NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date: xx/xx/2021

Region: Fayetteville Regional Office
County: Cumberland
NC Facility ID: 2600050
Inspector’s Name: Evangelyn Lowery-Jacobs
Date of Last Inspection: 03/18/2021
Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility’s Name): The Goodyear Tire & Rubber Company
Facility Address:
The Goodyear Tire & Rubber Company
6650 Ramsey Street
Fayetteville, NC 28311
SIC: 3011 / Tires And Inner Tubes
NAICS: 326211 / Tire Manufacturing (except Retreading)
Facility Classification: Before: Title V After: Title V
Fee Classification: Before: Title V After: Title V

Contact Data

Facility Contact
Joe Carta
EHS Coordinator
(910) 630-5678
6650 Ramsey Street
Fayetteville, NC 28311

Authorized Contact
Andrew Becker
Manufacturing Director
(910) 630-5211
6650 Ramsey Street
Fayetteville, NC 28311

Technical Contact
Joe Carta
EHS Coordinator
(910) 630-5678
6650 Ramsey Street
Fayetteville, NC 28311

Permit Applicability (this application only)
SIP: 15A NCAC 2D .0515, 02D .0521, 02D .0503, 02D .0516, 02D .0524, 02D .0614, 02D .0958, 2D .0530, 1806, 02D .1111, 2Q .0317 and 02Q .0513.
NSPS: Subpart Dc, III, and BBB
NESHAP: Subpart ZZZZ, DDDDD, and XXXX
PSD: BACT
PSD Avoidance: 02D .530(u)
NC Toxics: (NCGS) 143-215.107(a)(5) (House Bill 952)
112(r): NA
Other: NA

Application Data
Application Number: 2600050.19C, .19A, .19B, .19D, .20A, .20B, .20C, .21A, and .21C
Date Received: 08/08/2019, 01/14/2019, 02/15/2019, 11/13/2019, 08/06/2020, 10/15/2020, 3/24/2021, and 7/7/2021
Application Type: Renewal
Application Schedule: TV-Renewal
Existing Permit Data
Existing Permit Number: 00011/T53
Existing Permit Issue Date: 04/23/2021
Existing Permit Expiration Date: 03/31/2026

Total Actual emissions in TONS/YEAR:

<table>
<thead>
<tr>
<th>CY</th>
<th>SO2</th>
<th>NOX</th>
<th>VOC</th>
<th>CO</th>
<th>PM10</th>
<th>Total HAP</th>
<th>Largest HAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>0.2500</td>
<td>39.68</td>
<td>165.47</td>
<td>33.21</td>
<td>22.28</td>
<td>32.20</td>
<td>11.73 [MIBK (methyl isobutyl ketone)]</td>
</tr>
<tr>
<td>2018</td>
<td>0.2500</td>
<td>41.56</td>
<td>157.63</td>
<td>34.86</td>
<td>22.08</td>
<td>30.08</td>
<td>10.93 [MIBK (methyl isobutyl ketone)]</td>
</tr>
<tr>
<td>2017</td>
<td>0.2200</td>
<td>36.70</td>
<td>138.46</td>
<td>30.78</td>
<td>19.92</td>
<td>27.73</td>
<td>10.10 [MIBK (methyl isobutyl ketone)]</td>
</tr>
<tr>
<td>2016</td>
<td>0.2700</td>
<td>45.42</td>
<td>158.25</td>
<td>38.12</td>
<td>74.05</td>
<td>31.22</td>
<td>10.93 [MIBK (methyl isobutyl ketone)]</td>
</tr>
<tr>
<td>2015</td>
<td>0.2800</td>
<td>47.05</td>
<td>156.66</td>
<td>39.47</td>
<td>75.96</td>
<td>31.38</td>
<td>10.96 [MIBK (methyl isobutyl ketone)]</td>
</tr>
</tbody>
</table>

Review Engineer: Gautam Patnaik
Review Engineer’s Signature: Date: xx/xx/2021

Comments/Recommendations:
Issue: 00011/T54
Permit Issue Date: xx/xx/2021
Permit Expiration Date: xx/xx/2026
I. Facility Description

Goodyear is currently one of the five largest tire production facilities in the world. They manufacture a wide variety of automobile and truck tires for the auto after market and original equipment for other auto manufactures. Tires are manufactured under the Goodyear and Kelly-Springfield brands and are private branded for other companies.

The principal raw materials are carbon black powder and rubber compound pellets and blocks. These materials are mixed per various recipes and formed into strips of uncured rubber. Various shapes of rubber parts are formed from these strips. Automated tire assembly robots assemble the various parts into the finished “green” uncured tires prior to the final curing. After the tires are cured, they are balanced using force grinders, and are visually inspected.

II. Purpose of Application

Application No. 2600050.19C is for renewal of an existing Title V permit pursuant to 15A NCAC 2Q .0513. This renewal application was received on August 8, 2019 and the active permit at that time was Permit No. 00011T52 issued on August 20, 2018 and effective till February 28, 2020.

This renewal application was received at least six months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

Air Permit No. 00011T52, Section 3 – The General Conditions K., states “This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least six months before the date of permit expiration.” Thus, the applicant submitted their renewal in a timely manner.

Also, several 502(b)(10) applications (2600050.19A, .19B, .19D, .20A, .20B, .20C, .21B, and .21C) will be consolidated with this Title V renewal application which will go through a 30-day public notice and a 45-day EPA review. Each are discussed in Section V of this Document below.

III. Application Chronology

The table below outlines the modification to the applicant’s permit starting from their last permit renewal (Air Quality Permit No. 00011T47 issued on March 9, 2015)

<table>
<thead>
<tr>
<th>Application #</th>
<th>Changes Made to the Permit</th>
<th>Application Received</th>
<th>Permit Issued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application #</td>
<td>Changes Made to the Permit</td>
<td>Application Received</td>
<td>Permit Issued</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>2600050.14E</td>
<td>Step 1 Upgrade Banbury Mixer #2 and install fabric filter (DC-14). Cross-connect RTO-1 and RTO-2 so that RTO-1 can act as a back-up control device to RTO-2, and vice versa. Step 2 Upgrade Mixer #1.</td>
<td>12/29/2014</td>
<td>Permit Number: 00011T48</td>
</tr>
<tr>
<td>2600050.15A</td>
<td>The four natural gas/No. 6 fuel oil/No. 2 fuel oil/recycled No. 6 fuel oil-fired boilers (ID Nos. BL01 through BL04) were subject to MACT Subpart DDDDD.</td>
<td>10/05/2015</td>
<td>Permit Number: 00011T49</td>
</tr>
<tr>
<td>2600050.16A</td>
<td>Install a new cold feed Quad Extruder line.</td>
<td>04/06/2016</td>
<td>Permit Number: 00011T50</td>
</tr>
<tr>
<td>2600050.17A</td>
<td>Installed a regenerative thermal oxidizer (RTO-2) and conducted the required performance test.</td>
<td>05/24/2017</td>
<td>Permit Number: 00011T51</td>
</tr>
<tr>
<td>2600050.18A</td>
<td>This application is a 02Q.0501(c)(2) (Part II) application (as required by 15A NCAC 02Q.0504).</td>
<td>04/13/2018</td>
<td>Permit Number: 00011T52</td>
</tr>
<tr>
<td>2600050.21A</td>
<td>Conducted compliance stack test of the regenerative thermal oxidizer (ID No. RTO-1)</td>
<td>03/11/2021</td>
<td>Permit Number: 00011T53</td>
</tr>
</tbody>
</table>

### IV. Regulatory Summary

All sources and applicable regulations were updated to the latest permit conditions when required. The facility is subject to the following regulations:

- **i. 15A NCAC 02D .0503: “Particulates from Fuel Burning Indirect Heat Exchangers;”**

  The four natural gas/No. 6 fuel oil/No. 2 fuel oil/recycled No. 6 fuel oil-fired boilers (ID Nos. BL01 through BL04) and one temporary, back-up natural gas/No. 2 fuel oil-fired boiler (maximum heat input capacity of less than 100 million Btu per hour; ID No. TMP01) are subject to the above regulation.

  There were no changes to the emission standards, testing, monitoring, record keeping, and reporting to any of the above sources.

  None of the sources added by the 502(b)(10) procedures are subject to the above regulation.

- **ii. 15A NCAC 02D .0516: “Sulfur Dioxide Emissions from Combustion Sources;”**
The four natural gas/No. 6 fuel oil/No. 2 fuel oil/recycled No. 6 fuel oil-fired boilers (ID Nos. BL01 through BL04) and one temporary, back-up natural gas/No. 2 fuel oil-fired boiler (maximum heat input capacity of less than 100 million Btu per hour; ID No. TMP01) are subject to the above regulation.

There were no changes to the emission standards, testing, monitoring, record keeping, and reporting to any of the above sources.

None of the sources added by the 502(b)(10) procedures are combustion sources and not subject to the above regulation.

iii. 15A NCAC 02D .0521: “Control of Visible Emissions;”

All the sources in Section 2.1 A. and B., are subject to the above regulation.

Sources in 2.1 C., of the permit subject to this regulation are (ID Nos. CBT1-ES-210, CBT1-ES-211 through CBT1-ES-216, CBT1-TS1, CBT1-CBS-1, CBT1-CBS-2, CBT1-CBS-3, CBT1-CBS-6A, CBT2-ES-220, CBT2-ES-221 through CBT2-ES-226, CBT2-TS2, CBT2-CBS-7, CBT2-CBS-8, BO02, BB01-K9-1, BB02-L9-1, BB03-M9-1, BB04-P9-1, BB05-Q9-1, BB06-R9-1, BB06A-V9-1, BB07-AE8-1, BB08-CE8-1, K8-1, K8-2, BE7-1, BE7-2, PDS-2, FABR-G18, FABR-G25, EBP-W27, EBP-CAL1, CAL2, LE60, LE61, Q64, P63, HE63, KE63, Q66, WX66, FE66, ME69, AE71, DE71, UE70, TL07, TL08, TL09, TL10, TR01-F67, TR01-F69, TR01-AE63, RG800, RG801, RG802, RG803, RG804, MG1, QE01, and QE03) including sources added by the 502(b)(10) procedures (ID Nos. TL12, MHG1 through MHG4, TL13, TL14, and TL15).

