

TITLE V PERMIT STATEMENT

Facility Name: The Carlstar Group, LLC
City: Clinton
County: Anderson

Date Application Deemed Complete: February 2, 2017

Emission Source Reference No.:01-0114
Permit No.: 572478

INTRODUCTION

This narrative is being provided to assist the reader in understanding the content of the attached Title V operating permit. This Title V Permit Statement is written pursuant to Tennessee Air Pollution Control Rule 1200-3-9-.02(11)(f)1.(v). The primary purpose of the Title V operating permit is to consolidate and identify existing state and federal air requirements applicable to The Carlstar Group, LLC and to provide practical methods for determining compliance with these requirements. The following narrative is designed to accompany the Title V Operating Permit. It initially describes the facility receiving the permit, then the applicable requirements and their significance, and finally the compliance status with those applicable requirements. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public participation process will be described in an addendum to this narrative.

Acronyms

PSD - Prevention of Significant Deterioration

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards

MACT - Maximum Achievable Control Technology

NSR - New Source Review

I. Identification Information

A. Source Description

The Carlstar Group, LLC manufactures rubber non-road tires.

Emission Sources:

01: Rubber Processing – Three processing lines. One “hot” feed line beginning with four warming mills, one “cold” feed line that does not require milling before extrusion, and one radial tire manufacturing line. Includes undertread, sidewall, and tread end cementing. Line #3, along with eight tire curing presses, was originally Source 09 but was incorporated into this source and Source 04.

04: Tire Building – Tire curing presses and green tire spraying. The tire curing presses from previous Source 09 were incorporated into this source.

05: Two Boilers – One 95 MMBtu/hr boiler (subject to NSPS Subpart Dc and NESHAP Subpart 6J) and one 92.27 MMBtu/hr boiler (subject to NSPS Subpart Dc) used to provide steam for the facility. The two boilers do not operate simultaneously and no fuel is needed to keep the back-up boiler ready.

07: Raw Material Handling – Carbon black unloading and bulk bag unloading.

08: Rubber Mixing – Conveyor feeding raw materials into two Banbury mixers.

10: Emergency Generator Engine – One 64 hp diesel fired emergency reciprocating internal combustion engine (RICE). (Insignificant)

11: Emergency Fire Pump Engine – One 218 hp diesel fired emergency fire pump engine. (Insignificant)

14: Gasoline Dispensing – One 500 gallon gasoline storage tank for dispensing gasoline to onsite gasoline-fueled equipment. (Insignificant)

B. Facility Classification

1. Attainment or Non-Attainment Area Location

Area (**is**) designated as an attainment area for all criteria pollutants.

2. Company *is* located in a *Class II* area.

C. Regulatory Status

1. PSD/NSR

This facility ***is*** considered a major source for **PSD** purposes.

2. Title V Major Source Status by Pollutant

Pollutant	Is the pollutant emitted?	If emitted, what is the facility's status?	
		Major Source Status	Non-Major Source Status
PM	yes		yes
PM ₁₀	N/A	N/A	N/A
SO ₂	yes		yes
VOC	yes	yes	
NO _x	yes		yes
CO	yes		yes
Individual HAP	yes		yes
Total HAPs	yes		yes
GHG (CO ₂ e)	yes		yes

3. MACT Standards

List MACT Rule(s) if applicable:

This facility ***is not*** a major source for HAPs.

4. Program Applicability

Are the following programs applicable to the facility?

PSD (**yes**) – The facility ***is*** a major source for VOC under PSD.

NESHAP (**no**) - This facility is not major for HAPs and therefore not subject to 40 CFR 63 Subpart XXXX - National Emissions Standards For Hazardous Air Pollutants: Rubber Tire Manufacturing.

