) <u>Publication fee (Renewal/Modification):</u>	<u>\$250.00</u>
TOTAL FEE	\$380.00

APPENDIX A

Regulatory Applicability Overview Table

APPENDIX A

Regulatory Applicability Tables

Sonoco Products Company
Title V Operating Permit No. 00290-01TV (02-15-21)
Federal Applicable Requirements Overview

CFR Part	Description	Applicable Req.	Notes
40 CFR 50.1 — 50.19	National Primary and Secondary Ambient Air Quality Standards	Yes	Contains general requirements
40 CFR 52.21	Prevention of Significant Deterioration of Air Quality	Yes	Contains general requirements for PSD sources
40 CFR 54	Prior Notice of Citizen Suits	Yes	Contains general requirements
40 CFR 60 (Subpart TT)	Standards of Performance for Metal Coil Surface Coating	Not Applicable (NA)	The provisions of this subpart apply to metal coil surface coating operations where an organic coating is applied to the surface of any continuous metal strip with thickness of 0.15 millimeters (0.006 inches.) or more that is packaged in a roll or coil. The coil coated at this facility meets neither of the requirements of this subpart because it has a thickness <0.006 inches and is not packaged in a roll or coil.
40 CFR 60 (Subpart WW)	Standards of Performance for Beverage Can Surface Coating Industry	NA	The provisions of this subpart apply to the following affected facilities in beverage can surface coating lines: each exterior base coat operation, each over-varnish coating operation, and each inside spray coating operation. The can ends made at this facility are not for use as part of a beverage can, therefore, end sealant application is not affected by this subpart. A "beverage can" under this subpart is defined as any two-piece steel or aluminum container in which soft drinks or beer, including malt liquor, are packaged.
40 CFR 63 (Subpart MMMM)	National Emission Standards for Hazardous Air Pollutant Emissions for Misc. Metal Parts and Products (Surface Coating)	NA	Not applicable because this Sonoco facility is NOT a major source of HAPs
40 CFR 63 (Subpart HHHHH)	National Emission Standards for Hazardous Air Pollutant Emissions for Misc. Coating Manufacturing	NA	Not applicable because this Sonoco facility is NOT a major source of HAPs
40 CFR 64	Compliance Assurance Monitoring	Yes	Applicable to PES-1 and PES-4. Although the Department acknowledges that PES-2 (EU-2.2, 2.3 and 2.4), PES-3 and PES-5 are not subject to 40 CFR part 64 requirements, based on Sonoco calculations; the Department requires enhanced monitoring as authorized under City of Memphis Code Section 16-85 due to the NSR/PSD avoidance nature of the associated VOC emission limits.
40 CFR 66	Assessment and Collection of Noncompliance Penalties by EPA	Yes	Contains general requirements
40 CFR 70	State Operating Permit Programs	Yes	Contains general requirements for Title V major source operating permits

40 CFR 82 (Subpart A)	Protection of Stratospheric Ozone — Production and Consumption Controls	Yes	Contains general requirements regarding the use of ozone depleting substances
40 CFR 82 (Subpart B)	Servicing of Motor Vehicle Air Conditioners	Yes	
40 CFR 82 (Subpart C)	Ban on Nonessential Products Containing Class I Substances and Ban on Nonessential Products Containing or Manufactured with Class II Substances	Yes	
40 CFR 82 (Subpart D)	Federal Procurement	Yes	
40 CFR 82 (Subpart E)	The Labeling of Products Using Ozone Depleting Substances	Yes	
40 CFR 82 (Subpart F)	Recycling and Emissions Reduction	Yes	
40 CFR 82 (Subpart G)	Significant New Alternatives Policy Program (SNAP)	Yes	

Sonoco Products Company
Title V Operating Permit No. 00290-01TV (02-15-21)
State and Local Applicable Requirements Overview