There were no changes to the emission standards, testing, monitoring, record keeping, and reporting to any of the above sources.

For the four natural gas/No. 6 fuel oil/No. 2 fuel oil/recycled No. 6 fuel oil-fired boilers (ID Nos. BL01 through BL04) while firing No. 6 fuel oil or recycled No. 6 fuel oil, the applicant shall observe the emission points of these sources (ID Nos. BL01 through BL04) daily, for any visible emissions above normal (See Section 2.1 A.3.d.) of the modified permit.

The new sources (ID Nos. TL12, (MHG1 through MHG4), TL13, TL14, and TL15) applicability to this regulation are addressed individually under Section “V. 502(b)(10)s” of this review: Application # 2600050.19A (ID No. TL12), Application # 2600050.19B (ID Nos. MHG1 through MHG4), and Application # 2600050.20B (ID Nos. TL13, TL14, and TL15).

The new source visibility emissions are very small and thus not required to establish normal after start-up of their operation.

iv. 15A NCAC 02D .0515: “Particulates from Miscellaneous Industrial Processes;”

Sources in 2.1 C., of the permit subject to this regulation are (ID Nos. CBT1-ES-210, CBT1-ES-211 through CBT1-ES-216, CBT1-TS1, CBT1-CBS-1, CBT1-CBS-2, CBT1-CBS-3, CBT1-CBS-6A, CBT2-ES-220, CBT2-ES-221 through CBT2-ES-226, CBT2-TS2, CBT2-CBS-7,
CBT2-CBS-8, BO02, BB01-K9-1, BB02-L9-1, BB03-M9-1, BB04-P9-1, BB05-Q9-1, BB06-R9-1, BB06A-V9-1, BB07-AE8-1, BB08-CE8-1, K8-1, K8-2, BE7-1, BE7-2, PDS-2, FABRG18, FABRG25, EBP-W27, EBP-CAL1, CAL2, LE60, LE61, Q64, P63, HE63, KE63, Q66, WX66, FE66, ME69, AE71, DE71, UE70, TL07, TL08, TL09, TL10, TR01-F67, TR01-F69, TR01-AE63, RG800, RG801, RG802, RG803, RG804, RG805, MG1, QE01, and QE03) including sources added by the 502(b)(10) procedures (ID Nos. TL12, MHG1 through MHG4, TL13, TL14, and TL15).

There were no changes to the emission standards, testing, monitoring, record keeping, and reporting to any of the above sources.

The new sources (ID Nos. TL12, MHG1 through MHG4, TL13, TL14, and TL15) applicability to this regulation are addressed individually under Section “V. 502(b)(10)s” of this review: Application # 2600050.19A (ID No. TL12), Application # 2600050.19B (ID Nos. MHG1 through MHG4), and Application # 2600050.20B (ID Nos. TL13, TL14, and TL15).

v. 15A NCAC 02D. 0530: “Prevention of Significant Deterioration”

Emissions of VOCs resulting from the use of a coupling agent in any affected Banbury mixer (ID Nos. BB06A-V9-1, BB07-AE8-1, or BB08-CE8-1) shall not exceed 13.2 pounds per ton of rubber compound processed (See Section 2.2 B.1.a., of the permit).

There were no changes to the emission standards, testing, monitoring, record keeping, and reporting to any of the above sources.

The two hundred and fifty-three curing presses (green tire spray) operations (GTS-CP-001 through GTS-CP-253) are subject to BACT (Best Available Control Technology) limits (See Section 2.2 B.3., of the modified permit)

The applicability of BACT to the above sources is addressed under Section “V. 502(b)(10)s - Application # 2600050.21C (Received July 7, 2021)” of this review, below.

iv. 15A NCAC 02D. 0530: “Prevention of Significant Deterioration”

VOCs emissions limit resulting from the use of a coupling agent in any Banbury Mixer #1, #2 and #3 (ID Nos. BB01-K9-1, BB02-L9-1 and BB03-M9-1) not to exceed 2.49 pounds per ton of rubber compound mixed (See Section 2.2 B.2.a., of the permit).

There were no changes to the emission standards, testing, monitoring, record keeping, and reporting to any of the above sources.

The facility requested to replace RTO-1 with a functionally identical unit (See Section “V. 502(b)(10)s - Application # 2600050.19D (Received 11/13/2019)” of this review, below.

The testing requirements in Section 2.2 B.2.c.i., through iii., of the current permit required the performance test for regenerative thermal oxidizers which has already been conducted as per
Application # (2600050.21A) and the issuance of Air Quality Permit 00011T53 on April 23, 2021.

The testing language is replaced with the standard testing language.


This regulation ”15A NCAC 02D .0958” is the BACT for two hundred and fifty-three curing presses (green tire spray) operations (GTS-CP-001 through GTS-CP-253).

See Section “V. 502(b)(10)s - Application # 2600050.21C (Received July 7, 2021)” of this review, below.

vii. 15A NCAC 02D .1111: “Maximum Achievable Control Technology;”

- MACT Subpart DDDDD “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters”

The four natural gas/No. 6 fuel oil/No. 2 fuel oil/recycled No. 6 fuel oil-fired boilers (ID Nos. BL01 through BL04) are subject to the above regulation.

There were no changes to the emission standards, testing, monitoring, record keeping, and reporting to any of the above sources.


All the non-combustible sources at this facility are subject to the above regulation (See Section 2.2 A.2., of the modified permit).

There are no changes to the emission limits, testing, monitoring, record keeping and reporting requirements for the above regulation.

MACT Subpart ZZZZ “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.”

The emergency fire pumps (ID Nos I-ESFP1 through I-ESFP4) are subject to the above regulation.

There are no changes to the emission limits, testing, monitoring, record keeping and reporting requirements for the above regulation.

viii. 15A NCAC 02Q .0317: “Avoidance Conditions”

for 15A NCAC 02D .0530: “Prevention of Significant Deterioration;”
The temporary, back-up natural gas/No. 2 fuel oil-fired boiler (ID No. TMP01) avoids being subject to PSD by taking an emission limit for the emissions of nitrogen oxides and sulfur dioxide.

The total sulfur dioxide emissions from the back-up boiler (ID No. TMP01) is limited to less than 40 tons and total nitrogen dioxide emissions from the same boiler to less 40 tons during any consecutive 12-month period, respectively.

There are no changes to the emission limits, testing, monitoring, record keeping and reporting requirements for the above regulation.

(See Section 2.1 B.4., of the permit).

ix. 15A NCAC 02D.0524: “New Source Performance Standards;”

NSPS Subpart IIII for “Stationary Compression Ignition Internal Combustion Engines” is applicable to the insignificant source emergency fire pump (I-ESFP1)

NSPS Subpart Dc for “Small Industrial-Commercial-Institutional Steam Generating Units” is applicable to the temporary back-up boilers (ID No. TMP0) only if the boiler commenced construction, reconstruction, or modification after June 9, 1989; AND that has a maximum heat input capacity equal to or greater than 10 million Btu per hour.

NSPS Subpart BBB for “Rubber Tire Industry” is applicable to sources (ID Nos. GTS-CP-001 through GTS-CP-253, GTS-GT-S2, GTS-GT-S5, GTS-GT-S6, GTS-GT-S7, GTS-GT-S10, GTS-GT-S8, GTS-GT-S9, and TL03 through TL06)

This renewal does not change the emission limits, testing, monitoring, record keeping and reporting requirements for the above regulations.

x. 15A NCAC 02Q.0317: “Avoidance Conditions”

for 15A NCAC 02D.1111: “Maximum Achievable Control Technology;”

The temporary, back-up natural gas/No. 2 fuel oil-fired boiler (ID No. TMP01) avoids being subject to MACT Subpart DDDDD by fulfilling the requirements of Section 2.1 B.6.a.i., through iv., of the permit.

There are no changes to the record keeping for the above regulation.

(See Section 2.1 B.6., of the permit).

xi. 15A NCAC 02D.1806: “Control and Prohibition of Odorous Emissions;” (State-enforceable only)

This regulation applies to the entire facility and there is no change to this regulation due to this renewal.
xii. 15A NCAC 02D .0614: “Compliance Assurance Monitoring”

A determination of non-applicability has been made with the issuance of permits (00011T37 and 00011T48) and as per 15A NCAC 02Q .0512(a)(1)(B) Permit Shield. CAM has been determined to not be applicable to all the sources at this facility.

This renewal does not change the determination and CAM continues to be non-applicable to all the sources at this facility.

V. 502(b)(10)s

The facility has several 502(b)(10)s that are incorporated into the renewal permit. The following are lists of these applications, with their summary, and applicable regulations.

- Application # 2600050.19A (Received 01/14/2019):

Project involves the installation of one new bead apexer unit (Bead Apexer #8, ID No. TL12). This new unit is an extruder that will be used to make tire bead components. Rubber will be cold fed into the bead apexer, so milling will not be required for the bead extrusion process.

Regulations

i. 15A NCAC 02D .0530: “Prevention of Significant Deterioration”

Potential emissions for the bead apexer are calculated by multiplying the pollutant emission factor (pounds emitted per pounds of rubber) by the maximum potential rubber throughput (pounds per year). The emission factor was taken from AP-42 Section 4.12, “Manufacture of Rubber Products.”

Tire Apexer will be extruded in the bead apexer, which is Compound #5 in the AP-42 index of rubber compounds. Since the extrusion emission factor for Compound #5 is not available in the current draft of Section 4.12 (November 2008), the facility used the emission factor from the published RMA emission factors from 1999. Maximum potential throughput for the bead apexer is based on the maximum number of units produced per hour, and a rubber weight per unit factor. Maximum potential annual throughput is calculated assuming 8,760 hours per year.

The table below shows that the increase of total emissions as a result of this project is below the PSD Significant Emission Rates (SER).