NESHAP (**yes**) Source 05 – This facility is an area source for HAPs and one of the boilers is subject to 40 CFR 63 Subpart JJJJJ – National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

NESHAP (**yes**) Sources 10 and 11 – 40 CFR 63 Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

NESHAP (**yes**) Source 14 – 40 CFR 63 Subpart CCCCCC – National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

NSPS (**yes**) Source 05 – 40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

NSPS (**yes**) Sources 01 and 04 (Lines 2 and 3) – 40 CFR Part 60 Subpart BBB – Standards of Performance for the Rubber Tire Manufacturing Industry. Line 1 predates the NSPS applicability.

5. Other Standards

40 CFR 64 - Compliance Assurance Monitoring – Source 08 of this facility is subject to CAM for PM emissions. An updated CAM plan was submitted with the renewal of this Title V operating permit to allow the use of pressure drop monitoring in place of a leak detection system for Source 08. This update was incorporated into the renewal.

II. Compliance Information

A. Compliance Status

Is the facility currently in compliance with all applicable requirements? (**yes**)

If no, explain.

Are there any applicable requirements that will become effective during the permit term? (**yes**)

If yes, explain.

The updated CAM plan will require the monitoring of pressure drop in place of use of the leak detection system for Source 08.

III. Other Requirements

A. Emissions Trading

The facility is not involved in an emission trading program.

B. Acid Rain Requirements

This facility is not subject to any requirements in Title IV of the Clean Air Act.

C. Prevention of Accidental Releases

(Not Applicable)

IV. Public Participation Procedures

Notification of this draft permit was mailed to the following environmental agencies:

1. EPA
2. Knox County
3. State of Kentucky
4. State of North Carolina
5. State of Virginia
6. Cherokee Nation

V. **Permit History:**

Permit No. 572478

Operational Flexibility #1: Issued August 29, 2018 – Addition of a third spray booth to the tire building lines (Source 04) for spraying lubricant on green tires. There will no additional material used and the booth exhaust will be routed into existing ducting so there will not be any additional air flow.

Operational Flexibility #2: Issued January 8, 2019 – Replacement of the existing Line 1 tread end cement applicator with a new, mechanical roll-on applicator.

Operational Flexibility #3: Issued August 28, 2019 – Modification to the location of the clean air emissions exhaust piping on the #1 Mixer Dust Collector.

Significant Modification #1: Issued September 9, 2019 – Removal of the facility's PAL permit. The facility-wide limit from the PAL will remain the same. Volatile organic compound (VOC) emissions records that were part of the PAL were added to Condition E3-7, and tables in source-specific sections of the permit were either added or modified to account for record keeping that was being done in the PAL permit.

Operational Flexibility #4: Issued July 9, 2020 – Replacement of the Mixer #1 baghouse with a new dust collector.

Administrative Amendment #1: Issued August 10, 2020 – Removal of brand names of the Source 08 Mixer #1 and Mixer #2 control devices, and update of the technical and billing contacts.

Operational Flexibility #5: Issued February 22, 2021 – Replacement of the Mixer #2 baghouse with a new dust collector.

Operational Flexibility #6: Issued May 4, 2021 - Replacement of the Mixer #1 with a new mixer. Replacement mixer will continue to exhaust to the existing Mixer #1 baghouse.

Minor Modification #1: Issued October 11, 2022 - Update the pressure drop indicator range in the facility's Compliance Assurance Monitoring (CAM) plan for the Mixer #1 dust collector and Mixer #2 baghouse. The proposed pressure drop range will be updated from a minimum of 1.0 inch of water to a minimum of 0.25 inches of water and a maximum of 3.0 inches of water. Changes were made in Condition E8-1 and Attachment 2 of the permit.