TDEC/Shelby/Memphis	Description	Applicable Req.	Notes
CHAPTER 1200-3-2(3-1A)(16-46)	DEFINITIONS		
1200-3-2-.01	General Definitions	Not Applicable (NA)	Defines terms used in chapter
1200-3-2-.02	Abbreviations	NA	General applicability
CHAPTER 1200-3-3(3-6)(16-49)	AMBIENT AIR QUALITY STANDARDS		
1200-3-3-.01	Primary Air Quality Standard	Yes	Contains general requirements
1200-3-3-.02	Secondary Air Quality Standard	Yes	Contains general requirements
1200-3-3-.03	Tennessee's Ambient Air Quality Standard	Yes	Contains general requirements
1200-3-3-.04	Nondegradation Standard	Yes	Contains general requirements
1200-3-3-.05	Achievement	Yes	Contains general requirements
CHAPTER 1200-3-5(3-17)(16-83)	VISIBLE EMISSIONS		
1200-3-5-.01	General Standards	Yes	Contains specific requirements applicable to PES-1 through PES-5
1200-3-5-.02	Exceptions	Yes	Contains general requirements
1200-3-5-.03	Method of Recording	Yes	Contains specific requirements applicable to PES-1 through PES-5
1200-3-5-.04	Exemption	Yes	Contains general requirements
CHAPTER 1200-3-6(3-21)(16-79)	NON-PROCESS EMISSION STANDARDS (PM)		
1200-3-6-.01	General Non-Process Emissions	NA	Combustion gases from the burners associated with the PES-1 thermal oxidizer and PES-2 and PES-4 catalytic oxidizers are comingled with process emissions, therefore they are subject to the process emission standards in City of Memphis Code Section 16-78. Remaining catalytic units and end drying ovens at the facility are electrically powered. PM emissions from this facility are negligible.
1200-3-6-.02	Non-Process Particulate Emission Standards	NA	
CHAPTER 1200-3-7(3-20)(16-78)	PROCESS EMISSION STANDARDS (PM)		
1200-3-7-.01	General Process Particulate Emission Standards	Yes	Contains general requirements
1200-3-7-.03	New Processes	Yes	Contains specific requirements applicable to PES-1 through PES-5. PM emissions from this facility are negligible.
1200-3-7-.04	Limiting Allowable Emissions	Yes	Contains specific requirements applicable to PES-1 through PES-5. PM emissions from this facility are negligible.

1200-3-9-.01	Construction Permits	Yes	Contains specific requirements. General rules for new construction and modifications apply and are included in the general conditions section of this permit. Paragraph (5) of this rule includes "Growth Policy" BACT requirements applicable to PES-5. Enhanced localized end conveyance VOC emission capture, an enclosed induction heater and a catalytic oxidizer are sufficient for "Growth Policy" BACT. This facility is classified as a PSD source due to allowable VOC emissions, but this permit action does not trigger PSD review.
1200-3-9-.02	Operating Permits	Yes	Contains general requirements
1200-3-9-.03	General Provisions	Yes	Contains general requirements
1200-3-9-.04	Exemptions	Yes	Contains general requirements
1200-3-9-.05	Appeal of Permit Application Denials and Permit Conditions	Yes	Contains general requirements
CHAPTER 1200-3-10(3-7)(16-85)	REQUIRED SAMPLING, RECORDING, AND REPORTING		
1200-3-10-.01	Sampling Required to Establish Air Contaminant Emissions Levels	Yes	Contains general requirements
1200-3-10-.02	Monitoring of Source Emissions, Recording and Reporting of Same are Required	Yes	Contains general requirements
1200-3-10-.04	Sampling, Recording and Reporting Required for Major Stationary Sources	Yes	Contains general requirements
CHAPTER 1200-3-12(3-8)(16-86)	METHODS OF SAMPLING AND ANALYSIS		
1200-3-12.01	General	Yes	Contains general requirements
1200-3-12-.03	Source Sampling and Analysis	Yes	Contains general requirements
CHAPTER 1200-3-15(3-14)(16-60)	EMERGENCY EPISODE PLAN		
1200-3-15-.01 and .02	Purpose and Episode Criteria	Yes	Applicable for providing the definition of purpose and terms
1200-3-15-.03	Required Emissions Reduction	Yes	Contains general requirements
CHAPTER 1200-3-14(3-24)(16-82)	SULFUR OXIDE EMISSIONS		
1200-3-14-.01	General Provisions	Yes	Contains general requirements
1200-3-14-.03	Process Emission Standards	Yes	Combustion gases from the burners associated with the PES-1 thermal oxidizer and PES-2 and PES-4 catalytic oxidizers are comingled with process emissions, therefore they are subject to the process emission standards in City of Memphis Code Section 16-82. Remaining catalytic units and end drying ovens at the facility are electrically powered.