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Bead Apexer Emission Increase (tpy)</th>
<th>PSD SER (tpy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TotalPM</td>
<td>6.11E-05</td>
<td>25</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>6.11E-05</td>
<td>15</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>6.11E-05</td>
<td>10</td>
</tr>
<tr>
<td>VOC</td>
<td>2.82E-02</td>
<td>40</td>
</tr>
</tbody>
</table>
ii. 15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes

All non-combustion emission sources of PM at this facility must comply with the PM emission standards of this regulation. The process rate for the bead apexer is based on the maximum rubber throughput of the equipment. The process rate and the corresponding emission limit for the bead apexer are shown in the following table.

\[ E = 4.10(P)^{0.67} \]

Where:
E = allowable emission rate in pounds per hour and
P = process weight in tons per hour

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Process Rate (ton/hr)</th>
<th>Emission Limit (lb/hr)</th>
<th>Actual Emissions (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bead Apexer #8</td>
<td>0.063</td>
<td>0.640</td>
<td>1.40E-05</td>
</tr>
</tbody>
</table>

Due to the nature of the bead apexer operations, emission rates are low (1.40E-05 Lbs/hr of PM) and will be below the emission limitations without the use of a control device.

Thus, this source should always be in compliance with this regulation.

iii. 15A NCAC 02D .0521, Control of Visible Emissions.

Emissions from this source shall not be more than 20 percent opacity when averaged over a six-minute period. However, due to the nature of the extruder operation, no visible emissions are expected to result from this equipment and this source should always be in compliance.

vi. 15A NCAC 02D .0524 NSPS Subpart BBB

This regulation 40 CFR Subpart BBB “Standards of Performance for the Rubber Tire Manufacturing Industry” applies to green tire spraying machines, tread end cementers, sidewall cementers, and under tread cementers that have been installed or modified after January 20, 1983. Extruders are not affected sources under NSPS Subpart BBB, and are therefore not subject to the subpart. No other NSPS subparts potentially apply to this equipment.

vii. 15A NCAC 02D .1111: Maximum Achievable Control Technology (40 CFR 63, Subpart XXXX - Rubber Tire Manufacturing)

This facility is subject to MACT Subpart XXXX “Rubber Tire Manufacturing.” The requirements are included as Condition 2.2. A.2., of the modified permit and include a facility-wide limit on HAP emissions for cements and solvents used at the facility. These facility-wide requirements will not be affected by the proposed modification. The facility will continue to comply with the requirements of Subpart XXXX and the specific monitoring, recordkeeping and reporting requirements included in the Title V permit.

Application # 2600050.19B (received 02/15/2019):
With this project the facility will install one new permanent GTS unit (GTS #8, Emission Unit ID GTS-GT-S8) and one new portable GTS unit (GTS #9, Emission Unit ID GTS-GT-S9).

The facility will also remove two existing GTS units (GTS #3 and GTS #4, Emission Unit IDs GTS-GT-S3 & GTS-GT-S4). Following the project, there will be a total of six (6) GTS units at the facility, with five (5) being operated at a given time. There will be no change in the facility-wide GTS material usage at the facility, the total GTS usage will be balanced between the remaining GTS units. Therefore, no increase in emissions is expected with this change. In addition, the change will not impact throughputs in any of the upstream or downstream operations.

The new permanent GTS unit (GTS #8, Emission Unit ID GTS-GT-S8) and one new portable GTS unit (GTS #9, Emission Unit ID GTS-GT-S9) will be subject to the following regulations:

Regulations

i. 15A NCAC 02D .0524 NSPS Subpart BBB

This regulation 40 CFR Subpart BBB “Standards of Performance for the Rubber Tire Manufacturing Industry” applies to green tire spraying machines, tread end cementers, sidewall cementers, and under tread cementers that have been installed or modified after January 20, 1983. As per 40 CFR 60.542(5)(i), for each green tire spraying operation where only water-based sprays are used, discharge into the atmosphere shall be no more than 1.2 grams (0.0026 lb) of VOC per tire sprayed with an inside green tire spray for each month (See Section 2.1 D.1.c., of the modified permit).

ii. 15A NCAC 02D .1111: Maximum Achievable Control Technology (40 CFR 63, Subpart XXXX - Rubber Tire Manufacturing)

This facility is subject to MACT Subpart XXXX “Rubber Tire Manufacturing.” The requirements are included as Condition 2.2. A.2., of the modified permit and include a facility-wide limit on HAP emissions for cements and solvents used at the facility. These facility-wide requirements will not be affected by the proposed modification. The facility will continue to comply with the requirements of Subpart XXXX and the specific monitoring, recordkeeping and reporting requirements included in the Title V permit.

In addition, as part of the same 502(b)(10) application (2600050.19B) the facility will install three radial run-out grinders. The facility operates banks of grinders that check the tires for uniformity and symmetry, and grind high spots and blemishes. The facility installed one radial run-out grinder (Unit ID RG-1001) in the existing Grinder Bank #10 in 2017 under the insignificant source definition. The facility also plans to install two additional radial run-out grinders (Emission Unit IDs RG-1002, and RG-1003) in the existing Grinder Bank #10. The three radial run-out grinders have the same design and capacity as the existing radial run-out grinder (RG-1000) installed in Grinder Bank #10 following the submittal of a 502(b)(10) notification dated January 3, 2017.

However, the facility permit did not have any Grinder Bank #10 listed in the permit. In discussion with the facility on 4/4/2021, it was decided to create Run-Out Grinder Operation Bank #10 Horizontal
Grinders consisting of four Matuezzi horizontal grinders (ID Nos. MHG1 through MHG4) controlled by existing rotoclone (self-induced wet scrubber) (DC-167). The applicant also requested to rename sources to MHG1 through MGH3 in the renewal application.

The Run-Out Grinder Operation Bank #10 Horizontal Grinders consisting of four Matuezzi horizontal grinders (I Nos. MHG1 through MHG4) will be subject to the following regulations:

Regulations

i. 15A NCAC 02D .0530: “Prevention of Significant Deterioration”

The potential emissions for the radial runout grinders are calculated by multiplying the pollutant emission factor, the maximum potential rubber ground (in pounds per year) and the dust collector efficiency. Emission factors are taken from AP-42 Section 4.12, “Manufacture of Rubber Products.” The maximum potential throughput for each grinder is 250 tires/day. The grinders will be controlled by the existing rotoclone dust collector (DC-167), which will control particulate matter (PM) emissions which will have PM emissions control efficiency of 91.9%. Maximum potential annual throughput for each grinder is calculated assuming 365 days per year.

The table below shows the total emissions increase as a result of this project is below the PSD Significant Emission Rates (SER).

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Horizontal Grinder Emission Increase (tpy)</th>
<th>PSD SER (tpy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TotalPM</td>
<td>5.00E-04</td>
<td>25</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>5.00E-04</td>
<td>15</td>
</tr>
<tr>
<td>PM₂.₅</td>
<td>5.00E-04</td>
<td>10</td>
</tr>
<tr>
<td>VOC</td>
<td>5.00E-01</td>
<td>40</td>
</tr>
</tbody>
</table>

ii. 15A NCAC 02D .0524 NSPS Subpart BBB

Regulation 40 CFR Subpart BBB “Standards of Performance for the Rubber Tire Manufacturing Industry” applies to green tire spraying machines, tread end cementers, sidewall cementers, and under tread cementers that have been installed or modified after January 20, 1983. Grinders are not affected sources under NSPS Subpart BBB, and are therefore not subject to the subpart. No other NSPS subparts potentially apply to this equipment.

iii. 15A NCAC 02D .1111: Maximum Achievable Control Technology (40 CFR 63, Subpart XXXX - Rubber Tire Manufacturing)

This facility is subject to MACT Subpart XXXX “Rubber Tire Manufacturing.” The requirements are included as Condition 2.2. A.2., of the modified permit and include a facility-wide limit on HAP emissions for cements and solvents used at the facility. These facility-wide requirements will not be affected by the proposed modification. The facility will continue to comply with the requirements of Subpart XXXX and the specific monitoring, recordkeeping and reporting requirements included in the Title V permit.
iv. 15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes

All non-combustion emission sources of PM at this facility must comply with the PM emission standards of this regulation. The process weight rate for each radial run-out grinder is based on the throughput of the grinder (the quantity of rubber ground by the grinder). The process weight rate and the corresponding emission limits for the grinders are shown in the following table below.

\[
E = 4.10(P)^{0.67}
\]

Where:
- \(E\) = allowable emission rate in pounds per hour and
- \(P\) = process weight in tons per hour

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Process Weight Rate (ton/hr)</th>
<th>Emission Limit (lb/hr)</th>
<th>Actual Emissions (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RG-1001</td>
<td>0.0012</td>
<td>0.045</td>
<td>6.63E-05</td>
</tr>
<tr>
<td>RG-1002</td>
<td>0.0012</td>
<td>0.045</td>
<td>6.63E-05</td>
</tr>
<tr>
<td>RG-1003</td>
<td>0.0012</td>
<td>0.045</td>
<td>6.63E-05</td>
</tr>
</tbody>
</table>

Due to the nature of these operations, emission rates are (low) 6.63E-05 lbs/hr of PM and will be below the emission limitations without the use of a control device.

Emissions from the grinders are expected to comply with these emission limitations without the use of control devices. However, the facility is also electing to use a rotoclone dust collector to control emissions from the radial run-out grinders, which will further reduce PM emissions to the atmosphere. Thus, these sources should always be in compliance with this regulation.

v. 15A NCAC 02D .0521, Control of Visible Emissions.

Emissions from this source shall not be more than 20 percent opacity when averaged over a six-minute period. However, due to the nature of the extruder operation, no visible emissions are expected to result from this equipment and this source should always be in compliance.

- Application # 2600050.19D (Received 11/13/2019):

The facility operates two regenerative thermal oxidizers (RTOs) as control devices at their facility. The RTOs control volatile organic compound (VOC) emissions from the Banbury mixers to maintain compliance with 15A NCAC 02D .0530. One of these RTOs (Control Device ID RTO-1) is no longer operational; therefore, the facility plans to replace RTO-1 with a functionally identical unit. The replacement unit will have the same air flow rate as well as the same capture and control efficiency as the original control device as well as the same exhaust parameters, resulting in the same potential emissions as the existing unit. There are no changes to production equipment associated with this change.

The facility requested the replacement of RTO-1 as part of a Section 502(b)(10) change.
Section 2.2. B.2.c.i., requires the facility to conduct a performance test for RTO-1 before it is used as a control device for the control of VOC.