Indicator	Visible Emissions	Pressure Drop
Measurement Approach	Visible Emissions from the baghouse exhaust will be monitored daily using EPA Reference Method 22-like procedures. (visible/no visible)	Pressure Drop across each dust collector or baghouse is measured with a differential pressure gauge.
II. Indicator Range	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and reporting requirement.	Minimum pressure across the Mixer #1 dust collector and the Mixer #2 Carbon Black Baghouse is 0.25 inches of water and maximum pressure across the Mixer #1 dust collector and the Mixer #2 Carbon Black Baghouse is 3.0 inches of water. An excursion is defined as a pressure drop value expressed in inches of water, out of range established for each dust collector. Excursions trigger an inspection, corrective action and a reporting requirement.
QIP Threshold	None selected	None selected
III. Performance Criteria		
A. Data Representativeness	Measurements are made at the emission point (baghouse exhaust)	Pressure taps are located at the baghouse inlets and outlet. The gauges have a minimum accuracy of 0.25 in H ₂ O
B. Verification of operational Status	Minimum 95% of reading observed during monitoring period.	The gauges must operate at least 95% of the time the source is operating. Records must be kept to show compliance with this requirement.
C. QA/QC Practices and Criteria	The observer will be familiar with EPA Method 22.	The pressure gauges are calibrated annually. Pressure taps are checked for plugging daily and entered into a form or a checklist.
D. Monitoring frequency	Daily	Pressure drop is monitored continuously but recorded once per day.
Data Collection Procedure	The VE observation is documented	Pressure drops are manually recorded once per day for each baghouse during operation.
Averaging period	n/a	n/a

EPA Comments: None.

Minor Modification #2: Issued **TBD** - Updated the pressure drop indicator range in the facility's Compliance Assurance Monitoring (CAM) plan for the Mixer #1 dust collector and Mixer #2 dust collector. The proposed pressure drop range was updated from a minimum of 0.25 inches of water to a minimum of 0.5 inches of water and the maximum pressure drop was removed. Changes were made in Condition E8-1 and Attachment 2 of the permit.

Additional changes are listed below:

1. The Annual Accounting Period (AAP) and addresses (Fiscal Services and APC) in Section E1 were updated
2. Condition B7 was changed to "Reserved".
3. The Technical contact and billing contact in E3-10 was updated.
4. The regulatory citation was updated from Tenn. Comp. R. & Regs. to TAPCR.

5. The following sections were revised to match the language in the Title V Sections A-D for Sig Mods and Minor Mods document: A8, A11, A18, A20, B5, D9, D10, D12.
6. Addition of Condition D14 – Internal Combustion Engines.

Indicator	Visible Emissions	Pressure Drop
Measurement Approach	Visible Emissions from the dust collector exhaust will be monitored daily using EPA Reference Method 22-like procedures. (visible/no visible)	Pressure Drop across each dust collector is measured with a differential pressure gauge.
II. Indicator Range	An excursion is defined as the presence of visible emissions. Excursions trigger an inspection, corrective action, and reporting requirement.	Minimum pressure across the Mixer #1 dust collector and the Mixer #2 dust collector is 0.5 inches of water. An excursion is defined as a pressure drop value expressed in inches of water, out of range established for each dust collector. Excursions trigger an inspection, corrective action and a reporting requirement.
QIP Threshold	None selected	None selected
III. Performance Criteria		
A. Data Representativeness	Measurements are made at the emission point (dust collector exhaust)	Pressure taps are located at the dust collector inlets and outlet. The gauges have a minimum accuracy of 0.25 in H ₂ O
B. Verification of operational Status	Minimum 95% of reading observed during monitoring period.	The gauges must operate at least 95% of the time the source is operating. Records must be kept to show compliance with this requirement.
C. QA/QC Practices and Criteria	The observer will be familiar with EPA Method 22.	The pressure gauges are calibrated annually. Pressure taps are checked for plugging daily and entered into a form or a checklist.
D. Monitoring frequency	Daily	Pressure drop is monitored continuously but recorded once per day.
Data Collection Procedure	The VE observation is documented	Pressure drops are manually recorded once per day for each dust collector during operation.
Averaging period	n/a	n/a

Initial notification to EPA and affected States: November 22, 2024.

Draft permit sent to EPA: **TBD**