CHAPTER 1200-3-18(3-22)(16-80)	VOLATILE ORGANIC COMPOUNDS		
1200-3-18-.01	Definitions	Yes	Contains general requirements
1200-3-18-.02	General Provisions and Applicability	Yes	Contains general requirements
1200-3-18-.03	Compliance Certification, Record Keeping, and Reporting Requirements for Coating and Printing Sources	Yes	Contains general requirements
1200-3-18-.06	Handling, Storage, and Disposal of Volatile Organic Compounds (VOCs)	Yes	Contains general requirements
1200-3-18-.12	Can Coating	Yes	Contains specific requirements applicable to PES-1 through PES-5. Sheet basecoat VOC content is limited to 2.8 lbs/gal and can end sealing compound VOC content is limited to 3.7 lbs/gal (excluding water and exempt compounds).
1200-3-18-.13	Coil Coating	NA	The coil at this facility is cut into a sheet prior to coating (PES-1) and the metal has a thickness <0.006 inches, therefore this rule is not applicable.
1200-3-18-.20	Coating of Miscellaneous Metal Parts	NA	This rule applies to any miscellaneous metal parts and products coating line. This rule does not apply to the coating of metal parts and products that are covered by other rules of this chapter, therefore conventional coating and compounding operations are not affected by this rule. They are subject and affected by Rule 1200-3-18-.12.
1200-3-18-.79	Other Facilities that Emit Volatile Organic Compounds (VOC) of 100 tons/year	NA	This rule applies to any source that has potential VOC emissions of 100 tons or more per calendar year. Any sources subject to standards in Rules 1200-3-18-.11 through 1200-3-18-.77 of this chapter are excluded; therefore conventional coating and compounding operations are not affected by this rule. They are subject and affected by Rule 1200-3-18-.12.
1200-3-18-.80	Test Methods and Compliance Procedures: General Provisions	Yes	Contains specific requirements applicable to PES-1 through PES-5
1200-3-18-.81	Test Methods and Compliance Procedures: Determining the VOC Content of Coatings and Inks	Yes	Contains specific requirements applicable to PES-1 through PES-5
1200-3-18-.82	Test Methods and Compliance Procedures: Alternative Compliance Methods for Surface Coating	Yes	Contains specific requirements applicable to PES-1 through PES-5
1200-3-18-.83	Test Methods and Compliance Procedures: Emission Capture and Destruction of Removal Efficiency and Monitoring Requirements	Yes	Contains specific requirements applicable to PES-1 through PES-5
1200-3-18-.84	Test Methods and Compliance Procedures: Determining the Destruction or Removal Efficiency of a Control Device	Yes	Contains specific requirements applicable to PES-1 through PES-5