The current RTO-1 described as “One natural gas-fired regenerative thermal oxidizer (10.7 million Btu per hour maximum heat input capacity, 40,000 acfm)” is being replaced with control device RTO-1 described as “One natural gas-fired regenerative thermal oxidizer (11.56 million BTU per hour maximum heat input capacity, 40,000 acfm).”

The facility did conduct the performance test, as required, for the replacement unit and the results were submitted and incorporated into the permit as an administrative amendment (Application # 2600050.21A).

- Application # 2600050.20B (Received 08/06/2020):

With this project, the facility will install three new bead apexer units (Bead Apexers #9, #10, and #11 - Emission Unit IDs TL13, TL14, and TL15, respectively) which are extruders that will be used to make tire bead components. Rubber will be cold fed into the bead apexers; therefore, no milling will be required for the bead extrusion process. There is no expected change in the facility-wide bead production at the facility. Therefore, this project is not expected to impact the throughputs in any of the upstream or downstream operations. The existing bead tuber unit #1 (part of insignificant activity IES-4) has already been removed from service at the facility.

The emission factors are taken from AP-42 Section 4.12, Manufacture of Rubber Products. The maximum throughput of the Bead Apexers (TL13, TL14, and TL15) are based on 1,095,000 lbs/year of rubber each, with a Rubber Manufacturing Association (RMA) emission factor of 1.12E-07 lb/lb rubber for PM emissions and 5.15E-05 lb/lb rubber for emissions of VOCs.

Regulations

i. 15A NCAC 02D .0530: “Prevention of Significant Deterioration”

The total emissions increase as a result of this project is below emission rates requiring a PSD permit. A summary of the emissions increases is provided in the table below:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Increase (tpy)</th>
<th>PSD SER (tpy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TotalPM</td>
<td>1.83E-04</td>
<td>25</td>
</tr>
<tr>
<td>PM(_{10})</td>
<td>1.83E-04</td>
<td>15</td>
</tr>
<tr>
<td>PM(_{2.5})</td>
<td>1.83E-04</td>
<td>10</td>
</tr>
<tr>
<td>VOC</td>
<td>8.46E-02</td>
<td>40</td>
</tr>
</tbody>
</table>

Since emissions of each pollutant is less than their corresponding PSD Significant Emission Rates (SER) to determine if PSD permitting is required, a PSD review is not triggered for this project.

ii. 15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes
All non-combustion emission sources of PM at this facility must comply with the PM emission standards of this regulation. The process weight rate for each radial run-out grinder is based on the throughput of the grinder (the quantity of rubber ground by the grinder). The process weight rate and the corresponding emission limits for the grinders are shown in the following table below.

\[ E = 4.10(P)^{0.67} \]

Where:
E = allowable emission rate in pounds per hour and
P = process weight in tons per hour

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Process Weight Rate (ton/hr)</th>
<th>Emission Limit (lb/hr)</th>
<th>Actual Emissions (lb/hr)</th>
<th>Actual Emissions (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bead Apexer #9 (TL13)</td>
<td>0.063</td>
<td>0.640</td>
<td>4.19E-05</td>
<td>4.46E-05</td>
</tr>
<tr>
<td>Bead Apexer #10 (TL14)</td>
<td>0.063</td>
<td>0.640</td>
<td>4.19E-05</td>
<td>4.46E-05</td>
</tr>
<tr>
<td>Bead Apexer #11 (TL15)</td>
<td>0.063</td>
<td>0.640</td>
<td>4.19E-05</td>
<td>4.46E-05</td>
</tr>
</tbody>
</table>

Emissions from the bead apexers are expected to comply with these emission limitations without the use of control devices.

iii. 15A NCAC 02D .0521, Control of Visible Emissions.

Emissions from these sources shall not be more than 20 percent opacity when averaged over a six-minute period. However, due to the nature of the extruder operation, no visible emissions are expected to result from this equipment and this source should always be in compliance.

iv. 15A NCAC 02Q .0700, Toxic Air Pollutant Procedures

This regulation is State-enforceable only and is not part of North Carolina’s SIP. According to guidance issued by DEQ, dispersion modeling is required in North Carolina if emission rates for toxic air pollutants rise above levels listed in 15A NCAC 02Q .0711 due to the addition of a new source or modification of an existing source. However, per 15A NCAC 02Q .0702, Exemptions for the Toxic Air Pollutant (TAP) Procedures, sources of emissions that are subject to certain federal emissions requirements are exempt from TAP permit requirements. Pursuant to 15A NCAC 02Q .0702(a)(27), a permit to emit TAPs shall not be required under this Section for:

Extruders, including the proposed bead apexers, are part of the tire production affected source subject to 40 CFR Part 63, Subpart XXXX. Therefore, the toxic air pollutant procedures in this regulation do not apply to the proposed project since the toxic air pollutants are subject to MACT categories. The DAQ has evaluated the toxics emissions from this project in accordance with Session Law 2012-91 and determined that they do not present an unacceptable risk to human health.

- Application # 2600050.20C (Received 10/15/2020):
Facility replaced one force grinder No. FG-304, listed under Emission Source ID No. WX66 which is part of Force Grinder Operation Bank #2. The facility will retain the FG-304 nomenclature for the new replacement force grinder. In addition, force grinder FG-303 was removed with this project.

Force grinders test tires to simulate road conditions to check the tire’s uniformity. If necessary, the tire is ground to remove rough edges and to achieve symmetry. Emissions from force grinding consist of particulate matter (PM) and volatile organic compounds (VOCs), with PM emissions from the entire bank being controlled by a self-induced spray scrubber (rotocolone, DC-65). There will be no changes to the control device with this project, the replacement force grinder FG-304 will be controlled by DC-65.

Regulations

v. 15A NCAC 02D .0530: “Prevention of Significant Deterioration”

Potential emissions for the force grinders are calculated by multiplying the pollutant emission factor (in pounds emitted per pounds of rubber removed) by the maximum potential quantity of rubber removed by the grinder (in pounds per year). Consistent with emission calculations for existing force grinders, emission factors are taken from AP-42 Section 4.12, “Manufacture of Rubber Products” and the pounds of rubber removed is estimated based on a rubber grind factor of 0.05 pounds removed per tire and the maximum potential tire throughput.

The maximum potential tire throughput for the new force grinder is based on a production rate of 1,711 tires per day, assuming continuous operation at 365 days per year. The facility calculated the emissions increases associated with this project without consideration of the removal of FG-303 from Force Grinder Operation Bank #2.

The potential to emit for the force grinder, without taking into account any emissions decreases or baseline actual emissions for the existing grinder to be replaced, is below the PSD significance rates.

The table below provides a summary of the potential to emit and show that the increase of total emissions as a result of this project is below the PSD Significant Emission Rates (SER).

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Increase (tpy)</th>
<th>PSD SER (tpy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TotalPM</td>
<td>2.48E-04</td>
<td>25</td>
</tr>
<tr>
<td>PM10</td>
<td>2.48E-04</td>
<td>15</td>
</tr>
<tr>
<td>PM2.5</td>
<td>2.48E-04</td>
<td>10</td>
</tr>
<tr>
<td>VOC</td>
<td>2.48E-01</td>
<td>40</td>
</tr>
</tbody>
</table>

vi. 15A NCAC 02D .0524 NSPS Subpart BBB

This regulation 40 CFR Subpart BBB “Standards of Performance for the Rubber Tire Manufacturing Industry” applies to green tire spraying machines, tread end cementers, sidewall
cementers, and under tread cementers that have been installed or modified after January 20, 1983. Grinders are not affected sources under NSPS Subpart BBB, and are therefore not subject to the subpart. No other NSPS subparts potentially apply to this equipment.

vii. 15A NCAC 02D .1111: Maximum Achievable Control Technology (40 CFR 63, Subpart XXXXX - Rubber Tire Manufacturing)

This facility is subject to MACT Subpart XXXXX “Rubber Tire Manufacturing.” The requirements are included as Condition 2.2. A.2., of the modified permit and include a facility-wide limit on HAP emissions for cements and solvents used at the facility. These facility-wide requirements will not be affected by the proposed modification. The facility will continue to comply with the requirements of Subpart XXXXX and the specific monitoring, recordkeeping and reporting requirements included in the Title V permit.

viii. 15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes

All non-combustion emission sources of PM at this facility must comply with the PM emission standards of this regulation. The process weight rate for each radial run-out grinder is based on the throughput of the grinder (the quantity of rubber ground by the grinder). The process weight rate and the corresponding emission limits for the grinders are shown in the following table below.

\[ E = 4.10(P)^{0.67} \]

Where:
E = allowable emission rate in pounds per hour and
P = process weight in tons per hour

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Process Weight Rate (ton/hr)</th>
<th>Emission Limit (lb/hr)</th>
<th>Actual Emissions (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG-304</td>
<td>1.2231</td>
<td>4.692</td>
<td>1.13E-04</td>
</tr>
</tbody>
</table>

The facility will comply with these emission limitations without the use of a control device.

ix. 15A NCAC 02D .0521, Control of Visible Emissions.

Emissions from this source shall not be more than 20 percent opacity when averaged over a six-minute period. However, due to the nature of the extruder operation, no visible emissions are expected to result from this equipment and this source should always be in compliance

- Application # 2600050.21B (received on March 24, 2021):

The facility installed one new GTS unit (GTS #10, Emission Unit ID GTS-GT-S10) and removed one existing GTS unit (GTS #1, Emission Unit ID GTS-GT-S1). Following the project there will be a total of five GTS units at the facility. There is no change in GTS material usage at the facility, the total GTS usage is balanced between the five remaining GTS units. Therefore, there is no increase in emissions
with this change. In addition, the change will not impact throughputs in any of the upstream or downstream operations, as the plant is bottlenecked in the curing press area.

The above project is subject to the following regulations:

**Regulations**

i. 15A NCAC 02D .0530: “Prevention of Significant Deterioration”

Potential emissions for the new green tire machine are calculated by multiplying facility-wide potential usage of GTS material (tons/yr) by the maximum VOC content of the GTS material and then dividing this by the total number of GTS machines (5 machines) for the facility at the completion of the project. The total GTS usage for the facility will not increase with this project; therefore, consistent with the most recent potential emissions calculations for the facility, a maximum facility-wide green tire spray coating usage of 184.5 tons per year is assumed. 

The GTS usage is expected to be split evenly between each GTS machine, resulting in a maximum material usage of 36.9 tons per year for the new GTS machine. In addition, the facility utilizes GTS materials with a VOC content of less than 1.0% in order to meet the exemption criteria for monthly performance testing under 40 CFR 60.543(b)(4) of the New Source Performance Standard (NSPS) Subpart BBB, Standards of Performance for the Rubber Tire Manufacturing Industry. Therefore, VOC emissions are calculated assuming a maximum VOC content of 1.0% in the GTS material.

The total VOC emission increase associated with this project is summarized in the table below and is less than the emission rate requiring a PSD permit.

<table>
<thead>
<tr>
<th>Emission Source ID</th>
<th>GTS-GT-S10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum GTS Usage (tons/yr)</td>
<td>36.90</td>
</tr>
<tr>
<td>% VOC of Inside Green Tire Spray</td>
<td>1%</td>
</tr>
<tr>
<td>Maximum VOC Emissions (tons/yr)</td>
<td>0.37</td>
</tr>
<tr>
<td>VOC SER (tons/yr)</td>
<td>40</td>
</tr>
</tbody>
</table>

ii. 15A NCAC 02D .0524 NSPS Subpart BBB

This regulation 40 CFR Subpart BBB “Standards of Performance for the Rubber Tire Manufacturing Industry” applies to green tire spraying machines, tread end cementers, sidewall cementers, and under tread cementers that have been installed or modified after January 20, 1983. As per 40 CFR 60.542(5)(i) for each green tire spraying operation where only water-based sprays are used, discharge into the atmosphere shall be no more than 1.2 grams (0.0026 lb) of VOC per tire sprayed with an inside green tire spray for each month (See Section 2.1 D.1.c., of the modified permit).

iii. 15A NCAC 02D .1111: Maximum Achievable Control Technology (40 CFR 63, Subpart XXXX - Rubber Tire Manufacturing)
This facility is subject to MACT Subpart XXXX “Rubber Tire Manufacturing.” The requirements are included as Condition 2.2. A.2., of the modified permit and include a facility-wide limit on HAP emissions for cements and solvents used at the facility. These facility-wide requirements will not be affected by the proposed modification. The facility will continue to comply with the requirements of Subpart XXXX and the specific monitoring, recordkeeping and reporting requirements included in the Title V permit.

- Application # 2600050.20A (Received 12/31/2019):

  Note - Application # 2600050.20A was received on 12/31/2019. The DAQ requested that the application be modified and resubmitted. The modified application was received on July 7, 2021 and re-entered into the IBEAM system as 2600050.21C.

Application # 2600050.20A - The facility proposed “to replace existing curing presses at the Fayetteville facility, which are reaching the end of their useful lives. Specifically, Goodyear will remove ten (10) 48 inch McNeil presses and install ten (10) 52 inch SinoArp 2020 presses. As described in this notification, the replacement of the cure presses is a Section 502(b)(10) change, as allowed under Section 15A, Subchapter 02Q of the North Carolina Administrative Code (NCAC), under 15A NCAC 02Q .0523(a). The planned installation date for the replacement cure presses is approximately September 2020.

The new presses cure tires of the same size as the tires cured in the 48 inch presses, but also will have the capability to cure larger tires than the existing presses. The larger tires would require slightly longer curing cycle times. Importantly, Goodyear does not anticipate any increase in overall production throughput as a result of this press replacement project. Since emissions are based on the throughput of rubber, Goodyear does not expect an increase in the projected actual emissions. The tire presses will remain the bottleneck of the facility after the replacement project. The new presses are also anticipated to result in a decrease in steam demand due to an increase in energy efficiency of the new presses over the existing equipment.”

On 6/23/2021 there was a meeting between representatives from the facility and DAQ. The discussions were related to “existing curing presses,” total of these three hundred and twenty-two tire curing presses (ID Nos GTS-CP-001 through GTS-CP-322) currently in operation, and subject to BACT, MACT and NSPS applicability of these sources. Results of the meeting are discussed in more detail below.

- Application # 2600050.21C (Received July 7, 2021)

With this project, the facility proposed “to replace thirteen (13) curing presses in Trench #8 at the Fayetteville facility. These proposed presses are replacing thirteen (13) previously permitted curing presses; therefore, these are considered replacement presses.”

As per the applicant document dated July 28, 2021:
“With this project, Goodyear is proposing to replace thirteen (13) curing presses in Trench #8 at the Fayetteville facility. A 502(b)(10) change dated April 19, 2021 (application 2600050.21C) was originally submitted for this project indicating the presses would be new equipment. However, these proposed presses are replacing thirteen (13) previously permitted curing presses in Trench #8; therefore, these are considered replacement presses. Goodyear is submitting this revised 502(b)(10)…”
As discussed on a phone call with Booker Pullen and Gautam Patnaik of your office on June 4, 2021, the 13 existing presses were removed from service in 2019 and 2020 and will be replaced within the baseline actual emissions period. The planned start of installation date for the replacement cure presses is approximately January 2022.”

Mr. Andrew Becker, the Manufacturing Director of The Goodyear Tire & Rubber Company during the meeting on June 23, 2021, mentioned that these presses were removed from service in 2019 and 2020 time period. However, a thorough search of all the available documents on file in the Permit Section and the Regional Office was made and no records were found to indicate that these above sources were in operation or removed. The DAQ required a signed statement from the Responsible Official of this facility that the sources were removed in the above time frame.

The applicant responded “As Responsible Official of this facility and as indicated by my signature on this letter, I assert that based on all available information, the Trench #8 cure presses were removed in 2019 and 2020.” This letter was signed by Mr. Andrew Becker, the Manufacturing Director of The Goodyear Tire & Rubber Company, and the responsible official for this facility. This letter was received on August 17, 2021.

In the meeting on June 23, 2021, it was emphasized to have the total number of presses in operation for source ID Nos. GTS-CP-001 through GTS-CP-322 described as “Three hundred and twenty-two tire curing presses, each consisting of two curing cavities and two tire/mold release lube spray (green tire spray) operations.” The application 2600050.21C did not provide such information.

The applicant responded “The total number of cure presses in operation at the Fayetteville facility, including the thirteen cure press replacement units proposed in revised application 2600050.21C is 253 two hundred and fifty-three (253) tire curing presses, each consisting of two curing cavities.”

Thus, the three hundred and twenty-two tire curing presses (ID Nos. GTS-CP-001 through GTS-CP-322) will be changed to “Two hundred and fifty-three tire curing presses, each consisting of two curing cavities and two tire/mold release lube spray (green tire spray) operations (GTS-CP-001 through GTS-CP-253)” and still be subject to BACT; NSPS BBB, and MACT XXXX.

Regulations

i. 15A NCAC 02D .0530: “Prevention of Significant Deterioration”

The application stated “As provided in the Emission Characterization section of this letter, Goodyear has evaluated the net emissions increase for the replacement press installation using an actual-to-potential test, assuming the baseline actual emissions are zero and emissions increase is based on the maximum potential emissions for the replacement presses.”

It was emphasized in our last discussion on 6/23/2021 that the facility would be demonstrating compliance with PSD by using an “actual to projected actual” emissions methodology.
The facility’s response on 8/24/2021 by e-mail was “Goodyear does not track the rubber throughput through individual cure presses; therefore, the actual baseline emissions for these specific units are not available. As a conservative measure, Goodyear has presented the baseline actual emissions as zero rather than providing an estimated baseline emissions value. The evaluation to consider the baseline emissions as zero and comparing this to the potential emissions of the replacement cure presses, assuming 365 days of operation per year, is conservative and results in a higher resulting net emissions increase than if actual baseline emissions were to be used in the evaluation. The emissions increase as presented is below the PSD significant emission rate and, therefore, does not trigger PSD permitting. A calculation including a non-zero baseline emission rate in the calculation would result in a lower emissions increase, which would also be below the PSD significant emission rate.”

Detailed emissions calculations were for the Trench 8 curing presses for the potential emissions for the thirteen curing presses (rubber throughput for the thirteen new curing presses is 22,776,000 lbs/year of rubber) were calculated based on the maximum rubber throughput for all thirteen presses, in pounds per year, and the 1999 emission factor for Tire B published by the Rubber Manufacturers Association.

The total VOC emissions from the cure presses are calculated as follows:

\[
Total \text{ VOC Emissions } \left( \frac{\text{tons}}{\text{yr}} \right) = Curing \text{ VOC Emissions } \left( \frac{\text{tons}}{\text{yr}} \right) + Associated \text{ Curing} \text{ CA Emission Increase} \left( \frac{\text{tons}}{\text{yr}} \right)
\]

**Curing VOC Emissions:**

\[
Curing \text{ VOC Emissions} \left( \frac{\text{tons}}{\text{yr}} \right) = Max \text{ Rubber Throughput} \left( \frac{\text{lb}}{\text{yr}} \right) \times RMA \text{ Emission Factor} \left( \frac{\text{lb}}{\text{lb rubber}} \right) \times \frac{\text{ton}}{2,000 \text{ lbs}}
\]

\[
Max \text{ Rubber Throughput} \left( \frac{\text{lb}}{\text{yr}} \right) = 13 \text{ presses} \times 80 \frac{\text{tires}}{\text{press per day}} \times 60 \frac{\text{lb}}{\text{tire}} \times 365 \frac{\text{days}}{\text{yr}}
\]

\[
Curing \text{ VOC Emissions} \left( \frac{\text{tons}}{\text{yr}} \right) = 22,776,000 \frac{\text{lb}}{\text{yr}} \times 2.50 \times 10^{-4} \frac{\text{lb}}{\text{lb rubber}} \times \frac{\text{ton}}{2,000 \text{ lbs}} = 2.847 \frac{\text{tons}}{\text{yr}}
\]

**Associated Curing Coupling Agent Emission Increase:**
A summary of the calculated net emission increase for revised application #2600050.21C, is provided below:

Table for PSD Significant Emission Rate Comparison for application #2600050.21C

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Net Emission Increase (tons/yr)</th>
<th>PSD SER (tons/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>2.21</td>
<td>100</td>
</tr>
<tr>
<td>NO\textsubscript{X}</td>
<td>2.63</td>
<td>40</td>
</tr>
<tr>
<td>PM</td>
<td>1.44</td>
<td>25</td>
</tr>
<tr>
<td>PM\textsubscript{0.1}</td>
<td>1.44</td>
<td>15</td>
</tr>
<tr>
<td>PM\textsubscript{2.5}</td>
<td>1.44</td>
<td>10</td>
</tr>
<tr>
<td>SO\textsubscript{2}</td>
<td>0.02</td>
<td>40</td>
</tr>
<tr>
<td>VOC</td>
<td>6.1</td>
<td>40</td>
</tr>
</tbody>
</table>

The VOC emissions includes 3.672 tpy of direct emissions from the thirteen replacement presses and other associated emissions.