CHAPTER 1200-3-20(3-9)(16-87)	LIMITS ON EMISSIONS DUE TO MALFUNCTIONS, STARTUPS, AND SHUTDOWNS		
1200-3-20-.02	Reasonable Measures Required	Yes	Contains general requirements
1200-3-20-.03	Notice Required When Malfunction Occurs	Yes	Contains general requirements
1200-3-20-.04	Logs and Reports	Yes	Contains general requirements
1200-3-20-.05	Copies of Logs Required	Yes	Contains general requirements
1200-3-20-.06	Report Required Upon the Issuance of a Notice of Violation	Yes	Contains general requirements
1200-3-20-.07	Special Reports Required	Yes	Contains general requirements
1200-3-20-.08	Rights Reserved	Yes	Contains general requirements
1200-3-20-.09	Additional Sources Covered	Yes	Contains general requirements
CHAPTER 1200-3-24(3-40)(16-52)	GOOD ENGINEERING PRACTICE STACK HEIGHT REGULATIONS		
1200-3-24-.01	General Provisions	Yes	Contains general requirements
1200-3-24-.02	Definitions	Yes	General applicability
1200-3-24-.03	Good Engineering Practice Stack Height Standards	Yes	Contains general requirements
1200-3-24-.04	Specific Emission Standards	Yes	Contains general requirements
CHAPTER 1200-3-32(3-38)(16-91.4)	PREVENTION OF ACCIDENTAL RELEASES		
1200-3-32-.01	Purpose and Intent	Yes	Contains general requirements
1200-3-32-.02	Definitions	Yes	Contains general requirements
OTHER (LOCAL ONLY)			
(3-2)(16-56)	Enforcement - Violations of Chapter - Notice; Citation; Injunctive Relief	Yes	Contains general requirements
(3-3)(16-57)	Penalties - Misdemeanor, Civil, and Noncompliance	Yes	Contains general requirements
(3-4)(16-59)	Enforcement - Emergency Powers of Health Officer	Yes	Contains general requirements
(3-10)(16-58)	Enforcement - Variances	Yes	Contains general requirements
(3-11)(16-51)	Severability	Yes	Contains general requirements
(3-12)(16-48)	Words, Phrases Substituted in State Regulations Adopted by Reference	Yes	Contains general requirements
(3-13)(16-61)	Right Of Entry	Yes	Contains general requirements
(3-16)(16-50)	Open Burning	Yes	Contains general requirements
(3-18)(16-89)	Fugitive Dust	Yes	Contains general requirements
(3-19)(16-88)	Nuisance Abatement	Yes	Contains general requirements

(3-35)(16-71)	Created; Membership; Term of Office; Jurisdiction; Hearings; Appeals	Yes	Contains general requirements
(14.5-27-28, 30-32, 34-36)(16-93 through 100)	Permits and Fees (Various)	Yes	Contains general requirements
(14.5-35)(16-101)	Penalty Provisions	Yes	Contains general requirements
(14.5-36)(16-102)	Annual Review of Fee Structure and Financial Need	Yes	Contains general requirements

APPENDIX B

Emission Summary Table

DATE	SOURCE #		FACILITY NAME	FACILITY CLASSIFICATION			LAST INSPECTION	PERMIT ENGINEER:	FORTUNATO
02/15/21	00290		Sonoco Products Company	MAJOR	MINOR	SYNTHETIC MINOR	06/27/19		
				X					

ALLOWABLE PERMITTED POLLUTANT (tons per 12-month rolling period)

PERMIT #	ISSUED	REVISED	EXPIRES	TSP	SO ₂	VOC	CO	NO _x	PB	HAP	PM ₁₀	GHG's	Check if Applicable			
													MACT (40 CFR Part 63)	NESHAP (40 CFR Part 61)	NSPS (40 CFR Part 60)	PSD on NSR
00290-0TV	PENDING	Not Applicable (NA)	PENDING						NA				No	No	No	Yes
Facility-Wide Natural Gas Fuel Burning Equipment				0.53	0.04	0.39	5.88	7.00			0.53	8,419				
PES-1						48.1				9.9 tons (Single HAP) 24.9 tons (Combined HAP's)						
PES-2						270.5										
PES-3						13.0										
PES-4						25.9										
PES-5						16.45										
TOTAL TONS:				0.53	0.04	374.3	5.88	7.00	NA	24.9	0.53	NA				
Classification for each pollutant should be added here based on number of tons: A = Major SM = Synthetic Minor B = Minor				B	B	A	B	B	NA	SM	B	NA				
CHECK IF NONATTAINMENT STATUS APPLIES:												Subparts:				VOC