The above table demonstrates that PSD SERs are not exceeded with this project.

The two hundred and fifty-three tire curing presses, each consisting of two curing cavities and two tire/mold release lube spray (green tire spray) operations (GTS-CP-001 through GTS-CP-253) to be considered an existing “replacement unit” for PSD purposes and adhere to the existing PSD limits, the replaced unit has to meet all the criteria in paragraphs 40 CFR 51.166(b)(32)(i) through (iv) and additionally must meet the criteria of 40 CFR 51.166(y)(2)(ii).

As explained by the applicant:
40 CFR 51.166(b)(32) *Replacement unit* means an emissions unit for which all the criteria listed in paragraphs (b)(32)(i) through (iv) of this section are met. “No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.”

(i) The emissions unit is a reconstructed unit within the meaning of §60.15(b)(1) of this chapter, or the emissions unit completely takes the place of an existing emissions unit.

“The replacement cure presses completely take the place of the existing cure presses.”

(ii) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.

“The replacement cure presses are functionally equivalent to the replaced emission unit, existing and replacement cure presses are both dual-cavity cure presses used to cure green tires.”

(iii) The replacement does not change the basic design parameter(s) (as discussed in paragraph (y)(2) of this section) of the process unit.

“Please see below. The basic design parameter for the unit is rubber throughput.”

(iv) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

“The replaced emission units were permanently removed from the Fayetteville facility.”

40 CFR 51.166(y)(2)(ii):

(2) *Basic design parameters.* The replacement does not change the basic design parameter(s) of the process unit to which the activity pertains.

(ii) Except as provided in paragraph (y)(2)(iii) of this section, the basic design parameter(s) for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material when selecting a basic design parameter.

“The basic design parameter for the replacement presses is considered to be maximum rate of material input, in this case rubber cured (lbs).”

Based on the above parameters this project is not subject to a PSD review.

In a BACT Preliminary Determination for the three hundred and twenty-two tire curing presses (ID Nos. GTS-CP-001 through GTS-CP-322) done in April 2008, the BACT did not impose any numerical emissions limit for the curing presses but required a work practice standard which was the requirements for 15A NCAC 02D .0958: “Work Practices for Sources of Volatile Organic Compounds.” This work practice standard was re-instated for the curing presses and placed into
the Title V permit (See Section 2.2 B.3., of the modified permit). However, there was no reference to 02D .0958 regulation in the permit.

**Project Aggregation**

Performing several small projects in an attempt to avoid PSD permitting is not allowed under PSD regulations. In the past several years several modifications have been done at this facility. NCDAQ does not take any position as to whether this project and other previous projects (previous TV-502(b)(10)s) should be aggregated as a single project. The NCDAQ typically applies the economic relationship test to determine if two projects should be aggregated. (EPA published in the Federal Register on Thursday, January 15, 2009, guidelines for aggregation of sources and their relationship regarding NSR applicability).

Emissions for this modification and previous projects are summarized in the table below:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>CO</th>
<th>NOx</th>
<th>PM</th>
<th>PM10</th>
<th>PM2.5</th>
<th>SO2</th>
<th>VOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment affected:</td>
<td>Application No.:</td>
<td>Application Date:</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
</tr>
<tr>
<td><strong>This Project</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trench 8 Presses</td>
<td>2600050.21C</td>
<td>[July 2021]</td>
<td>2.21</td>
<td>2.63</td>
<td>1.44</td>
<td>1.44</td>
<td>1.44</td>
</tr>
<tr>
<td>GTS#10</td>
<td>2600050.20B</td>
<td>[Mar-21]</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>FG-304</td>
<td>2600050.20C</td>
<td>[Oct-20]</td>
<td>--</td>
<td>--</td>
<td>1.83E-04</td>
<td>1.83E-04</td>
<td>1.83E-04</td>
</tr>
<tr>
<td>TL13, TL14, TL15</td>
<td>2600050.20B</td>
<td>[Jul-20]</td>
<td>--</td>
<td>--</td>
<td>2.48E-04</td>
<td>2.48E-04</td>
<td>2.48E-04</td>
</tr>
<tr>
<td>Trench 11 Presses</td>
<td>2600050.20A</td>
<td>[Dec-19]</td>
<td>1.85</td>
<td>2.2</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
</tr>
<tr>
<td>RTO Replacement</td>
<td>2600050.19D</td>
<td>[Nov-19]</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>GTS #8 &amp; #9</td>
<td>2600050.19B</td>
<td>[Feb-19]</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>RG-1001, RG-1002, RG-1003</td>
<td>2600050.19B</td>
<td>[Feb-19]</td>
<td>--</td>
<td>--</td>
<td>5.00E-04</td>
<td>5.00E-04</td>
<td>5.00E-04</td>
</tr>
<tr>
<td>TL12</td>
<td>2600050.19A</td>
<td>[Jan-19]</td>
<td>--</td>
<td>--</td>
<td>6.11E-05</td>
<td>6.11E-05</td>
<td>6.11E-05</td>
</tr>
<tr>
<td><strong>Aggregated Net Emission Increase</strong></td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
</tr>
<tr>
<td><strong>PSD SER</strong></td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
<td>(Tons/yr)</td>
</tr>
<tr>
<td></td>
<td>4.06</td>
<td>4.83</td>
<td>1.61</td>
<td>1.61</td>
<td>1.61</td>
<td>0.03</td>
<td>12.54</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>40</td>
<td>25</td>
<td>15</td>
<td>10</td>
<td>40</td>
<td>40</td>
</tr>
</tbody>
</table>

Since the net emissions increases of all criteria pollutants are less than the significant emissions rates for this this project and projects done in the past (within two years) DAQ acknowledges the facility is not doing several small projects in an attempt to avoid PSD permitting.

ii. 15A NCAC 02D .0524 NSPS Subpart BBB

---

As per the applicant “this regulation 40 CFR Subpart BBB “Standards of Performance for the Rubber Tire Manufacturing Industry” applies to green tire spraying machines, tread end cementers, sidewall cementers, and under tread cementers that have been installed or modified after January 20, 1983. Extruders are not affected sources under NSPS Subpart BBB, and are therefore not subject to the subpart. No other NSPS subparts potentially apply to this equipment.”

As per 40 CFR 60.15(b) “Reconstruction” means the Replacement of components of an existing facility to such an extent that:

40 CFR 60.15(b)(1) - The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
40 CFR 60.15(b)(2) - It is technologically and economically feasible to meet the applicable standards set forth in this part.”

In a 6/23/2021 meeting, the applicant stated cost of the new components exceeds 50 percent of the fixed capital cost and would comply with all the applicable NSPS and MACT standards. Thus, for NSPS purposes 40 CFR 60.15(b) the curing presses are “replacement” units that satisfies the “reconstruction” requirements since the fixed capital cost of the new components does exceed 50 percent of the fixed capital cost and the reconstructed unit will technologically and economically meet the applicable standards.

On 6/23/2021 the issue regarding non applicability of NSPS was discussed. DAQ’s decision was that the removal of NSPS from the curing presses should be done by a major modification. The applicant would apply for another major modification change via another application process to remove the applicability of NSPS Subpart BBB for the curing presses.

iii. 15A NCAC 02D .1111: Maximum Achievable Control Technology (40 CFR 63, Subpart XXXX - Rubber Tire Manufacturing)

40 CFR 63.2 describes “Reconstruction” as “the replacement of components of an affected or a previously non-affected source to such an extent that … the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and … it is technologically and economically feasible for the reconstructed source to meet the relevant standard(s).

Thus, for MACT purposes 40 CFR 63.2 the curing presses are “replacement” units that satisfies the “reconstruction” requirements since the fixed capital cost of the new components does exceed 50 percent of the fixed capital cost and the reconstructed unit will technologically and economically meet the applicable standards.

IV. NSPS, NESHAPS/MACT, PSD, Attainment Status, 12(r), Air Toxics (NCGS) 143-215.107(a)(5) (House Bill 952), CAM, Retain 02D .0958 and Compliance Status:

NSPS
The insignificant source I-ESFP1 is subject to NSPS IIII “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,” the temporary back-up natural gas/No. 2 fuel oil-fired boiler TMP01 is subject to NSPS Subpart Dc “Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units,” and several sources are subject to NSPS subpart BBB “New Source Performance Standards for Rubber Tire Manufacturing.” There were no changes to these rules.

(See Section IV. ix., of this review, above, which lists all sources subject to every NSPS Subpart).

NESHAP/MACT

Some combustion sources are subject to MACT Subpart ZZZZ “National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines” and the rest of the non combustion sources at this facility are subject to MACT subpart XXXX “Tire Manufacturing.” There were no changes to these rules.

(See Section IV. vii., of this review, above, which lists all sources subject to every MACT Subpart).

Attainment Status and Increments

As per http://daq.state.nc.us/permits/psd/docs/mbd1.pdf the PSD minor source baseline dates for the emissions of PM$_{10}$, NOx and SO$_2$ have been triggered for Cumberland County, which is currently designated as an attainment area.

The emissions calculations for the table displaying the emissions summary for the “Project Aggregation,” are based on operation of 8760 hours per year.

Therefore, the increment consumed by this renewal and associated projects are increased as follows:

PM$_{10}$ = 0.37 lbs/hr
NOx = 1.1 lbs/hr
SO$_2$ = 0.01 lbs/hr

112(r)

This facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in this rule.

CAM

The Compliance Assurance Monitoring (CAM) Rule (40 CFR Part 64) applies to pollutant-specific emissions units (PSEU) that are pre-control major sources and use a control device to comply with an emissions limit. None of the sources at this facility is subject to a CAM plan. The new projects will not cause any sources to be subject to this rule.

Also, Section 2.3 1., of the permit provides a permit shield to a majority of the source controlled by regenerative thermal oxidizers (ID Nos. RTO-1 and RTO-2). This renewal and associated projects are covered by this shield.
Compliance with Toxics - (NCGS) 143-215.107(a)(5) (House Bill 952)

The current permit does not include any toxic air pollutant requirements. This renewal and associated projects will not increase any toxic air pollutant emissions to the environment and not present an unacceptable risk to human health and thus comply with North Carolina General Statute (NCGS) 143-215.107(a)(5) (House Bill 952).

Compliance Status

Per the latest inspection performed on March 18, 2021 by Evangelyn Lowery-Jacobs of the Fayetteville Regional Office, the facility appeared to be in Compliance.

15A NCAC 02D .0958: Work Practices for Sources of Volatile Organic Compounds

This regulation establishes work practice standards for a variety of sources having VOC emissions. Currently this regulation is being maintained for facilities currently subject to RACT rule. This regulation is being reinserted in this permit as BACT for the two hundred and fifty-three tire curing presses (ID. Nos GTS-CP-001 through GTS-CP-253). (See Section 2.1 D 2., of the modified permit and See Section “V. 502(b)(10) - Application # 2600050.21C (Received July 7, 2021)” of this review, above.

V. Miscellaneous

- The responsible official in the draft permit matches the information on IBEAM.
- The facility address matches the information on IBEAM.
- There are no new insignificant activities being added with this modification.
- All the regulatory references to 15A NCAC 02Q and 15A NCAC 02D have been verified.
- Every instance of the word “assure” has been changed to “ensure” in the modified permit.
- Removed all references from the bottom of the permitted sources table that no longer apply.
- Removed word “Subpart” from the permit sources table (i.e., NSPS Subpart IIII, etc.).
- All old testing requirements have been deleted.
- Updated language from the shell for regulations (example 15A NCAC 02D .0515, .0521, .0516, etc.).
- Updated General Conditions.

The Fayetteville Regional Office, the applicant, and the SSCB (Stationary Source Compliance Branch) were provided a copy of the modified draft permit for this application for their comments and their comments were taken into consideration.

The Stationary Source Compliance Branch did not have Any comments.

Applicant’s Comments:

- “In renewal application, we requested removing these sources from this list because there are no quantifiable PM emissions from the sources.”
Sources in Section 2.1 C.1., 1.c., 2.1 C.2., and 2.c., were modified and sources with no emissions of PM were removed.

There were several changes requested in the permit that were included in the renewal application that were not reflected in this draft.

This redline version of the permit attached to the application required several changes to the permit. The table below shows the additional changes to the sources or control device in the current permit.

Table with additional sources and control devices description, addition, or removal

<table>
<thead>
<tr>
<th>Emission Source or Control Device ID No.</th>
<th>Emission Source or Control Device Description</th>
<th>Description of changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IES-4</td>
<td>Six (6) bead tuber units</td>
<td>Added</td>
</tr>
<tr>
<td>I-ESFP3</td>
<td>Emergency fire pump with diesel-fired engines with ratings of 220 hp (subject to MACT ZZZZ)</td>
<td>Removed</td>
</tr>
<tr>
<td>I-ESFP4</td>
<td>Emergency fire pump with diesel-fired engines with ratings of 220 hp (subject to MACT ZZZZ)</td>
<td>Removed</td>
</tr>
<tr>
<td>I-EG1</td>
<td>300 hp diesel fired emergency generator (subject to MACT Subpart ZZZZ)</td>
<td>Added</td>
</tr>
<tr>
<td>I-EG2</td>
<td>259 hp natural gas-fired back up generator (subject to NSPS Subpart JJJJ and MACT Subpart ZZZZ)</td>
<td>Added</td>
</tr>
<tr>
<td>IB53</td>
<td>Natural gas-fired inert gas generator (3.5 Btu per hour maximum heat input capacity)</td>
<td>Rating corrected</td>
</tr>
<tr>
<td>I-SM01</td>
<td>Slurry mixer</td>
<td>Added</td>
</tr>
<tr>
<td>I-LE60 &amp; I-LE61</td>
<td>Two mechanical mold cleaners</td>
<td>Added</td>
</tr>
<tr>
<td>RTO-1</td>
<td>One natural gas-fired regenerative thermal oxidizer (11.56 million Btu per hour maximum heat input capacity, 40,000 acfm)</td>
<td>Change oxidizer rating</td>
</tr>
<tr>
<td>Emission Source or Control Device ID No.</td>
<td>Description</td>
<td>Description of changes</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>K8-1, K8-2 (MACT XXXX)</td>
<td>Slurry Mixers (Nos. 1 and 2)</td>
<td>Removed</td>
</tr>
<tr>
<td>DC-100</td>
<td>One bagfilter (2,032 square feet of filter area, minimum)</td>
<td>Removed</td>
</tr>
<tr>
<td>BE7-1, BE7-2 (MACT XXXX)</td>
<td>Slurry Mixers (Nos. 3 and 4)</td>
<td>Removed</td>
</tr>
<tr>
<td>PDS-2 (MACT XXXX)</td>
<td>Banbury mixer Nos. 5 and 6 dump sinks</td>
<td>Change sources description</td>
</tr>
<tr>
<td>TL07, TL08, TL09, TL10, TL11, TL12 (MACT XXXX)</td>
<td>Six non-cementing rubber extrusion lines/tubers, (Nos. 7, 8, 9, 10, 11, and 12)</td>
<td>Moved TL11 and TL12 into the new row from below</td>
</tr>
<tr>
<td>TL06 (NSPS BBB, MACT XXXX)</td>
<td>One cementing rubber extrusion line/tuber (No. 6) consisting of one tread end cement operation (S23-2)</td>
<td>Removed</td>
</tr>
<tr>
<td>TL13, TL14, TL15</td>
<td>Three bead apexers</td>
<td>Added</td>
</tr>
<tr>
<td>DC-103</td>
<td>One bagfilter (220 square feet of filter area, minimum)</td>
<td>Removed</td>
</tr>
<tr>
<td>DC-104</td>
<td>One dust collector/cyclone (12 inches in diameter, minimum)</td>
<td>Removed</td>
</tr>
<tr>
<td>DC-106</td>
<td>One dust collector/cyclone (12 inches in diameter, minimum)</td>
<td>Removed</td>
</tr>
<tr>
<td>GTS-CP-001 through GTS-CP-253 (BACT; NSPS BBB, MACT XXXX)</td>
<td>Two hundred and fifty-three tire curing presses, each consisting of two curing cavities</td>
<td>Change in source description</td>
</tr>
<tr>
<td>GTS-GT-S1, GTS-GT-S3, and GTS-GT-S4 (NSPS BBB, MACT XXXX)</td>
<td>Seven tire/mold release lube spray (green tire spray) operations booths</td>
<td>Removed</td>
</tr>
<tr>
<td>GTS-GT-S2, GTS-GT-S5, GTS-GT-S6, GTS-GT-S7, GTS-GT-S8, GTS-GT-S9 and GTS-GT-S10 (NSPS BBB, MACT XXXX)</td>
<td>Seven tire/mold release lube spray (green tire spray) operations booths</td>
<td>Moved GTS-GT-S8 and GTS-GT-S9 into the same row</td>
</tr>
<tr>
<td>LE60 (MACT XXXX)</td>
<td>One mold cleaner</td>
<td>Moved to Insignificant source</td>
</tr>
<tr>
<td>LE61 (MACT XXXX)</td>
<td>One mold cleaner</td>
<td>Moved to Insignificant source</td>
</tr>
<tr>
<td>DC-94</td>
<td>One bagfilter (500 square feet of filter area, minimum)</td>
<td>This control device is removed since it is vented indoors</td>
</tr>
<tr>
<td>Emission Source or Control Device ID No.</td>
<td>Emission Source or Control Device Description</td>
<td>Description of changes</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>DC-95</td>
<td>One bagfilter (500 square feet of filter area, minimum)</td>
<td>This control device is removed since it is vented indoors</td>
</tr>
<tr>
<td>N63</td>
<td>Two lubricant applicators</td>
<td>Removed</td>
</tr>
<tr>
<td>HE63 (MACT XXXX)</td>
<td>White Sidewall Grinders Operation Bank #2 - Sidewall Grinders (Nos. SG-308 and SG-317)</td>
<td>Removed never installed</td>
</tr>
<tr>
<td>KE63 (MACT XXXX)</td>
<td>Lubricant applicer</td>
<td>Removed never installed</td>
</tr>
<tr>
<td>DC-42</td>
<td>One self-induced spray scrubber (16,000 ACFM, minimum)</td>
<td>Control device removed never installed</td>
</tr>
<tr>
<td>ME69 (MACT XXXX)</td>
<td>Force Grinders (Nos. FG-401 through FG-404)</td>
<td>Removed</td>
</tr>
<tr>
<td>DC-165</td>
<td>One rotoclone (self-induced scrubber) (5,100 ACFM, minimum)</td>
<td>Removed</td>
</tr>
<tr>
<td>AE71 (MACT XXXX)</td>
<td>BGM Grinders (Nos. BGM1 and BGM2)</td>
<td>Modified source description</td>
</tr>
<tr>
<td>AE71 (MACT XXXX)</td>
<td>BGM Grinders (Nos. BGM1 and BGM2)</td>
<td>Change in source description</td>
</tr>
<tr>
<td>DC-167</td>
<td>One rotoclone (self-induced wet scrubber) (7,500 ACFM, minimum)</td>
<td>Removed</td>
</tr>
<tr>
<td>RG800-805 (MACT XXXX)</td>
<td>Six force grinders (Nos. RG-800 through RG-805)</td>
<td>Removed</td>
</tr>
<tr>
<td>DC-169</td>
<td>One rotoclone (self-induced scrubber) (7,500 ACFM, minimum)</td>
<td>Removed</td>
</tr>
<tr>
<td>TL12 (MACT XXXX)</td>
<td>Bead Apexer #8</td>
<td>Removed</td>
</tr>
<tr>
<td>UE70 (MACT XXXX)</td>
<td>MFG Grinders (Nos. MFG5 – MFG9)</td>
<td>Source added</td>
</tr>
<tr>
<td>MHG1 through MHG4 (MACT XXXX)</td>
<td>Four Matueezzi horizontal grinders</td>
<td>Source added</td>
</tr>
<tr>
<td>DC-167</td>
<td>Controls MHG1 through MHG4</td>
<td>Existing control device</td>
</tr>
</tbody>
</table>

The applicant requested “each annual tune-up shall be conducted no more than 61 months after the previous tune-up,” for the four natural gas/No. 6 fuel oil/No. 2 fuel oil/recycled No. 6 fuel oil-fired boilers (ID Nos. BL01 through BL04)

Section 2.1 A.4.h., of the current permit requires the four natural gas/No. 6 fuel oil/No. 2 fuel oil/recycled No. 6 fuel oil-fired boilers (ID Nos. BL01 through BL04) each annual tune-up shall be conducted no more than 13 months after the previous tune-up as per the requirements of 40 CFR § 63.7515(d).

In their application, they mentioned “In addition, because the boilers are equipped with a continuous oxygen trim system that maintains an optimum air to fuel ratio, the frequency of the subsequent boiler tune-ups is every five years, not annually as stated in the current
version of the Title V permit. These requested changes are included in the redline version of the permit submitted with this application.

DAQ agreed to this request.

As per 40 CFR 7540 - How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

40 CFR 7540(a)(12) cites “If your boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio ….. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.”

(See 2.1 A.4.g., of the modified permit)

As per 40 CFR 63.7515 - When must I conduct subsequent performance tests, fuel analyses, or tune-ups?

40 CFR 63.7515(d) states “If you are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to 63.7540(a)(10), (11), or (12), respectively. ….. Each 5-year tune-up specified in 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up.”

Thus each annual tune-up shall be conducted no more than 61 months after the previous tune-up.

40 CFR 63.7550 - What reports must I submit and when?

40 CFR 63.7550(b) “Unless the EPA Administrator has approved a different schedule for submission of reports …. For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-up according to 63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or Table 4 operating limits, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of this section, instead of a semi-annual compliance report.”

(See 2.1 A.4.n., of the modified permit)

- “The cure presses are not considered any of the following operations and, therefore, do not meet the applicability criteria of NSPS Subpart BBB: undertread cementing operation, sidewall cementing operation, tread end cementing operation, bead cementing operation, green tire spraying operation, Michelin-A operation, Michelin-B operation, and Michelin-C automatic operation.

This inaccuracy was not identified until the detailed discussion earlier this year, so this request was not included in the original renewal application.
As this is not relaxing a requirement in the permit, but just correcting the permit language to reflect the actual equipment and actual NSPS Subpart BBB applicability for the cure presses, Goodyear requests that the action to remove the NSPS applicability be completed with this renewal action. This could be considered an administrative permit amendment to remove non-applicable permit conditions under the provisions of 15A NCAC 02Q .0514(a)(8), and should not require a major modification, as indicated in the draft review document.”

In the last meeting of DAQ and members of the facility including the responsible official of the facility it was discussed and the facility had agreed to apply as a separate application for the removal of NSPS Subpart BBB applicability.

In an e-mail on 11/2/2021 the applicant wrote back “thanks for the discussion this morning. I spoke with our team and we agree to submit the significant mod for the NSPS BBB request.”

- “The language in Conditions 2.2.B.1.a/2.2.B.1.b and 2.2.B.2.a/2.2.B.2.b are nearly identical, and both allow the use of an RTO for control to comply with the VOC limit. All testing completed to date to comply with the existing condition in the permit has revolved around testing the RTO control device in order to establish the minimum operating temperature for each RTO, therefore, it is appropriate for Condition 2.2.B.1.d to refer to testing of the RTO vs. testing of the mixers themselves.

Section 2.2.B.1 conditions were added for the first PSD project to authorize coupling agent mixing on Banburys 6A, 7, and 8. Section 2.2.B.2 conditions were added with the second similar PSD project to authorize coupling agent mixing on Banburys 1, 2, and 3. The only significant differences between these two projects are the emission limits established for each mixer grouping and the mixer groupings themselves. Therefore, the language in conditions 2.2.B.1.d and 2.2.B.2.d should also be consistent with each other as well. All other conditions are consistent between these two sections, which is why we are requesting that this condition read the same for both PSD sections in the permit.”

Section 2.2.B.1.d., and Section 2.2.B.2.d., and were modified to resolve this above testing issue.

- Applicant wrote “Goodyear requests the opportunity to review the updated draft package again before it goes out to notice.”

The applicant was advised they also had an opportunity to comment on the drafts during the public notice period.

Regional Office Comments:

- Update page numbers for Summary of Changes to Permit
- Renumbering for some sources

Comments by the Section Chief:

The Section Chief Mark Cuilla had some comments and they are addressed here or in the review, above.

- Mark wanted to highlight each application number and receipt date for each 502(b)(10) application being consolidated into this renewal.

  This was done in the cover letter.

- If we outlined the discussion of why CAM doesn’t apply do we really need to have this in the permit?”

  Mark was referring to Section 2.3 of the permit “Permit Shield for Non-applicable Requirements”

  The applicant’s responded on 11-10-2021 by e-mail: “it looks like this condition was added with the 2007 renewal (T37). Goodyear did not request any changes to this condition in the renewal.”

  Thus, this section of the permit is removed.

- “Has the t10 years of recordkeeping been completed? If so, this can be removed”

  Mark was referring to current Section 2.4 - Use of projected actual emissions to avoid applicability of PSD for all the affected sources as identified in application 2600050.08B and application 2600050.16A.

  The applicant response: “Based on my available records, CAL4 started up in 2017 & MG1 started up in 2018; therefore, Goodyear has been considering this as still within the 10-year window of regular operations after the change was made so it would be appropriate to retain this condition in the permit.”

  Thus, this section of the permit is not removed. (Now corrected to Section 2.3 in the modified permit).

- Regarding the temporary, back-up natural gas/No. 2 fuel oil-fired boiler (maximum heat input capacity of less than 100 million Btu per hour; ID No. TMP01) in Section 2.1 B., of the permit Mark wanted to know “is this something that they take on and off the facility at times so it is ever changing?”
Applicant’s response: “Goodyear would like to retain TMP01 in the permit to allow for a temporary boiler to be brought on-site if deemed necessary. The heat input capacity of the boiler has the potential to exceed 10MMBtu/hr.”

There is further discussion of this boiler as mentioned below.

On further inquiry the responsible official for this facility responded by e-mail on 11/18/2021 stating: “The boiler was permitted to allow Goodyear to bring on-site a temporary package (trailer mounted) boiler if/when an existing boiler needed repairs to allow the plant to continue to operate at needed capacity. There is no temporary boiler on-site at this time.” Also, there has never been a temporary boiler ever put in place since being permitted.

The applicant further added “It is impossible to determine how long repairs may take for any existing boiler, especially with a shortage of spare parts and supply chain issues in all parts of the economy. Ideally, we would like to have the option to be operated as temporary or as permanent units under these regulations” and “ideally, we would like the option to operate the boiler under either scenario, thereby not adding avoidance conditions to the permit.”

On discussions between staff members at DAQ it was decided to add a NSPS avoidance (See Section 2.1 B 5., of the modified permit) along with the MACT avoidance (See Section 2.1 B6., of the modified permit) to this source.

- Section 2.1 A 4., of the permit subjects the four natural gas/No. 6 fuel oil/No. 2 fuel oil/recycled No. 6 fuel oil-fired boilers (ID Nos. BL01 through BL04) to MACT Subpart DDDDD “National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.”

The regulatory language pertaining to this MACT was reviewed by my colleague Joe Voelker for updates pertaining to this standard and were updated as per his recommendations (See Section 2.1 A. 4., of the modified permit).
Table of changes made in Air Quality Permit No. 00011T53

<table>
<thead>
<tr>
<th>Pages</th>
<th>Section</th>
<th>Description of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insignificant Activities</td>
<td>Removed six bead tuber units (IES-4)</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>2.1 A. 5.</td>
<td>Removed “Case-by-Case MACT” for boilers (from previous permit)</td>
</tr>
<tr>
<td>5</td>
<td>Sources Summary table</td>
<td>Replaced natural gas-fired regenerative thermal oxidizer (RTO-1)</td>
</tr>
<tr>
<td>11</td>
<td>Sources Summary table</td>
<td>Installed three bead apexers TL13, TL14, and TL15.</td>
</tr>
<tr>
<td>11</td>
<td>Sources Summary table</td>
<td>Verified total curing presses to two hundred and fifty-three</td>
</tr>
<tr>
<td>12</td>
<td>Sources Summary table</td>
<td>Removed booths GTS-GT-S1, GTS-GT-S3, and GTS-GT-S4.</td>
</tr>
<tr>
<td>12</td>
<td>Sources Summary table</td>
<td>Installed two green tire spray operations booths GTS-GT-S8 and GTS-GT-S9</td>
</tr>
<tr>
<td>13</td>
<td>Sources Summary table</td>
<td>Installed Force Grinders (Nos FG-301, FG-302, and FG-304)</td>
</tr>
<tr>
<td>14</td>
<td>Sources Summary table</td>
<td>Installed four Matuezzi horizontal grinders MHG1 through MHG4</td>
</tr>
<tr>
<td>14</td>
<td>Sources Summary table</td>
<td>Installed Bead Apexer #8 (TL12)</td>
</tr>
<tr>
<td>15</td>
<td>2.1 A. 4.</td>
<td>Updated boiler MACT regulations</td>
</tr>
<tr>
<td>22</td>
<td>2.1 B. 5.</td>
<td>NSPS avoidance for temporary boilers (ID No. TMP01)</td>
</tr>
<tr>
<td>22</td>
<td>2.1 B.6.</td>
<td>Updated MACT avoidance for temporary boilers (ID No. TMP01)</td>
</tr>
<tr>
<td>30</td>
<td>2.1 D. 2.</td>
<td>BACT - “Work Practices” standard for two hundred and fifty-three curing presses (ID Nos. GTS-CP-001 through GTS-CP-253)</td>
</tr>
<tr>
<td>39 through 49</td>
<td>General Conditions</td>
<td>Updated “General Conditions”</td>
</tr>
</tbody>
</table>